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GENERAL PSYCHOPATHOLOGY

KARL JASPERS

GENERAL
PSYCHOPATHOLOGY

Translated from the German by

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and

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FOREWORD

I am honoured that the task of writing a foreword to the English translation of the seventh and latest edition of this great psychiatric classic should devolve upon me. An English translation is long overdue. It is a source of satisfaction to me also that this translation should emerge from the Manchester University Department of Psychiatry. Karl Jaspers has worldwide eminence as a philosopher; his outstanding contribution to psychiatric thought is less well-known, at least amongst psychiatrists in England and America. The first edition of the *Allgemeine Psychopathologie* appeared nearly fifty years ago, in 1913, when the author was barely thirty years of age. Before this, in 1910, Jaspers had created a stir in the world of German psychiatry by the publication of his seminal article on morbid jealousy in which he first brought to the light of day his method and fundamental principles. As one of his biographers has remarked, Jaspers showed in this momentous contribution his sure eye for psychopathological detail and it was in this article that he first introduced his concept of 'process' versus 'personality development'. This laid the basis of so-called psychopathological phenomenology which, through the work of Jaspers and a brilliant group of colleagues, amongst whom may be mentioned Hans Gruhle, Kurt Schneider, the late Professor Mayer-Gross, well-known to us in this country, and several others, became the particular decoration of the Heidelberg school of psychiatry. The importance of this development in psychiatric thought has been on the whole insufficiently recognised, even in the land of its origin. In recent years, however, there has been an evident increase of interest in and attention to the teachings of this school. The Heidelberg school, until recently under the leadership of Professor Kurt Schneider, whose own contributions over the last fifty years have been outstanding, has stimulated a large number of younger men who have broken fresh ground. It may, I think, be fairly said that the school of phenomenology with its developmental offshoots is at the moment the most significant school in present-day German psychiatry. That this school should have been insufficiently recognised in England is perhaps hardly surprising. Many reasons can be adduced for this, first and foremost of which is the linguistic barrier. Secondly, even for those familiar with the German language, Jaspers' thought and style are difficult, due no doubt to his training as a philosopher, and his consequent use at times of terms specially devised to express some nuance of meaning not easily, if at all, to be translated intelligibly. To the English with their ingrained empiricism such an approach might well repel at first sight as academic and theoretical. Yet this would be a superficial valuation. In fact, the whole basis of Jaspers' work is strongly empirical and, as he is at pains to affirm, strictly within the framework of the inductive method of the natural sciences as far as the often

intangible subject matter of this difficult field allows. By a remarkable paradox, however, our supposedly empirical countrymen have accepted readily enough, and on the whole with an astonishing lack of criticism, the often unproved and unprovable assertions of the so-called psychodynamic schools. To those to whom such teachings form an acceptable psychopathology, the work of Jaspers might well appear static and arid. Static it is certainly not, arid it may be to those for whom the still sparse and inconvenient facts of mental illness must be circumvented by romantic fancies. This statement implies no facile derision of psychoanalytic teaching, it reflects rather an unvoiced Utopian regret that, due no doubt to the nature of the subject, psychoanalytic teaching, often enough characterised by profound insight into human behaviour, could not have been limited to the thoughtful and critical few. On the other hand the phenomenological approach involves painstaking, detailed and laborious study of facts observed in the individual patient at the conscious level. It is the method which forms the basis of the clinical practice and teaching of the Manchester Department of Psychiatry and one which I believe is fundamental to sound clinical work. Moreover, I believe that whatever other paths the young clinical psychiatrist may come ultimately to tread, whatever particular orientation he may come later to adopt, a knowledge of the principles stated in this book is indispensable to him. For whilst one of the great merits of the book lies in its tentative formulations and the resolute determination of the author to go no further than the facts, and whilst some of Jaspers' interpretations and analyses of morbid phenomena have been subjected to searching criticism, and some are now not widely accepted, the principles remain and with these the continuing influence of the work.

As long as psychiatric diagnosis and treatment rest on psychopathological investigation, the continuing improvement and sharpening of this tool of investigation must remain a prime concern to psychiatrists. This book is a guide to that technique, still irreplaceable, much of it is still as fresh as the day it was written and still a lively stimulus to others yet to come.

The world of English-speaking psychiatry stands in debt to the translators, my two colleagues Dr. J. Hoenig and Miss M. W. Hamilton. It had been for long my earnest desire that this key work should be translated into English. When Dr. Hoenig joined my staff I was gratified to learn that he had already contemplated doing so. Miss Hamilton, who had had already some considerable experience in translating from the German other works of this particular school, seemed an obvious collaborator. I wish therefore to thank them particularly for having undertaken this immensely difficult task. If here and there the translation may seem to have faltered, this can, I am sure, be charged for the most part to the difficulty and at times impossibility of rendering the author's subtle thought into concise and comprehensible English.

E. W. ANDERSON

TRANSLATORS' PREFACE

Being concerned with the teaching of psychiatry, we have felt as keenly as others the lack of a fundamental textbook in psychopathology. The existing difficulties of psychiatry as a subject are many but they seem rooted in two major shortcomings:

1. Although modern clinical psychiatry is still largely based on the achievements of continental psychiatrists, particularly of those French and German workers, who wrote in the first quarter of this century, much of what has been written remains inaccessible to the English-speaking psychiatrist who is unfamiliar with these languages. This often results in a very superficial understanding of the concepts, which are either used out of their proper context or put into a wrong one. The confusion which follows is suffocating.

2. As a consequence of this confusion, but also going beyond it, there is an absence of common terminology. Identical expressions tend to be used for entirely different entities, and one and the same entity is often given two, three or more different names as if it were so many different things.

It is said that the development of psychiatry has at present reached a stage where a unification of viewpoints is impossible. This is true; more than that, a unification is not even desirable. Thought and research must be free to explore in many directions and within many different theoretical frameworks. But conceptual confusion and the lack of a common, basic terminology far from safeguarding this freedom constitute a major threat to it. It is precisely because there are now so many different interpretations of the few known facts that the need for improved communication within the profession has become paramount. We need to know better what psychiatry has already achieved and discipline ourselves more, to use a shared terminology within clearly defined theoretical frameworks.

Though none, perhaps, are better placed to further such an aim than the editors of the psychiatric journals themselves, professional education remains the function of the University Departments. With this in mind we decided to translate Karl Jaspers' *General Psychopathology*. To make the book available in English had been a firm objective with one of us (J.H.) since 1951, but hitherto the scale of the work had failed to attract a publisher. However the University Department in Manchester seemed to offer an excellent opportunity for a fresh endeavour since the climate of this Department under Professor Anderson's teaching was very favourable to the Heidelberg School and one of us (M.W.H.) had already had experience in translating other psychiatric texts from the German.¹ No other work better meets the need for

¹ K. Schneider, *Psychopathic Personalities* (Cassell, 1958); *Clinical Psychopathology* (Grune & Stratton, 1959).

a critical introduction to continental psychiatry and for the creation of a terminology which would be commonly acceptable. The translation therefore was begun in 1958 but, as we were only able to work in our own time, it was not completed until 1962. The task has proved exacting but very instructive and always enjoyable.

One of Jaspers' explicit aims was to systematise the main methods of approach in psychopathology and thus facilitate the building of a common terminology. To do justice to this latter has presented us with some formidable difficulties. We have tackled these in several different ways:

1. We retain the original German or French term (e.g. 'Gestalt', 'Anlage', 'Querulant', 'Milieu', 'Absences'), where the words have already become part of English usage. Where a possible translation has suggested itself, but we have felt doubtful, we have given the German term in brackets with a cross-reference in the index, e.g. Thought-resonance (*Gedankenlautwerden*), Thrust (*Schub*) of the schizophrenic process, Talking past the point (*Vorbereiden*), Inhibition on becoming (*Werdenshemmung*), etc.

2. Where the obvious English translation is already in technical usage but represents quite a different concept from its German step-brother, e.g. 'Psychopathy' for 'Psychopathie', we have avoided it, since its use would give rise to confusion. We have, therefore, translated 'Psychopathie' as 'personality disorder', which is a term relatively free from any other specific meaning and appears to express quite adequately what is meant by the term 'Psychopathie' in continental psychiatry. But we have retained 'neurosis' for 'Neurose' since here the term has retained the same sense in both languages, namely, a psychogenic disorder of behaviour and thought.

3. The term 'paranoid' presented us with special difficulties. We have used it in keeping with the Oxford Dictionary definition of Paranoia (n. Mental derangement, esp. when marked by delusions, of grandeur, etc. [Gk. -noia f. para (noos—mind), distracted]. The German usage is also in line with this definition and implies a 'wrong notion', synonymous with 'delusional'. In English, however, 'paranoid' is often used to mean 'persecutory' both in technical psychiatry and in general usage. This has led to a good deal of confusion with such expressions as 'paranoid schizophrenia' (i.e. a schizophrenic picture in which delusions predominate), since the content of the delusions can have other than persecutory content, e.g. messianic, hypochondriacal, magical, etc. Thus the expression 'paranoid features' does not properly mean 'ideas of persecution' but merely the 'presence of delusions'. As there does not seem any philological justification for the use of this word in the narrower sense of 'persecutory', we have retained the broader meaning in accordance with the dictionary definition.

4. We have translated the philosophical terms as best we could. We were not able to get much help from translations of Jaspers' philosophical works nor from other writings. These translations have not been consistent nor particularly happy, and, on advice from our colleagues in the University Depart-

ment of Philosophy, we decided to go our own way, keeping the other translations in mind as much as possible. Terms such as 'Existenz' (Existence itself), 'Dasein' (Existence as such; existence in a world; human existence), 'Sein' (Being), 'So-Sein' (Being-Thus), 'Das Umgreifende' (that which encompasses, the Encompassing) or 'Geist' presented some of our greatest difficulties. The latter we found impossible to render by any single English word. It appears as 'mind', 'spirit', 'culture', according to the context.

5. Certain words in common German usage have been 'coined' by Jaspers and given specific meanings. The two most important 'Verstehen' (understanding) and 'Erklären' (explanation) run through the whole book and are related to his central theme, the dichotomy of psychic phenomena into 'psychogenic development' versus 'organic process'. Both these orders of psychic phenomena occur in all the conditions encountered in psychiatric practice, are usually inextricably intertwined and must be separated out for complete comprehension of the mental state. Jaspers uses 'Verstehen' and 'Erklären' to describe the methods of their respective exploration. Words which would fully convey his exact meaning do not exist in either German or English and even for the German reader lengthy comment was needed (p. 301, footnote). We therefore thought it best to retain the literal translation throughout the book, wherever possible. However, for clarity's sake we have been forced to 'coin' certain phrases, especially in respect of 'Verstehen' and its adjectival use 'verstehende' (e.g. 'verstehende Psychologie'—'the psychology of meaningful connections, meaningful psychology, psychology of meaning'), Where 'understanding' is non-specific in Jaspers' sense, the term 'comprehend'—'Begreifen' has been used.

Finally, we are aware that in trying to be faithful to the text and preserve in some measure the author's style, our translation may at times leave the reader, as it has us, dissatisfied, but we hope that in all major matters the intention of this great work has been served truly by its English rendering.

We were greatly helped by many; we would like to acknowledge the sympathetic support accorded by Professor E. W. Anderson and the unceasing encouragement offered us in particular by Sir Aubrey Lewis and the late Professor Mayer-Gross. A number of colleagues have helped in preparing the scripts and proofs in their various stages. We wish to thank particularly Mr. J. C. Kenna and Dr. N. L. Gittleson. We are also indebted to colleagues and friends who have helped in the compilation and paging of the index, in particular Mr. Harold Smith, Dr. Uma Sreenivasan and Mrs Meti Abraham.

Last but not least we wish to thank Mr. T. L. Jones, Secretary of the Manchester University Press, for his constant help and the patience he has brought to bear on the many problems involved.

Manchester, 1962

J.H.
M.W.H.

AUTHOR'S PREFACES

To the first edition (1913)

This book sets out to survey the entire field of general psychopathology and the facts and viewpoints of this science. It also sets out to be a guide to the literature for all those who are interested.

Instead of presenting dogmatic statements of results, it prefers to introduce the reader to problems, approaches and methods, and instead of a system based on a theory, it would like to achieve some kind of order based on a deliberate methodology.

There are in psychopathology a number of viewpoints, a number of parallel approaches which in themselves are quite justifiable and complement rather than oppose each other. My efforts have been directed towards sorting these approaches out, separating them clearly and at the same time demonstrating the many-sided nature of our science. An attempt has been made to include every empirically-based approach and every field of psychopathological interest, so that as far as possible the reader may gain a really comprehensive view of psychopathology as a whole and not merely be presented with a personal opinion, a particular school or a set of ideas that happens to be in vogue.

In many parts of the book we have had simply to record and enumerate facts so far available, data still lacking in context and experiments that are as yet tentative. But in psychopathology it is dangerous merely to learn the matter, our task is not to 'learn psychopathology' but to learn to observe, ask questions, analyse and think in psychopathological terms. I would like to help the student to acquire a well-ordered body of knowledge, which will offer a point of departure for new observations and enable him to set freshly acquired knowledge in its proper place.

To the second and third editions (extracts, 1919 and 1922)

... We trail around with us a great number of vague generalities. I have tried to clarify them as far as possible. But the deep intentions, which sometimes find expression through them, should not simply be put aside and let fall, because full clarification has not been attained. . . . The opinion has been expressed in medical quarters that this book is too hard for students, because it attempts to tackle extremely difficult and ultimate problems. As far as that is concerned, I am convinced that either one grasps a science entirely, that means in its central problems, or not at all. I consider it fatal simply to adjust at a low level. One should be guided by the better students who are interested

in the subject for its own sake, even though they may be in a minority. Those who teach should compel their students to rise to a scientific level. But this is made impossible if 'compendia' are used, which give students fragmentary, superficial pseudo-knowledge 'for practical purposes', and which sometimes is more subversive for practice than total ignorance. One should not show a façade of science. There is a decline in culture and intellectual effort in our days and it is the duty of everyone not to compromise. This book has, as a matter of fact, found its way to students; I feel justified in hoping that it will remain in the hands of students.

. . . In general, the methodological climate of the book remains important. In the midst of all the psychopathological talk, we have to learn to know what we know and do not know, to know how and in what sense and within what limits we know something, by what means that knowledge was gained and on what it was founded. This is so because knowledge is not a smooth expanse of uniform and equivalent truths but an ordered structure of quite diverse kinds of validity, importance and essence.

To the fourth edition (1942)

The intention of this book has remained unchanged. Its working-out however has called for a complete re-writing. This was so because of the extensive research done in psychopathology during the last two decades and because of the deepening of my own basic knowledge.

The book aims very high. It would like, as far as the subject matter is concerned, to satisfy the universal demand for knowledge. It wishes to be of service to physicians and all those who make mankind their theme.

I have attempted to get to know all the material provided by research, obtain an over-all picture and present it vividly. Everything, which has been contributed to the knowledge of the sick human psyche by psychiatrists in the main, but also by general physicians, psychologists, psychotherapists, biologists and philosophers, has needed to be analysed in respect of its basic features and also found a place within a realistic classification. The illumination brought by analysis of methods has provided me with the means. Such a task, in all its width, can only be achieved for the time being and then only incompletely. I hope that now I have succeeded better than in my previous attempt.

I want to thank Professor Kurt Schneider¹ of Munich. Not only has he stimulated me with penetrating criticism and valuable suggestions but he has greatly encouraged my work through his positive and exacting attitudes.

I am also grateful to Professor Oehlkers of Freiburg for information on biological questions and for clarifying them in discussion. He read through the chapter on Heredity and made improvements.

¹ Now (1946) in Heidelberg.

I wish to thank my publisher *Dr. Ferdinand Springer*. My impulse to rewrite was aroused through his expressed wish in the spring of 1941 that I should again work over the book which Springer and Wilmanns stimulated me to write thirty years before, and through the generosity with which he left it entirely to me to determine the scope and time in which to write it. After the first hesitation I became wholly absorbed by the task and instead of making minor adjustments set myself once more to reconstruct the whole.

Professor Carl Schneider made my work much easier by admitting me to the free use of the Library at the Heidelberg Clinic for Neuro-psychiatry and by being always ready, even at the cost of considerable trouble, to obtain books for me, for which I am most grateful.

To the seventh edition (1959)

A long time ago this book came into being in the Heidelberg Clinic. Under Nissl's leadership, Wilmanns, Gruhle, Wetzel, Homburger, Mayer-Gross and others created a community of living research. (See my brief description in *Philosophie und Welt*, 1958, pp. 286-92. Regarding Franz Nissl, there is an excellent essay by Hugo Spatz in the *Grosse Nervenärzte*, vol. 2, 1959, ed. K. Kolle). Within the framework of Wundt's brain-research and accompanied by much fierce discussion, phenomenology and the psychology of meaningful connections came into being. At the same time as they appeared, they were established methodologically. The psychology of meaningful connection has become an undisputed part of psychiatry, drawing today from other sources, some of which are productive, others highly confused. When my book has been on occasion described as representative of the phenomenological trend, or of the trend of meaningful psychology, this has been only partly correct. It reaches into a far wider sphere: the clarification of psychiatric methods in general, modes of comprehension and ways of research. The aim has been to work through all the available empirical knowledge critically, by reflecting on the methods whereby it was gained, and then give it a general presentation.

To bring the book up to date on the basis of the psychiatric research of the last two decades, would have necessitated my living for a while as an observer in a clinic in order to refresh and extend my own experience. Even if this had been possible, nowadays I would not be able to manage it. The book however rouses a steady interest and does not seem to be out of date. Considerable extensions in its material might be necessary, particularly as regards researches into the brain and somatic research in general, but the methodological principles remain largely unaffected by the increased material. It would certainly be possible nowadays to write a better book even on the methodological side. Such a task must fall to a younger scientist who might well succeed if he would appropriate the methodological clarification of this

book, expand it and put it perhaps into a different context. I would gladly welcome such a book. Until it appears this present old one is well suited to help the physician who wants to learn how to 'think' in psychopathological terms.

KARL JASPERS

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CHAPTER I

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INTRODUCTION

The aim of this introduction is to remind the reader of the wide, unrestricted field in which the science of psychopathology has to make its way. Since each chapter provides the necessary basis for its subject-matter there is no need to lay any general foundation in these opening remarks. We shall simply centre discussion on the modes of human experience and the meaning of psychopathology. Patients' actual experiences will be reported on later.

§ 1. THE BOUNDARIES OF GENERAL PSYCHOPATHOLOGY

(a) *Psychiatry as clinical practice and psychopathology as a science*

The psychiatrist as a practitioner deals with individuals, with the human being as a whole. These individuals may be patients in his care or under treatment, he may give testimony on their behalf in a Court of Law or to other authorities, or a personal opinion on them to historians, or may just see them in his consulting-room. Every case is entirely 'unique' but to deal with it competently the psychiatrist has to look to psychopathology to provide him with certain general concepts and laws. Psychiatrists function primarily as living, comprehending and acting persons, to whom science is only one resource among many; for psychopathologists, however, science is the sole and ultimate aim of their work. Their interest is not the individual human being. Their aim is to know, recognise, describe and analyse general principles rather than particular individuals. Their major concern is not the usefulness of science (this comes automatically as progress is made) but what the real, distinguishable phenomena are, what truths can be discovered about them and how they can be tested and demonstrated. Empathy and observation bring complex material, indispensable for study, but psychopathologists want more than this; they want communicable concepts for this material which can then be formulated into laws and principles and demonstrable relationships. This being so, they have to accept certain limitations so as not to transgress but on the other hand they gain freedom and power to explore the wide field which is left to them.

Psychopathology is limited in that there can be no final analysis of human beings as such, since the more we reduce them to what is typical and normative the more we realise there is something hidden in every human individual which defies recognition. We have to be content with partial knowledge of an infinity which we cannot exhaust. As a person, not as a psychopathologist, one may well see more; and, if others see more which is exceptional and unique, we should refrain from letting this interfere with our psychopathology. Ethical, aesthetic and metaphysical values are established independently from psychopathological assessment and analysis.

Apart from this field of values, which has nothing to do with psychiatry, instinctive attitudes and personal intuitions, which are usually quite incom- muncable, are essential nevertheless for clinical practice. It has often been emphasised that psychiatry is still an 'expertise' and has not yet reached the status of a science. Science calls for systematic, conceptual thinking which can be communicated to others. Only in so far as psychopathology does this can it claim to be regarded as a science. What in psychiatry is just expertise and art can never be accurately formulated and can at best be mutually sensed by another colleague. It is therefore hardly a matter for textbooks and we should not expect to find it there. Training students in psychiatry is always more than a communication of concepts, more than mere scientific teaching. A textbook of psychopathology, however, must be scientific and is valuable only for this reason, so that we are deliberately confining ourselves in this book to what can be understood in scientific terms, while we fully recognise the practical importance of clinical art in the examination of the individual case.

Psychopathology is concerned with every psychic reality which we can render intelligible by a concept of constant significance. The phenomenon studied may also be a matter of aesthetic, ethical or historical interest, but we can still examine it psychopathologically. Different frames of reference are involved. Further, there is no sharp line of demarcation between the art and science of psychiatry. Science is continually extending into the field of clinical art but the latter always remains indispensable in its own right and reaches out on its own into ever new territory, but scientific practice is to be preferred in principle, even if it is not always possible. When it is attainable, we should always deprecate the use of our own personal intuitions which by their very nature are unreliable.

Psychopathology has, *as its subject-matter*, actual conscious psychic events. Although the main concern is with pathological phenomena, it is also necessary to know what people experience in general and how they experience it; in short, to take the full range of psychic reality. It is necessary not only to examine the actual experience but also the causes and conditions at work, as well as the relationships and the modes in which the experience comes to expression. We can make an analogy with somatic medicine, where in individual cases physiology and pathology seem equally concerned. We find the two are really interdependent. They work with the same principles and there is no clear, dividing line between the two disciplines. In the same way psychology and psychopathology belong to each other and learn from one another. There is no sharp division and many mutual problems are tackled by psychologists and psychopathologists alike. There is no unitary concept of what is morbid, but rather a number of concepts which in principle can all be differentiated but in practice have to allow for borderline cases and transitional states. We are not insisting here on any precise definition of mental illness, and our selection of material will be seen to follow conventional lines. We do not think it so important if in somebody's view this or that material should be

included as morbid or some other material excluded as not morbid. A full discussion on the concept of illness has been left to the last part of this book. We must admit that we have demarcated our field of psychopathology from the larger field of psychology in what may seem rather an arbitrary manner, and it should be remembered that they really belong together, just as physiology and pathology belong to each other.

(b) *Psychopathology and psychology*

Psychology studies what has been called normal psychic life. Theoretically psychology is as necessary for the psychopathologist as physiology for the pathologist,¹ but in fact we find many instances to the contrary. This is due to the fact that psychopathologists are concerned with much material of which the normal counterpart has not yet been studied by psychologists and they often have to provide their own psychology, since the psychologist can give no counsel. Academic psychology seems to be too preoccupied with those primary processes that are affected by neurological disorders and organic lesions but rarely suffer any disturbance in psychic illnesses proper. Psychiatrists, therefore, need some wider psychology which will give them better provision from the thousand-year-old stores of psychological thinking. Such a psychology seems to be finding a place for itself in academic circles recently.

(c) *Psychopathology and physical medicine*

We said earlier that psychic events, their conditioning factors, causes and consequences all provide the subject-matter for psychopathology. Any enquiry into the connections between them must bring us to the theory of extra-conscious mechanisms and ultimately in many cases to definite, somatic events as the remote causes of psychic phenomena.

In every individual event soma and psyche form an inseparable unity. The two stand in a mutual reciprocity which shows itself much more directly in psychopathology than it does in normal psychology. There are somatic phenomena, universally accepted as such, which are in part dependent on

¹ We cannot quote any one text on psychology which would serve as a complement to the study of psychopathology. Psychology is divided into as many different camps as psychopathology. We have to get to know the schools and their teachings one by one if we are to learn anything about psychology. The *Physiologische Psychologie* of Wundt is the main text on psychic problems connected with the physiology of the senses and somatic phenomena but in many respects it is out of date. Ebbinghaus, *Lehrbuch* in Buhler's new edition is preferable so far as it goes. No new principle but a new thoroughness in the old method is offered by Husserl in his phenomenological basis for psychological enquiry. Contributions from the school of Külpe follow the same line. Messer provides a short popular exposition of this type of enquiry in *Empfindung u. Kenken*. As an introduction to certain sections of modern psychology, there is the well-written and realistic text by Bumke, *Psychologische Vorlesungen* (Wiesbaden: Bergmann, 1919). More recent texts can only be recommended with some reserve. For an overall picture of the literature we might mention S. J. Fröbes, *Lehrbuch der experimentellen Psychologie* (Freiburg, 1917, vol. 1; 1920, vol. 2). A. Messer, *Psychologie*, 7 bis 9 Tausend (Stuttgart, 1922). Th. Elsenhaus, *Lehrbuch der Psychologie*, 3rd edn. (Giese, Gruhle and Dorsch, Tübingen, 1937).

psychic events: for example, duration of menstrual flow, the nutritional state and perhaps in certain circumstances any one of the somatic functions. On the other hand, the most complex psychic events originate in part from somatic sources. These relationships are responsible for the close connection between psychopathology and medicine. Quite apart from the fact that the actual treatment of human beings calls for thorough medical training, insight into the aetiology of psychic events cannot be achieved at all without some knowledge of somatic function, more particularly the physiology of the nervous system. Thus psychopathology finds in neurology, internal medicine and physiology its most valuable auxiliary sciences.

Investigation of somatic function, including the most complex cortical activity, is bound up with investigation of psychic function, and the unity of soma and psyche seems indisputable. Yet we must remember that neither line of enquiry encounters the other so directly that we can speak of some specific psychic event as directly associated with some specific somatic event or of an actual parallelism. The situation is analogous with the exploration of an unknown continent from opposite directions, where the explorers never meet because of impenetrable country that intervenes. We only know the end links in the chain of causation from soma to psyche and vice versa and from both these terminal points we endeavour to advance. *Neurology* has discovered that the cortex with the brain-stem provides the organ most closely associated with psychic function and its researches have reached their highest peak so far in the theory of aphasia, agnosia and apraxia. It seems, however, as if the further neurology advances, the further the psyche recedes; *psychopathology* on the other hand explores the psyche to the limits of consciousness but finds at these limits no somatic process directly associated with such phenomena as delusional ideas, spontaneous affects and hallucinations. In many cases, which increase in number as we gain in knowledge, the primary source of psychic change is found to lie in some cerebral disorder. Yet we always find that no one specific psychic change is characteristic for any one of these disorders. The facts seem to be that cerebral disorders may be responsible for almost all possible psychic changes though the frequency with which they appear may vary in different disorders (for example, in General Paralysis of the Insane).

From these observations we may conclude that it is vital for us when investigating somatic changes to bear possible psychic causation in mind and vice versa. Since every psychopathologist has to study neurology and internal medicine independently, we shall not try to deal here with matters of neurology and internal medicine best learned from the many textbooks available (such as neurological methods of examination, pupillary changes, abnormal reflexes, sensory or motor disturbances). Furthermore, the principle of this book is to present a psychopathology which, in its concept-building, its methods of investigation and general outlook, is not enslaved to neurology and medicine on the dogmatic grounds that 'psychic disorder is cerebral disorder'. Our particular scientific contribution is not to imitate neurology and construct a system

with constant cross-reference to the brain—this always seems unreal and superficial—but to develop a standpoint from which to investigate the various problems, concepts and relationships within the framework of the psychopathological phenomena themselves. This is the special task of psychopathology, but time and again and at many points we shall of course find ourselves close to associated problems of neurology (e.g. the dependence of particular defects of psychic function on focal brain injury as in aphasia, etc.; the finding that some mental disorders are based upon cerebral disorders as with General Paralysis, arteriosclerosis, etc.; the conjecture that this is also the case with a number of others such as dementia praecox).

(d) *Methodology—the contribution of philosophy*

Psychology and medicine are the scientific disciplines most closely linked with psychopathology but the latter, of course, like any other science, has remoter connections with all other branches of human enquiry, one of which should have a special mention here—the discipline of philosophy with its accent on methodology.

In psychology as in psychopathology there are very few, perhaps no, assertions which are not somewhere and at some time under dispute. If we wish to raise our statements and discoveries to firm ground, above the daily flood of psychological notions, we shall almost always be forced to reflect on our methodology. Not only assertions but methods themselves come under dispute and it is quite an achievement if two investigators will agree upon method and only argue over their actual findings. Compared with this situation in psychopathology, somatic investigations in psychiatry at present pursue a relatively firm and smooth traditional path. There is, for instance, a wide community of aim in such fields of research as the histology of the central nervous system, serology, etc., whereas even the mere possibility of a scientific psychopathology will be questioned. Voices are raised asserting that no progress has been made in this field for a long time, nor could any be made since psychopathology, it is said, is involved with that ‘popular psychology’ familiar to psychiatrists of an earlier date, which has already provided all that is really needed for psychiatric purposes. We also find a tendency to cling to newly discovered somatic phenomena as a means of gaining better knowledge of the psyche. Salvation is thought to lie in experiments where results are either expressed in figures or are objectively demonstrated or plotted as a curve. The upholders of such views are guilty of one omission. They fail to train themselves in psychological methods and therefore may be charged with uncritical thinking. Observation is not enough. If we are to obtain some clear, communicable concepts and if we are to reach an adequate differentiation of our field, valid thinking in addition is essential, otherwise no advance in our knowledge will take place.

It is not surprising, therefore, that every psychopathologist is driven to concern himself *with his methods*. For the same reasons some discussion of

methodology is necessary in this book. In the face of outside criticism we are forced to defend ourselves and clarify our own position. A science in dispute must first of all show its merits by factual results but, particularly when these are not so readily accessible, we must anticipate some criticism of the methods we employ.¹

So far as concrete research is concerned, a thorough study of *philosophy* is not of any positive value to psychopathologists, apart from the importance of methodology. There is nothing that we can, so to speak, take over 'ready-made', but philosophical studies undoubtedly exercise a certain restraining influence of their own. They can protect us from putting the wrong question, indulging in irrelevant discussions and deploying our prejudices, all of which activities appear only too often in the psychopathological field among individual workers bereft of any such training. In the second place the study of philosophy makes a positive contribution to the human quality of the psychopathologist himself and with its help he can clarify his motives.

§ 2. SOME BASIC CONCEPTS

Psychopathology is concerned with the ill person as a whole, in so far as he suffers from a psychic illness or one that is psychically determined.

If we knew the elements that constituted the human psyche and all the forces at work we could begin with a broad outline of the psyche and leave details to be filled in later. But we need no such blue-print, since we conceive the psyche as an unending effort at comprehension, an effort which can never be concluded wholly, though we are always advancing through the many methods of research. We have no basic concept in terms of which we could define man nor any theory that would wholly cover his actual, objective existence. We must, therefore, as scientists, keep an open mind for all the empirical possibilities and guard against the temptation to reduce human existence to one common denominator. We have no psychic master-plan, but we shall simply discuss a number of horizons within which our psychic realities present themselves.

1. We are going to discuss *Man*. Does the fact that man is not an animal have any bearing on human illness?
2. We are going to discuss the human *psyche*. How is this actually objectified?
3. The psyche is *consciousness*. What do 'conscious' and 'unconscious' mean?

¹ Among psychiatrists writing on methodology, we would recommend Gaupp, 'Über die Grenzen psychiatrischer Erkenntnis', *Zbl. Nervenkh.*, etc. (1903). Wege and Ziele, *Psychiatrischer Forschung* (Tübingen, 1907). Professional philosophers who generalise have less to offer than papers on methodology written by research workers who have in their possession a wealth of concrete observations. Max Weber's book, for instance, *Gesammelte Beiträge zur Wissenschaftslehre* (Tübingen, Mohr, 1922), is of value, dealing in part with problems closely touching on psychopathology.

4. The psyche is not a thing but '*being in one's own world*'. What do 'inner' and 'outer' world mean?

5. The psyche is not an end state but becoming, developing, unfolding. What does psychic *differentiation* mean?

(a) *Man and animal*

Medicine draws little distinction somatically between man and animal. Both are studied in anatomy, physiology, pharmacology, pathology and somatic therapeutics. In psychopathology, however, human existence is, so to speak, a constant problem since the human mind and spirit are involved in every psychic illness.

It is altogether doubtful whether animals suffer from psychic illness. They can it is true suffer from diseases of the brain and nerves. We may, for instance, study the heredity of syringomyelia in rabbits. Then there are such phenomena as restiveness in horses, so-called hypnosis in animals (a different matter from the hypnosis of humans) and panic reactions. Animals can also suffer 'symptomatic psychoses' due to organic brain diseases. They show disorders of sense-perception, of stance, movement and changes in their 'personality', such as running in circles, biting, apathy and so on.

The following illustrates this: Dogs and cats in a state of experimental hypoparathyroidism sometimes behave in such a way that Blum,¹ who has reported on such observations, speaks of a borderland between motor and psychic symptoms. He noticed attacks of savagery in which a cat rushed round its pen as if possessed, tried to jump up the smooth walls, attacked another friendly cat and bit it, until it finally collapsed with exhaustion. With dogs and cats he also noticed the adoption of unusual and uncomfortable postures, sudden jerky movements or a gait never seen with normal animals, such as parading or prancing like a show-horse. The head might be held consistently low as with an attacking bull, or the animal might stagger to the extent of falling or run or try to creep backwards in spite of a wall behind it, which it was bound to feel. A dog in a state of hallucination and delusion would sniff around and stare when there was nothing to see, and without the slightest apparent cause. He would scratch on the tin floor of his cage or try to burrow with his muzzle in an empty corner. From time to time he would bark but pay no attention to the environment. The cats obviously saw visions, striking out into emptiness and slowly retracting their paws.

'Functional psychoses proper' in animals have not been described (hysteria in animals is far from proven). Schizophrenia and the cyclic psychoses are found in every human race but not in animals. 'There is indeed no evidence for any specific animal psychoses and certainly none for any hereditary ones,'

¹ F. Blum, *Arch. Psychiatr.* (D), vol. 96 (1932), p. 215. Covering the whole subject: Dexler, 'Über die psychotischen Erkrankungen der Tiere', *Msch. Psychiatr.*, vol. 16, Erg. H.99. Dexler, 'Die Erkrankungen des Zentralnervensystems der Tiere'. *Hdbuch. der normalen u. pathologischen Physiologie* von Bethe, Bergmann, etc. (1927), vol. X, p. 1232. R. Sommer, *Tierpsychologie* (Leipzig, 1925). K. Lorenz, 'Durch Domestikation verursachte Störungen arteigenen Verhaltens', *Z. angew. Psychol.*, vol. 59 (1940).

states Luxenburger, who quite rightly attacks anthropomorphic attitudes which tend to attribute human motives to animal behaviour. There is a striking contrast here between somatic medicine and psychopathology. Our quest for the particular human factor in psychic illness constrains us to view the latter as a specific human, rather than a universal natural, phenomenon. In so far as man exhibits his specific *human* nature, there can be no analogy with animals.

Man holds a unique position. He brought into the world an element alien to the animals but what this is still remains a problem. Although man can be classified somatically with the zoological species even his body remains unique, not only because of its erect gait and other characteristics but because his specific constitution sets him apart since, if we take the whole range of living forms into account, the human form preserves within itself more possibilities and less specialisation than any other. In addition man differs from all the animals in the expressive use he makes of his body. Psychologically there is a complete break. Animals do not laugh or cry as men do nor is the intelligence of apes mind or genuine thought but a sharp attentiveness which in man is a pre-condition of thought and not thinking itself. Freedom of action, conscious reflection and qualities of intellect and spirit have been considered the fundamentals of our humanity from time immemorial. The animal is bound to a natural fate which automatically fulfils itself in accordance with natural laws. Man is likewise bound but in addition he has a destiny the fulfilment of which lies in his own hands. Nowhere, however, do we find man as a completely rational being; he is borne along by natural necessity, which reaches into the furthest ramifications of his reason. In earlier centuries the imagination of men conceived of angels as pure intelligences. Man, however, is himself neither animal nor angel; he shares the condition of both but the existence of neither.

A further question is how man's special position influences the nature of human illness. In physical illness we so resemble the animals that experiments on the latter can be used to reach an understanding of vital bodily function in humans, though the application may be neither simple or direct. But the concept of human psychic illness introduces a completely new dimension. Here the incompleteness and vulnerability of human beings and their freedom and infinite possibilities are themselves a cause of illness. In contrast with animals, man lacks an inborn, perfected pattern of adaptation. He has to acquire a way of life as he goes along. Man is not merely pattern, he patterns himself. In so far as he is merely pattern, he is nearer to the animals.

In psychopathology the human being has himself become the object of scientific study and thus observations on animals do not contribute anything essential and there is a qualification of another kind. Not everything that happens in a psychic illness can be explained by using the criteria of science. Human beings are creators of culture, they develop beliefs and moral standards and constantly transcend their own empirical human self which is the only self that scientific research can recognise and grasp.

Animal psychology and psychopathology—so far as they can be said to

exist—are not without some interest for our study. Firstly, we learn from them the basic phenomena of life, which may be discerned in humans also, but can be evaluated more objectively in this wider context—phenomena such as habits, learning abilities, conditioned reflexes, automatisms, trial-and-error behaviour and specific kinds of intelligent behaviour (e.g. W. Kohler, *Intelligenzprüfung an Anthropoiden*). Secondly we learn what are the idiosyncrasies of animal life itself, and we see that none of the animal forms were the predecessors of man but are all like him branches of the great tree of life. From such contrasts we learn to understand the exact implications of specific human existence.

(b) Objective manifestations of psychic life

We can grasp and investigate only what has become an object to us. Psychic life as such is not an object. It becomes an object to us through that which makes it perceptible in the world, the accompanying somatic phenomena, meaningful gestures, behaviour and actions. It is further manifested through communication in the form of speech. It says what it means and thinks and it produces works. These demonstrable phenomena present us with the effects of the psyche. We either perceive it in these phenomena directly or at least deduce its existence from them; *the psyche itself does not become an object*. We are aware of it as conscious experience in ourselves and we represent the experience of others to ourselves as similar, whether the related phenomena are objectively observed by us or reported by others. But this experience too is a phenomenon. We can try to objectify the psychic life through symbol and analogy but it remains simply *the encompassing of existence*; a comprehension which in itself *can never be comprehended as an object*, yet it remains the framework of all the individual objective phenomena which we encounter.

We must emphasise once again that the psyche is not a thing. Even talking of 'the psyche' as an object is misleading. (1) Psyche means *consciousness*, but just as much and from certain points of view it can even, in particular, mean 'the unconscious'. (2) Psyche is not to be regarded as an object with given qualities but as '*being in one's own world*', the integrating of an inner and outer world. (3) Psyche is a becoming, an unfolding and a differentiating, it is nothing final nor is it ever fully accomplished.

(c) Consciousness and the unconscious

The term 'consciousness' has acquired a threefold significance: it implies *awareness of experience* and as such is distinct from loss of consciousness and from what is extra-conscious; secondly, it implies *awareness of an object*, knowing something, and as such is distinct from unconscious subjective experience, in which 'I' and 'object' are as yet undifferentiated; thirdly, it implies *self-reflection*, awareness of one's self and as such is distinct from the unconscious experience where I experience the self and the object as separate entities but am not explicitly aware of this differentiation.

Consciousness is indispensable for the manifestation of the psyche, provided by consciousness we mean every mode of inner experience, even where there is no differentiation into 'I' and 'object' and even where all that takes place is simply a feeling, devoid of object or any discrete self. There is no psyche where there is no consciousness of this order.

Psychic life, however, cannot be fully understood in terms of consciousness, nor is it to be grasped by consciousness alone. To reach a full and satisfactory explanation we must add to the actual psychic experience *a theoretical extra-conscious construct that goes beyond it*. Phenomenology and objective observation are founded in the actual phenomena of psychic experience and need no theory. They are only concerned with what is given, but once we look for explanation, this requires a theoretical framework and the assumption of certain extra-conscious mechanisms and apparatuses. Direct, accessible psychic experiences are like the foam on the sea's surface. The depths are inaccessible and can only be explored in an indirect and theoretical way. But the test of theoretical assumptions is in their effects. Their value never lies solely in their self-consistency but rather in how well they explain the actual experience and how capable they are of refining our observation. In order to explain psychic life we have to work with extra-conscious mechanisms and unconscious events, which of course can never be visualised as such but can only be conceived in simile and symbol, whether physical or psychic.

In contrast to century-old tradition a dislike for speculative theory has been asserting itself for some time. This seems a move in the right direction since theories are so easily thought up and lead to irreparable confusion, particularly when they are mingled with facts. We shall make it a principle to be as economical as possible with our theoretical concepts and use them in the full consciousness of their hypothetical character and consequent limitations.

It has often been debated whether *unconscious* psychic events exist. First, we must differentiate between psychic events which though they have been actually experienced go unnoticed by the individual and those events which are in fact extra-conscious and have never actually been experienced. The unnoticed psychic events can be brought to notice given certain favourable circumstances, and their reality can thus be established. Extra-conscious events, however, can by definition never be brought to notice.

Psychology and psychopathology have the important task of extending knowledge into wide areas of the unnoticed psychic life and they illuminate this life for consciousness (= knowledge). To do this within one's self is a necessary pre-condition in the quest for truth and in the achievement of individual development; to enhance this latter is one type of psychotherapy.

Extra-conscious events can never be directly demonstrated unless they happen to appear as perceivable somatic events. It is undeniable, however, that conscious psychic phenomena can be explained very plausibly and usefully in this way by adding extra-conscious events as cause and effect. They are therefore theoretical constructs and their aptness and consistency are debatable,

but we cannot establish their actual reality, nor need we. The extra-conscious factors appear in many different forms, such as acquired memory patterns, acquired habits and attitudes and one's intellectual and temperamental endowment. It is not uncommon for a person to be aware that he is faced or even perhaps being overwhelmed by an experience which has emerged from extra-conscious depths within him.

The *numerous meanings* which have become attached to the term '*unconscious*' are shown by the following:

(a) The '*unconscious*' is thought to be a *derivative of consciousness*. As such it may be (1) *automatic behaviour* (e.g. a past conscious activity is now carried out automatically and hence unconsciously), e.g. walking, writing, riding a bicycle; (2) *forgotten experience* that is *still effective*, e.g. the so-called complexes, after-affects of previous experience; (3) *memories* in reach of recall.

(b) The '*unconscious*' is thought of in relation to *inattentiveness*. As such it is (1) *unnoticed*, yet lived through; (2) *unwilled*, unintended yet performed; (3) *unremembered* (it has been in consciousness but was straightway forgotten; seniles, for instance, often no longer know what was their clear intention a moment before—'I go into another room—what did I want there?'); (4) something that *has never become objective* and is not definable in speech.

(c) The '*unconscious*' is thought of as *a power*, an *original source*. As such it is (1) the *creative, vital element*; (2) *haven, shelter, first cause and final end*. That is, everything essential comes to us from the unconscious, our passionate aspirations and inspirations, every impulse, every idea, every shape and form of our creative imagination, all the grandeur and the desolation of life. Fulfilment becomes the unconscious into which we return.

(d) The '*unconscious*' is thought of as '*Being*'—the very sense of being. As such it is thought to be (1) *psychic reality* (but we can no more explain consciousness as something mechanically and accidentally added to psychic reality than we can equate what is psychic with mere consciousness, rooted as the psyche is in the unconscious, influenced by it and influencing it in turn). Psychic reality has been variously conceived: as the spontaneous *play of basic elements* (Herbart), of which conscious psychic life is the manifestation; as a *series of deepening unconscious levels* (Kohnstamm, Freud); as that *personal unconscious* which every individual gathers to himself in the course of his life; as the *collective unconscious* (Jung) which operates in each individual as a substratum of universal human experience. In all these instances the unconscious is conceived as '*being for its own sake*', the reality which gives us our existence. (2) '*Absolute being*.' (This is a *metaphysical concept*: the '*unconscious*'—like *Being*, *Non-Being*, *Becoming*, *Substance*, *Form* and almost all categories—is used as an analogy for this in an effort to make the unthinkable, thinkable; '*absolute being*' is not however a concept that belongs to psychology.)

(d) *Inner and outer world*

There are certain categories of thought valid for the apprehension of all

living things, even of the psyche in its highest flights, though we have then to exchange exact meaning for analogy. Among these categories is that of life as '*an existence in its own world*' since all life reveals itself as a continuous interchange between an inner and an outer world (v. Uexküll). To live in its own world is a fundamental phenomenon of life. Even physical existence cannot be adequately explored as if it were merely a matter of anatomical structure and physiological function, arbitrarily located in space. It has to be regarded as a living engagement with the world around it, whereby it achieves form and reality through constant adaptation to stimuli, which it receives in part and in part creates. This primal, integrative process of life as an existence in and along with its own world is exemplified in human life too, but human beings take the process even further *through conscious discrimination and an active influence on their own world* and then through their *generalised knowledge of it*. By such means life transcends itself and moves on into other possible worlds and beyond the concept of World itself. Empirical research must turn to certain particular manifestations of this basic inter-relatedness and thereby to certain isolated aspects of the relation between inner and outer world. For instance:

(1) In physiological thinking we find *stimulus* related to *response*; in phenomenological thinking we find the 'intentional' relationship of the 'I' to '*what confronts it*' ('subject' v. 'object').

(2) Individual life develops out of *constitution* (*Anlage*) and *environment* (*milieu*); it springs from innate potentialities which may be stimulated and moulded by the environment or left dormant to wither away. Constitution and environment operate at first through biological events that lie outside consciousness and we try to understand causal relationships at this level. Next, in our conscious life they function in a psychologically comprehensible way, when environmental factors, our birth, for instance, and changing life-situation, pattern our existence and are in turn challenged and patterned by us. Because of a natural self-development, the individual with his constitution confronts the environment and enters into effective exchange with it. From this springs all experience of human destiny, deed, effort and pain.

(3) Above all, environment fosters *situations*.¹ These provide the individual with opportunities which he may make use of or waste or in which he may reach decisions. He can contrive situations himself, letting them arise or not arise in some meaningful pattern. He submits to the ordered regularity and conventions of a world and at the same time he can convert them into means of escape. In the end, however, he comes upon *frontier-situations*, the final frontiers of existence—death, chance, suffering, guilt. These may awaken in him something we have called Existence itself—a reality of selfhood.

(4) Everyone has his own *private world*² but an objective world also exists

¹ The concept of 'the situation' is discussed in my *Geistige Situation der Zeit* (Berlin, 1931), pp. 19 ff.

² See my book *Philosophie* (Berlin, 1932), vol. 1, pp. 61 ff., on concepts of the world. Also my *Psychologie der Weltanschauungen* (Berlin), pp. 122 ff.; 3rd edn. (Berlin, 1919), pp. 141 ff.

—a general world common to all. This general world exists for ‘common consciousness’ (or ‘consciousness-as-such’) and participation in this ensures a criterion for accuracy of thinking and its objective validity. Individual consciousness is but a portion of what is universal and generally possible, for which it provides a *concrete historical framework*, and so sets the stage for misapprehension and mistake.

(5) The psyche *discovers itself in its own world* and with that *creates a world*. In the world it becomes intelligible to others and the world brings it to creativity.

Thus the meaning of the fundamental relation between inner and outer is so often transposed that we may suddenly find ourselves confronted with what seem to be completely heterogeneous entities. But the general analogy holds good; there is a basic relatedness between what is within and what is without; we are in a world common to all living things and to all psychic life and to every human being in his separate reality.

(e) *The differentiation of psychic life*

Psychic reality enlightens our understanding best when it is most highly developed. The furthest evolved and the most complex illuminates the simple and the primitive, not vice versa. For research purposes, therefore, we look to those who have the best cultural endowment and a rich psychic life, but the very highly differentiated is something rare. Yet it is just the rare case which gives orientation to knowledge, in so far as it is not a freak but the full development of a classical extreme. Exceptional not ordinary cases are the psychologically illuminating ones and through them we gain a firmer grasp of the great company of more commonplace instances. The degree of psychic differentiation is a fundamental factor which exerts a constant influence on all phenomena.

To be able to distinguish the unusual is very important from a clinical point of view. What happens most often is most often reported on or complained of, but the mere fact of frequency does not mean that the phenomenon is fully understood nor that it is more akin to natural law, nor that somehow it has more reality. We may ask why one thing occurs rarely and another frequently. Why are the paranoics as defined by Kraepelin so rare, yet when they do occur they are so typical? Why should the classic types of hysteria be so common in the environment of Charcot’s world but so rare nowadays?

Psychic life offers us enormous variety right up to the elaborate developments of genius. Hashish will produce in one person a dull, animal glow, uproariousness in another, in another a rich fabulous bliss. The same illness, dementia praecox for example, may be characterised in one individual by simple delusions of jealousy and persecution, while in another, Strindberg for instance, the same ideas can develop to an extraordinary degree of richness and the changed experience of life turn into a fountain of originality and poetic

creativity. The symptomatology of every psychic disturbance will correspond with the degree of psychic development attained by the patient.

Psychic phenomena are generally only possible where there is some psychic differentiation. This applies both to the complexity of content and to the actual form the psychic event takes. For instance, compulsive ideas and the phenomena of depersonalisation only appear when there is a relatively advanced degree of differentiation; compulsive ideas, which call for a high degree of self-awareness, are not observed in young children, but are common in generally well-differentiated persons. The same applies to that large group of subjective inhibitions, specific to vulnerable people who are given to self-scrutiny.

The *concept of differentiation* can be further analysed: *in the first place*, it means a numerical increase in qualitative modes of experience. *Secondly*, it means the breaking up of vague experiences into several well-defined ones, thus giving richness and depth to the total experience. Low-level individual phenomena differentiate into higher ones; the vague instinctive life gains in content. Increased differentiation brings increased clarity and awareness. Undefined intuitions and feelings give place to clear, definite ideas. From an undifferentiated state of innocence emerge the innumerable contradictions and conflicts of our psychic life. *Thirdly*, it implies analysis and synthesis of object-consciousness, whereby we increase the possibilities for thought, comprehension, attitude, discrimination and comparison. *Fourthly*, it means a growing consciousness of self through the process of self-reflection. We have to distinguish here differentiation as a subjective experience which need not be conscious from conscious differentiation which takes the form of self-observation. Someone may have a compulsive idea without attempting to understand what he is undergoing. Usually, however, differentiation and self-awareness go together. Sometimes the mere registering of all kinds of unimportant feelings may create the false impression of a growth in differentiation. *Fifthly*, we should know at what level of development the differentiation takes place; this is decisive for understanding the personality. The whole force and vigour of the individual need to be taken into account besides the actual degree of differentiation, so that we come across different levels of the personality as a whole (Klages' concept of levels of development—'Formniveau'). Here we are at one of the limits of what we can conceive. Yet if we wish to understand personality we must try to find our way confidently beyond this point. Individuals can really be compared only when they have the same degree of differentiation and are at the same level of development (have the same 'Formniveau'), and this applies as much to the comparison of personal bearing and conduct as to comparison in the narrower field of handwriting, etc.

These distinctions are not really enough to give us any clear definitive point of view on the psyche as a whole. At present, so far as psychopathological phenomena are concerned, we have no satisfactory basis for estimating *degrees* of differentiation nor of the *direction* taken, and the same applies to

degrees of disintegration and the direction they take. The general point of view which we have outlined will therefore have to suffice.

We can, however, distinguish two fundamental *causes* of differentiation. One is rooted in the *individual disposition* (Veranlagung); the other springs from the *cultural milieu*.

In *mental defectives*¹ psychosis exhibits a relatively poor symptomatology, the disturbances seem fewer in number and more primitive; *delusions* are hardly systematised and below a certain level of intelligence certain types of delusion (such as delusions of profound guilt) are never encountered. Excitement manifests itself invariably as loud, monotonous shouting or screaming; apathy appears as general, dull torpidity.

The *cultural milieu* in which a human being grows up and lives merely furthers or retards the unfolding of the individual constitution (Anlage). Man lives by participating in the collective cultural achievements of history and only reaches his own individual development through them. Untaught deaf-mutes remain at the level of idiots. What from the external social point of view seems to emerge by stages is actually already there in the totality of the psyche. Manifestations of mental illness obviously attain far more richness and variety when they occur at higher cultural levels. For this reason the advance of psychopathology gains nothing from the study of animals and is largely dependent on the study of people who come from the higher levels of culture. Doctors in private clinics possess incomparably valuable case-material in their educated patients, whereas public clinics know only too well the monotony of hysteria in the simpler type of patient.

Both differentiated and undifferentiated psychic phenomena, however, call for our attention. Analysis of highly differentiated psychic life throws light on the lower levels of development so that typically our interest finds itself swinging to and fro in both directions. For the natural sciences the proper object of investigation is the average phenomenon or that which most commonly appears. Other studies, equally partisan, maintain that the only proper object for examination is the rare and highly differentiated psyche. In the realm of '*belles lettres*', we may find an analogy in the early French novel of manners and morals and the psychological novel of modern times.²

(f) *Recapitulation*

From the above selected points of view we have visualised a number of horizons within which psychic phenomena appear. The only common factor is the shift in meaning, so that any contrast takes on manifold form. But discussion of the above five points of view should give us some preliminary feeling for the extent of the realities with which we have to deal, and make it quite

¹ Luther, *Z. Neur.*, vol. 16, p. 386. Plaskuda, *Z. Neur.*, vol. 19, p. 596.

² Bourget, commenting on the 'psychological novel' in contrast to the novel of manners and morals, says 'il devra choisir les personnages chez lesquelles cette vie interieure soit le plus ample' (i.e. choice needs to be made of characters whose inner life is rich and ample).

clear how little can be said in general terms. When it comes to individual application, we need a firm grasp of the particular meaning in relation to the concrete issue. Discussion in general terms is usually meaningless in view of their indefinite nature.

§ 3. PREJUDICE AND PRESUPPOSITION

Whenever we apperceive, we have already brought into the situation that which renders apperception possible and gives it form. If what we bring falsifies our view we call it 'prejudice' but if on the contrary our apperception has been enabled and enhanced, we speak of 'presupposition'.

(a) *Prejudice*

It is an enlightening process of self-criticism to make ourselves realise how much we have taken unconsciously for granted. There are many reasons for this, e.g. the urge to get some unified picture of the whole, or the wish to arrive at a few primary concepts that are simple and definitive. As a result we tend to generalise isolated points of view, specific methods and categories. Or, what happens more commonly, we confuse what is definitely knowable with what we believe.

Prejudices of this sort weigh on us unconsciously but with paralysing effect and we shall have to try and free ourselves from them in every chapter of this book. At this point we will only look at one or two very pronounced examples, and if we can recognise them in these extreme forms we shall be ready for the disguises which they more often assume.

(1) *Philosophical prejudice.* There have been periods in which great value has been placed on speculative and *deductive thinking*, based on principles that sought to comprehend and explain everything without the test of experience. Such thinking was more highly valued than than the irksome examination of particulars. These were periods in which philosophy tried to create from 'above' what only experience could bring from 'below'. Nowadays we seem to have abandoned this orientation but it reappears here and there in the form of abstruse theories. Behind our accepted systems of general psychopathology the old spirit hovers and can be identified. Our rejection of purely deductive and barren philosophical theorising is justified but it is often linked regrettably with the opposite misconception, that the only useful approach is to go on with the collection of particular experiences. It is thought better to amass data blindly than sit down and think. From this follows a contempt for the activity of thinking, which alone gives a place to facts, a plan to work to, a standpoint for observation and the passionate drive for rewarding scientific goals.

Deductive philosophies were generally associated with value-judgments and displayed *moralistic and theological tendencies*. Sins and passions were ascribed as the causes of mental illness and human qualities divided categorically into bad and good. Maximilian Jakobi, writing in the first half of the

nineteenth century, completely annihilated such 'philosophising in the wrong place'. Science indeed has no room for philosophies of this sort, however important they may be as expressions of human attitudes to the world. Philosophies in conflict are commonly a mere battle for power, but in an exchange of scientific views there is always some chance for sensible discussion and a rational conclusion. All the same, it is difficult to keep psychology and psychopathology wholly free from value-judgments, which often prove to be an expression of some background philosophy. The simple *separation of observation and value-judgment* is something that must be required from every psychopathologist in his work, not so that all human values must be relinquished but that, on the contrary, we shall possess truer, clearer and profounder values the more we observe before we judge. What is needed is a quiet absorption into the facts of psychic life without the adoption of any specific attitude to them. Human beings have to be approached in an unbiased fashion with lively interest and without any kind of appraisal. This principle of keeping simple observation and value-judgment apart is easy to accept in theory but in practice it calls for such a high degree of self-discipline and real objectivity that we can never take it for granted at any time.

(2) *Theoretical prejudice.* The natural sciences rest on *comprehensive* and well-founded theories which provide us with a uniform background for individual observations. The atom-theory and the cell-theory are cases in point. We find nothing similar in psychology or psychopathology, where no *uniform theoretical framework* is attainable, except perhaps as the speculative construct of an individual. Our methods do not lead us to discover any ultimate elements, mechanisms or laws, in terms of which psychic life becomes explicable or will eventually do so; they merely introduce us by certain paths to various aspects of it. In our view psychic life is an infinite whole, a totality that resists any consistent attempt to systematise it; much like the sea, we may coast along the shore, go far out into the deeps but still only traverse the surface waters.

If we try to reduce psychic life to a few universal principles and seek comprehensive laws, we beg a question that cannot be answered. Where our theories may seem to have some kinship with the natural sciences, it is in the forming of tentative hypotheses, which we make for limited research ends only and which have no application to the psyche as a whole. Wherever we prejudge because of a theory, the appreciation of facts is curtailed. Findings are viewed from the angle of that particular theory; anything that supports it or seems relevant is found interesting; anything that has no relevance is ignored; anything that contradicts the theory is blanketed or misinterpreted. Reality is constantly seen through the spectacles of one theory or another. We have, therefore, to make a continual effort to *discount* the theoretical prejudices ever present in our minds and train ourselves to *pure appreciation of the facts*. We can only appreciate these latter in terms of category and method, and we have therefore to be fully aware of the presuppositions lying in every discovery according to the nature of its subject-matter—'theory lurks in every fact'. We

can thus learn to look at reality in the clear knowledge that what we see is never reality itself nor ever the whole reality.

(3) *Somatic prejudice*. Tacit assumptions are made that, like everything else biological, the actual reality of human existence is a somatic event. Man is only comprehensible when he is understood in somatic terms; should the psyche be mentioned, this is in the nature of a theoretical stop-gap of no real scientific value. A tendency arises to discuss all psychic events as if their essence were something somatic, already in one's grasp, or as if such a concept merely pointed the way to discoveries of a somatic nature. Genuine research provides hypotheses which stimulate investigation, verification or refutation of experiential facts through somatic findings, but where this somatic prejudice is operative an imaginary 'soma' receives great emphasis as a heuristic presupposition, when in fact it is nothing but the unconscious expression of an unscientific prejudice. The attitudes of resignation sometimes shown when psychological matters are under consideration reflect the same prejudice; we can see it, for instance, in the statement that all psychological interest in schizophrenia will vanish when once the morbid somatic process that underlies it is discovered.

This somatic prejudice comes up again and again in the guise of physiology, anatomy or vague biology. At the beginning of the century we would find it expressed as follows: there is no need to investigate the psyche as such; it is purely subjective. If it is to be discussed scientifically, it must be presented anatomically, somatically—as a physical function. Even provisional anatomical constructs are preferable to mere psychological investigation. These anatomical constructions, however, became quite fantastic (e.g. Meynert, Wernicke) and have rightly been called 'Brain Mythologies'. Unrelated things were forcibly related, e.g. cortical cells were related to memory, nerve fibres to association of ideas. Such somatic constructions have no real basis. Not one specific cerebral process is known which parallels a specific psychic phenomenon. Localisation of various sensory areas in the cerebral cortex and of the aphasias in the left hemisphere only means that these organs must be intact for a specific psychic event to be possible. There is no difference in principle here from the equal necessity of having intact function of the eye or of the motor mechanism, etc., which are also essential 'tools'. With regard to the neurological mechanisms, the position is more advanced, but we are still infinitely far removed from finding exact parallels to psychic events. It was entirely erroneous to suppose that the discovery of the aphasias and apraxias would lead us into psychic territory, and empirically we cannot decide whether psychic and somatic phenomena are parallel or interacting. There is not a single instance where we could demonstrate this. Psychic and somatic phenomena, in so far as we can have some scientific understanding of them, appear separated by a measureless expanse of intermediary events, of which at present we are ignorant. In practice we can speak of parallelism or of interaction—usually of the latter. We can do this all the more easily in that it is always

possible to convert the one set of terms into the other. As regards this tendency to translate psychic into somatic terms (imaginary or real), we may refer to Janet who said: 'if we are always to think anatomically where psychiatry is concerned, we might as well resign ourselves to think nothing'.

(4) '*Psychologising*' and '*intellectualising*'. Empathy is often itself responsible for '*psychologising*'. There is a desire to 'understand' everything and all critical awareness of the limits of psychological understanding is lost. This happens whenever '*psychological understanding*' is turned into '*causal explanation*' under the misconception that in every case there is a meaningful determinant of experience to be found. People ignorant of psychology and with a somatic orientation are most prone to fall into this trap. Too much is attributed to ill-will or malingering but this is due perhaps not so much to actual psychologising as to moralising. Some physicians have a definite dislike for hysterics and they suffer profound irritation if they cannot find any of the physical signs with which they are familiar. In their heart of hearts they think it all plain naughtiness, and when the situation is out of hand, only then do they pass the case on to the psychiatrist. Crude, naïve psychologising is found precisely in those medical men who do not want to have anything to do with psychology, nor to know anything about it.

Psychic life provides many contexts where people seem to act purposefully and out of rational motives, and there is a very widespread inclination to assume '*conscious reasons*' behind all human activity. In actual fact rational behaviour plays a very small part in human affairs. Irrational drives and emotional states usually prevail, even when the individual wishes to convince himself that he is acting on purely logical grounds. Exaggerated search for rational connections gives rise to *intellectualising*, which obstructs any hope of reaching a true and penetrating understanding of human behaviour. Reasoning is then over-rated as against the forces of suggestion. When the patient appears irrational, there is a hasty resort to a diagnosis of '*dementia*' and all the complex richness of human experience is ignored.

(5) *Use of False Analogy*. Psychic life is objectified through expression and through creative impact, through behaviour and through action, through somatic events and speech. But the psyche itself cannot be observed; we can only see it through *metaphor* and *simile*. It is something we experience and implement, something we realise in ourselves but never actually see. In discussing the psyche we always have to fall back on imagery, usually of a three-dimensional kind, and in psychological thinking analogies for the psyche abound, e.g. the psyche is a stream of consciousness; consciousness is like a space where individual psychic phenomena come and go as figures on a stage; it is a space that recedes infinitely into the unconscious; the psyche is constituted of layers—layers of consciousness, of experience, function and personality; the psyche is made up of elements in various combinations; it is moved by fundamental forces, the factors and components of which we can analyse; it has attributes that can be described as with any other thing. Such

three-dimensional analogies are invaluable to us. We could not do without them and they do no harm as long as we do not try to prove anything by them, but merely use them descriptively. It is not uncommon, however, for the original analogy to be taken as a valid construct and become established as one of our prejudices. Vivid and comprehensible analogies readily dominate our minds so that from time to time we no longer see them as analogies but as valid concepts of the thing itself. For instance, the psyche is broken down into atom-like elements or psychic events are seen as mechanical movements (mechanistic theory) or psychic connections as a series of combinations analogous to a chemical compound (psychic chemistry). In any case there is a constant human tendency to let imagery and metaphor become the preferred mode of thought and work in our minds prejudicially.

(6) *Medical prejudice relating to quantitative assessment, objectivity and diagnostics.* The prejudice in favour of quantitative findings derives from the exact sciences. Examination of qualitative changes is regarded as arbitrary, subjective and not scientific. Statistical and experimental methods, which by their use of measurement, calculation and graphs seem so valuable for the investigation of certain problems, are held to be the one and only scientific method. Even when this sort of investigation is no longer possible, quantitative concepts are often still applied, though in the context they are meaningless. Sometimes we find it put forward quite seriously that the 'intensity' of ideas is the primary cause of compulsive thinking, hysterical phenomena, delusions and hallucinations—ideas are projected outward simply because of their intensity.

The only suitable object for investigation then becomes *that which can be perceived through the senses*. The examination of physical phenomena, of performance and productivity is indeed very valuable but all the same we can only penetrate to what is psychic if we let the psyche confront us directly and the psyche, as we shall find, is always qualitatively singular. Psychic events can never be directly perceived, only indirectly in the way they express themselves. This self-evident point explains why a psychopathology which simply confines itself to what can be directly perceived through the senses becomes inevitably a psychopathology without a psyche.

In the psychiatric assessment of a case, diagnosis is left to the last but in practice, except in the case of well-known cerebral changes, diagnosis is the least relevant factor. If it is made the main issue, it will prejudge what ideally should emerge from the investigation. What matters is the process of analysis. The chaos of phenomena should not be blotted out with some diagnostic label but bring illumination through the way it is systematically ordered and related. Psychiatric diagnosis is too often a sterile running round in circles so that only a few phenomena are brought into the orbit of conscious knowledge.

(b) Presupposition

The opposite of prejudging our investigations is to try and make every possible approach to psychic reality, using all the means in our power. In the

empirical sciences every investigator is driven on to find reality, so that as regards the somatic aspects of psychiatry the psychiatrist will ask for histological, serological and neurological facts and will discard anatomical constructs and speculations. In psychopathology the basic reality for research is psychic life as it is presented to us through observed behaviour and through what can be understood from the patient's remarks. We have to feel, grasp and contemplate all that is really happening in the human psyche. The reality we are driven to look for is the reality of psychic life and we want to know it in a context that to some extent is open to scientific observation. It is the understanding of psychic reality which alone gives body and richness to our concepts, and we refuse to have this reality dissolved away in empty theoretical prejudice and anatomical or other constructs taking its place. Indeed, we cannot practise psychopathology at all if we lack the capacity and the desire to bring the psyche home to ourselves in all its rich complexity.

The investigator, however, is more than a vessel into which knowledge can be poured. He is a living being and as such an indispensable instrument of his own research. The *presuppositions* without which his enquiry will remain sterile are contained within his own person. Clarification may free us from prejudice, but presuppositions are a necessary part of understanding. They appear as tentative ideas which we then take as experimental hypotheses; they are certain basic attitudes in ourselves, derivations of our own being, without which we cannot comprehend the essence of anything. Presuppositions provide guiding ideas, and form the mental life of those engaged in research; they need to be strengthened and cultivated and they should be acknowledged. They do not prove the correctness of an insight but are the source of any truth or relevance it attains.

Prejudices (that are false) are rigid, circumscribed presuppositions which are wrongly taken as absolutes. They are hardly realised by those who hold them; they do not reach consciousness and when clarified can be dissolved. *Presuppositions (that are true)* are rooted in the investigator himself and are the ground of his ability to see and understand. Once elucidated, they will be well and truly grasped.

The most vital part of the psychopathologist's knowledge is drawn from his *contact* with people. What he gains from this depends upon the particular way he gives himself and as therapist partakes in events, whether he illuminates himself as well as his patients. The process is not only one of simple observation, like reading off a measurement, but the exercise of a self-involving vision in which the psyche itself is glimpsed.

It is possible to partake in the inner life of another person through a tentative exchange of roles; a certain dramatic play, as it were, which nevertheless is no play but real. There is a natural way of empathic listening to others in which we simultaneously keep touch with ourselves. Every psychopathologist depends on his power to see and experience and on the range, receptivity and complexity of such power. There is an immense difference

between those who blunder about among the sick and those who take an unhesitating course in the light of their sensitive perceptions.

This sympathetic tremulation of one psyche with the experiences of another means that, if we are to be scientific, we must objectify such experience critically. Sympathy is not the same as knowledge, but from it springs that vision of things which provides knowledge with indispensable material. Completely dispassionate observation misses the essence of things. Detachment and sympathy belong together and should not be seen in opposition. If we are to gain in scientific knowledge, the interplay of both is needed. The psychopathologist with this genuine vision has a psychic life vibrant with experiences which he is constantly subduing to a rational order.

The critique of his own basic reason, when confronted with objects, forces him to ask: what state of mind is governing my perception of these objects? Have I got their correct relevance and importance as an observed reality? What construction am I putting on them? How do they affect my own conscious reality? In order to appreciate facts properly we must always work on ourselves as well as on our material. Only that knowledge is a full knowledge which leads to growth of the self and as such it can move into new dimensions beyond the level of mere confirmatory practice.

Research workers and clinicians should create in themselves a universe of different approaches. Memories of things seen, concrete clinical pictures, biological insights, important encounters—in brief, all their personal past experience should be readily available for constant comparison. They also need a set of well-differentiated concepts, so that the interpretation of what they perceive can be made clear to others.

§ 4. METHODS

In psychiatric literature there is much discussion of mere possibilities and a great deal of subjective and speculative comment that lacks the substance of authentic experience. In studying the contributions of others as well as in our own researches, therefore, we should always ask: 'What are the facts?'—'What am I being shown?'—'What are the original findings and what are the present ones?'—'What interpretation has been put upon them?'—'How much is pure speculation?'—'What experience do I need to follow these ideas up properly?' When the ideas presented are not based on experience, we should ask whether we might not discard them as immaterial. Ideas should lead to new findings or enrich those findings that already exist by making them more tangible or giving them a fuller context. It is a pity to waste time on tortuous, meaningless argument or on imaginary models, however much they clamour for attention. If we are to apperceive essentials with certainty, our guide should be a clearly grasped methodology. This helps us to draw a line between genuine, empirical research, pointless experiment and compilations that are uninformative, poorly designed and repetitive.

Every advance in factual knowledge means an advance in method. The latter is often adopted consciously, but by no means always so. Not all great scientific advances begin with complete methodological insight, though when this is present it always clarifies and establishes the factual knowledge gained.

Research methods define their objects by the method chosen. The object is therefore never reality as a whole but always something in particular, an aspect or a perspective, never the happening in its totality.

(a) Techniques

Psychopathology finds its objects for study in clinics, consulting rooms, institutions, in collected papers, reports, in research laboratories, etc. We are dependent in the beginning on such facts as can be found, and on the way they have been tackled. Discovery often enough consists in simply drawing attention to observed facts. The first person to count suicides and list other comparable figures (population-statistics, seasons of the year) discovered something, even if only in the first instance a routine technique. The important thing is to see the significance of something hitherto ignored and to watch the chance of winning fresh facts through the use of a number of techniques.

1. *Case-study.* Research in psychopathology is based on verbal exploration of the patient and on an intimate acquaintance with his behaviour, gestures and attempts at communication. We also try to get material information on his present condition and on his earlier personal history, so far as it can be obtained. We use the patient's own description of himself, the history as given by him or his relatives, official documents when he has been in the hands of authority, personal papers, information from acquaintances, superiors, etc.

The individual case remains the basic source for all that counts as experience in psychopathology. The description of cases and case-histories—which may range from a description of individual phenomena to a comprehensive biography—is called case-study. This method provides the foundation for our particular science and orientates our approach.

Besides this commonly used and readily grasped method, psychopathology has also developed certain special methods which are not so well suited for routine enquiries, but are appropriate for the exploration of correlates. These are the statistical and experimental methods.

2. *Statistics.* Statistics¹ first appeared in psychopathology as a method of social research, e.g. criminal statistics, suicide rates, etc. Then came the statistical handling of certain specific psychiatric problems: duration of paralysis, interval between luetic infection and onset of paralysis, ages of patients and onset of their respective psychoses; annual distribution curve of admissions, etc. Finally, statistics gained a prominent place in genetics, in correlation-finding in personality studies, in intelligence testing and in somatotyping. The pull towards precision, so characteristic of the natural sciences, operates

¹ F. W. Hagen, *Statistische Untersuchungen über Geisteskrankheiten* (Erlangen, 1876). Also later works such as Roemer, *Allg. Z. Psychiatr.*, vol. 70, p. 804.

no less in the field of psychopathology and spurs us on to try to measure and enumerate everything we can.

Statistical methods present a particular problem of their own. We would comment briefly as follows:

(aa) Statistical findings never show anything conclusive, when applied to *the individual case*. They can only work with probabilities (usually to the most modest degree). Individual cases can never be subsumed under a statistical finding. For instance, if I know the percentage mortality for an operation, I still do not know what will happen in the individual case. Or if I know the correlation between somato-type and psychosis, I cannot assess the significance of the somatotype in the individual. Any one case may be totally unaffected by the statistical findings.

(bb) A clear definition of *the original data* is of decisive importance. If it is not unequivocally defined and identifiable by any other research worker at any time, calculation becomes meaningless. Exact method based on inexact data can lead to the most remarkable mistakes.

(cc) Whenever simple enumeration gives place to *mathematical manipulation* a high degree of mathematical and critical ability is required in evaluating results. All the different steps must be kept in mind as well as the sense of the findings; it is only too easy to get lost in a nightmare world of pseudo-mathematical abstractions.

(dd) Statistical findings lead to *correlations* but not to *causal connections*. They hint at possibilities and stimulate us to interpret. Causal interpretation demands hypotheses which we can test out. This leads to the danger of numerous *ad hoc* hypotheses multiplying in support. The limits of interpretation must be realised. We should be aware when the point has been reached of artificial hypotheses explaining every correlation. No one case can be contradictory because the supposed factors in all their possible combinations have become all-inclusive and by the application of mathematics every finding can be turned into a confirmation. Friess' theory of the periodicity of biographical events provides an instance. But even with relatively simple numerical comparisons, misinterpretation is quite a risk and often not easily perceived as such. Figures are convincing and we must see they do not smother the useful overstatement 'figures can prove anything'.

3. *Experiments.* Experiment has occupied a prominent position in psychopathology. *Experimental psychopathology*, as it was called, was separated off from the rest of the subject and regarded as a special field, i.e. scientific psychopathology proper. Such a division seems to us a mistake. Under certain circumstances experiments can be most valuable auxiliaries but the ultimate goal of a science cannot be merely to obtain experimental results. Valid experiment in this field can only be carried out by a psychopathologist who has psychological training, and who knows what questions to ask and how to evaluate the answers. Practice in experiment may give technical skill but it does not in itself constitute the ability for psychological work. Hence the many pseudo-scientific experiments carried out by experimental psychopathologists. Complicated experiments are performed and figures produced but they tell us nothing. There is no supporting theory at the back of them nor any guiding

point of view. The brilliant investigations of Kraepelin in regard to the work-curve, his measurements of memory, his association experiments, etc., constitute a most valuable contribution but comparing the results of psychopathological enquiry in general with the results of experimental psychology, Möbius¹ seems to state the truth when he writes of the latter 'they are, to put it crudely, very small beer'.

The main problem is to find those methods that will extract some definite realities from the endless and confusing flood of life; methods that will help us to construct models, find measurable data, draw graphs, schemata and likenesses—in brief create the configurations whereby reality can be properly structured and comprehended. Discovery of a way to make certain facts comprehensible, so that they can be re-identified by others, is the beginning of all research.

Technical methods, such as experiments, calculations, measurements, very often result in accidental observations on the patient which may be extremely useful, though within their own term of reference these methods may yield little. Intelligence tests, for instance, can produce situations in which the patient offers an interesting piece of behaviour which the objective clinical examination did not bring to light. Somatotyping induces a scrutiny of the body from all possible angles, although the actual measurements may be without significance. Thus it is easy to make false evaluations, once we confuse a method's objective findings with what comes to light incidentally in the course of its application.

(b) *The practical logic of research*

In the actual course of acquiring knowledge we find ourselves using several methods simultaneously. For theoretical purposes we can discriminate between them and along with them the main types of material gained from their use. There are three major groups: the collection of *individual phenomena*, the enquiry into the *connections* and the grasping of *complex unities*.

1. *Collection of individual phenomena.* Individual facts emerge out of the living flow of psychic reality. Their infinite number fall into various groupings determined by the method of their collection.

(aa) The first step towards a scientific knowledge of the psyche is the selection, delimitation, differentiation and description of particular *phenomena of experience* which then, through the use of the allotted term, become defined and capable of identification time and again. Thus we shall presently describe the different kinds of hallucinations, delusions, compulsive phenomena and the different modes of personal awareness, drives, etc. So far there is no concern with the sources of such phenomena nor with the emergence of one psychic phenomenon from another, nor yet with any theories about underlying causes. The only concern is with the actual experience. This representation of psychic experiences and psychic states, this delimitation and definition

¹ P. J. Möbius, *Die Hoffnungslosigkeit aller Psychologie*, 2nd edn. (Halle, 1907).

of them, so that we can be sure the same term means the same thing, is the express function of *phenomenology*.

(bb) The descriptions of phenomenology only help us to get to know our material indirectly. We depend on patients' self-descriptions, which we can only grasp by analogy with our own modes of experience. Phenomena of this sort may be called *subjective* as opposed to those *objective* phenomena which can be directly demonstrated as they occur, which they do in a number of fundamentally different ways, e.g. as somatic accompaniments (the pulse rate during excitement, dilatation of pupils during fear), or as expression (facial expressions of happiness or gloom), as measurable performance (work-output, memory performance), or in the shape of actions, behaviour or literary or artistic creation. All such objective phenomena help to elucidate the question —what are the basic types of objective psychic facts?

Differentiation is very often made between *subjective* (the patient's immediate experience, which can only be indirectly grasped by the observer) and *objective* (that which can be directly demonstrated in the external world). But such differentiation is not unequivocal. 'Objective' has various meanings; it is not identical in the case of pulse rate, memory performance or meaningful gesture. The following shows the different meanings which this dichotomy into 'subjective' and 'objective' can produce :

1. *Objective* means everything that can be *perceived by the senses*: reflexes, recordable movements, actions, conduct, etc.; every measurable performance, work-output, memory-span. *Subjective* then means everything that can be comprehended by *empathy* into psychic events, or by some realisation of psychic content.
2. Rational content, e.g. of delusions, can be called *objective*, in so far as this can be understood in a *purely intellectual* way, i.e. without empathy. *Subjective* then is applied to the actual events in the psyche which can only be grasped by *sympathetic insight*, i.e. the original delusional experience.
3. *Objective* can be used ultimately for a part of what was up to then subjective, for the *outward sign* of some psychic content directly understood by empathy, e.g. the fear shown by a patient. In this context, *subjective* becomes what we get to know indirectly *through the patient's own statements*, e.g. when a patient with no outward signs of fear tells us he is afraid.
4. It is a remarkable fact that one can have psychic experience without knowing the exact manner of it. For instance, patients may be retarded, which we can either note objectively in the slowing down of their reactions or detect as an objective fact through the exercise of our own empathy. They themselves, however, need not be subjectively aware of this at all. The less psychic differentiation there is, the less is the subjective awareness. In this context, therefore, we can find *objective retardation* as opposed to *subjective retardation* or an objective flight of ideas as opposed to a subjectively experienced 'pressure of thought' (the feeling of a disjointed, restless and shifting flow of ideas).
5. So far all the phenomena, whether objective or subjective, provide matter for scientific investigation but there is one last aspect of the dichotomy into subjective and objective under which *objective* phenomena become those *which can*

be tested and discussed, while *subjective* phenomena are those that remain vague matters, *untestable*, cannot be discussed, seeming to rest on inexplicable impressions and purely personal judgments.

2. *Enquiry into connections* ('Understanding' or 'perception of meaning'—Verstehen; 'Explanation' or 'perception of causal connection'—Erklären). Phenomenology presents us with a series of isolated fragments broken out from a person's total psychic *experience*. Other studies present us with data of a different order, e.g. psychological performances, somato-psychic events, expressive gestures, psychotic actions and inner worlds. How are all these various data to be related? In some cases the meaning is clear and we understand directly *how one psychic event emerges from another*. This mode of understanding is only possible with psychic events. In this way we can be said to understand the anger of someone attacked, the jealousy of the man made cuckold, the acts and decisions that spring from motive. In phenomenology we scrutinise a number of qualities or states and the understanding that accompanies this has a *static* quality. But in this question of connectedness, we grasp a psychic perturbation, a psyche in motion, a psychic connection, the actual emergence of one thing from another. Here our understanding has a *genetic* quality. (A psychopathology of meaningful phenomena.) Not only do we understand subjectively-experienced phenomena in this way, but all the other phenomena which are directly visible to us in their objective manifestations, e.g. actual performances and the works and personal worlds of our patients, which may all have provided us with the material for our static observation.

Broadly speaking, however, 'understanding' has two different meanings, according to whether it is termed *static* or *genetic*. The *static mode* denotes the presentation to oneself of psychic states, the objectifying to oneself of psychic qualities, and we shall exercise this kind of understanding when we come to the chapters on phenomenology and the psychology of expression, etc. In the second part of the book we shall occupy ourselves with the *genetic mode*, that of empathy, of perceiving the meaning of psychic connections and the emergence of one psychic phenomenon from another. The qualification of 'static' or 'genetic' will only be added to 'understanding' (Verstehen) where there might be some confusion. Otherwise we shall use the term 'understanding' according to context, implying in one chapter the static mode, in another the genetic.

In psychopathology our genetic understanding (or perception of meaningful connection) soon reaches its *limits*. (We can call this process 'psychological explanation' if we like, but then we must keep it clearly distinct, as of a different order from objective causal explanation, which is the perception of causal connection in the strict sense.) In psychopathology psychic phenomena appear suddenly as something entirely new, in a way we cannot understand at all. One psychic event follows another quite incomprehensibly; it seems to follow arbitrarily rather than emerge. Stages of psychic development in

normal people, psychic phases and episodes in abnormal people are all incomprehensible events and appear as purely temporal sequences. It is equally difficult to understand the whole range of a person's psychic development and its full meaning in genetic terms. We can only resort to *causal explanation*, as with phenomena in the natural sciences, which, as distinct from psychological phenomena, are never seen 'from within' but 'from the outside' only.

In order to be clear we shall keep the expression '*understanding*' (*Verstehen*) solely for the understanding of psychic events 'from within'. The expression will never be used for the appreciation of objective causal connections, which as we have said can only be seen 'from without'. For these we shall reserve the expression '*explanation*' (*Erklären*). These two different expressions denote something very specific which will grow clearer as the reader proceeds and the number of examples increases. In questionable cases where one or the other expression could be used interchangeably we shall use the term '*comprehend*' (*Begreifen*). The very possibility of any systematic study or clear-sighted research in psychopathology depends on grasping the fact that we are dealing here with polar opposites, static understanding as opposed to external sense-perception and genetic understanding as opposed to causal explanation of objective connections. These represent totally different, ultimate sources of knowledge.

Some scientists tend to deny the validity of any psychological source of scientific knowledge. They only accept what can be perceived objectively by the senses, not what can be meaningfully understood through the senses. Their viewpoint cannot be refuted since there is no proof of the validity of any ultimate source of knowledge. But at least we might look for consistency. Such scientists should abstain from talking of the psyche or even thinking in terms of psychic events. They should give up psychopathology and confine themselves to the study of cerebral processes and general physiology. They should not appear as expert witnesses in Court, since on their own showing they know nothing about the subject-matter; they can give no expert opinion on the psyche, only on the brain. They can only help expertly with reference to physical phenomena and they should give up any pretence to history-taking. Such consistency would gain one's respect and we might think it worthy of the name of science. More commonly we find, however, denials and doubts expressed in interjections such as 'this is only subjective', etc. This seems a sterile nihilism shown by people who would persuade themselves that their incompetence is due to their subject-matter, not to themselves.

3. *Grasp of complex unities.* All research differentiates, separates and studies individual particulars in which it tries to discover certain general laws. Yet all these individual particulars are taken out from what is in reality a complex unity. In grasping particulars we make a mistake if we forget the comprehensive whole in which and through which they exist. This never becomes the direct object of our study but only does so via the particulars. It is never examined

in itself but only in the form of some schema of its essence. In itself it remains an idea.

We can state the following in relation to it: the whole comes before its parts; the whole is not the sum of its parts, it is more than them; it is an independent and original source; it is form; the whole cannot therefore be grasped from its elements alone. The whole can persist in its totality even when its parts are lost or changed. It is impossible to derive the whole from its parts (mechanistic philosophy) nor can the parts be derived from the whole (Hegelianism). We have rather to conceive a polarity. The whole must be seen through its parts and the parts from the aspect of the whole; there can be no comprehensive synthesis of the whole from its parts nor any deduction of the parts from the whole; there is only something that encompasses. The infinite whole comprises a mutual interplay of parts and wholes. We have to enter upon an infinite analysis and relate everything analysed to its appropriate whole. In biology, for instance, all the particular causal connections obtain their coherence through mutual interaction within a living whole. Genetic understanding (the perception of psychic connection) enlarges the 'hermeneutic round'; we have to understand the whole from the particular facts and this whole in turn preconditions our understanding of the facts.

The same question arises in *somatic medicine*. In the old days when illnesses were thought to be demons in possession, a man was held to be either sick or not; he had a devil in him or he had not. He was thought to be wholly possessed, sick as a person. Then came one of the greatest advances in scientific knowledge, when it was found that the body was not sick as a whole at all, but that the trouble could be localised in certain anatomical organs or biological processes, from which point it exercised more or less far-reaching effects on other organs, functions or even on the whole body. Reactive and compensatory processes were observed between the morbid development and the body as a whole, which was seen as a life-process making for health. It was now possible to distinguish purely local and limited diseases, which had no effect on the rest of the body and were of slight importance—what we might, using other criteria, call a blemish—from those other disorders which became vitally important because of their effect on the body as a whole, which then began to react to these effects. Instead of the numerous ills which had been supposed rather vaguely to affect the whole body, it was now possible to describe a number of well-defined diseases which could be the cause of widespread symptoms but did not spring from the living body as a whole. There remained a by no means unimportant group of somatic disorders which seemed to be grounded in the total constitution of the body. In the last resort, however, we find that with all individual disturbances once they have been identified there is always some relation to the 'constitution', that complex unity of the living individual.

The same polarity of whole and part will be found to exist in our study of *the psyche*. But in this case from the point of view of methodology everything

is much less clear scientifically, with many more dimensions and much more complex. The relationship between part and whole enters into every chapter of this book. At critical points the meaning of wholeness will be explored in some detail, but it becomes the main theme in the fourth part, as the empirical whole, and in the sixth part as that all-encompassing whole which is beyond empirical investigation. The following are a few general preliminary remarks:

Though we speak of 'a human being as a whole' we mean something infinite and as a whole unrealisable. A vast number of individual psychic functions go to its construction. Let us take for example some extremely circumscribed particular, such as colour-blindness, tone-deafness or outstanding memory for digits; these are so to speak deviant parts of the psyche which may eventually—sometimes during a lifetime—exert an influence on the total personality. Similarly we can think of many other particulars as isolated functions of the psyche which provide the varied equipment of personality and we can contrast abnormalities arising in these functions, in memory for instance, with abnormalities of a quite different kind, which are rooted in the whole individual right from the start and do not seem to originate in any individual part of the psyche. For instance, there are patients in whom brain injury has produced severe memory defects, speech disorders and motor paralyses which seem destructive to the total personality. If we observe closely, however, under certain favourable conditions, the original unchanged personality becomes apparent; it is only 'put out of action' for a time or made incapable of expressing itself. It remains potentially intact. In contrast with this we find patients whose 'equipment' seems all in order but who appear deviant in their personality as a whole, sometimes in a way which defies definition. It was this which led the older psychiatrists to call mental illnesses 'illness of personality'.

This general polarity of the human being as a whole and his individual psychic parts does not provide the sole dimension for our analysis. There are many kinds of wholes and parts in psychological research. Phenomenological elements are contrasted with the totality of the momentary state of consciousness; an individual's particular performance with his over-all performance; the individual symptom with the typical syndrome. As to more comprehensive and complex unities, we find these in the constitution, in the disease entity and in the person's whole history. Yet even these ultimate empirical wholes remain relative and cannot be taken as the whole of the human being as such. This encompasses all these things and springs from an unconfined freedom which lies beyond the reach of empirical enquiry into Man.

Scientific endeavour makes progress only by analysis and by relating one particular to another, but if it does no more than this, it dies in failing to discern the essential; it simply slips into the comfort of bare enumeration. Science must always be carried along by the idea of some unifying whole, without being seduced by facile anticipation into tackling any such whole

directly. When this happens we tend to get drunk with phrases and narrow our horizons through a presumed mastery of the whole and through an apparent elucidation of the psychic forces which encompass us all. In our research we need to keep as our farthest horizon the consciousness of this encompassing quality of the human being, which reduces every object of our enquiry to a part or an aspect, to something relative, however comprehensive it may seem in its empirical wholeness.

What Man actually is remains the great question that stands at the margins of all our knowledge.

(c) *Inevitable mistakes in formal logic that have to be constantly overcome*

i. *The slide into endlessness.* Facts and thinking are 'correct' but yet do not bring knowledge. Every research worker has the experience of being on the wrong track and baffled, without knowing why. We have to learn to meet this hazard consciously, having grasped wherein it lies. I now try to point out a number of these hazards.

(aa) If I write my *case-histories* on the principle that I must lay judgment aside and describe everything, put down all that the patient says, collect everything that can be known, my case-histories will soon become nothing but endless description and if I am too conscientious, they will grow into fat tomes which nobody reads. The mass of irrelevant data cannot be justified by saying that later research workers may look at it from some fresh point of view. Very few facts can be well described without there being some intuitive awareness of their possible meaning. We can only avoid pointless activity of this sort if we start with a vision of what is essential and if we formulate some ideas to govern the collection of our data and its presentation. It is no help to cut the process short with some schema of popular appeal.

(bb) One of the surest ways to establish facts is *to count what can be counted*. But we can count ad infinitum. Figures may now and then command interest, particularly for a beginner, but they make sense only when such figures can be compared from different points of view. Yet even that lacks point. The important thing is to make the whole counting operation into an instrument for some exploratory idea which will penetrate reality and not merely re-present itself in a string of endless figures. Thus we find complex investigations which produce certain figures but teach us nothing; there is no basic idea to check diffusiveness and give the work methodical shape.

(cc) It has become popular to calculate the *correlation* between two sets of facts, and this may vary from certainty (coefficient = 1) to complete independence (coefficient = 0). Personality traits, individual abilities, genetic factors, test-results, are all examined statistically for degrees of correlation. Such correlations appear very satisfying; there seems to have been a conclusive demonstration of real connections. If however such correlations are multiplied endlessly and are only of moderate significance in any case, they begin to lose their value. Correlations are after all only superficial facts, an end effect which cannot inform us of the real relationships obscured by such mass statistics. In this world almost everything is related to everything else. The facts will attain to meaning and the endless correlation stop only if we can introduce some standpoint to give significance. This should derive from a theory based upon other sciences and be itself illuminated with a fresh idea. As with everything else, the mere beauty of the presentation must not blind one. Diffusiveness of this

sort can be checked only with the help of some methodological principle to which we must adhere.

(dd) Another protracted, yet sterile, undertaking is the enumeration of all the parts of a reality and the explanation of it by the *combination and permutation* of these same parts. Even if, judging by methods of pure logic, this were quite correct, our knowledge of fresh, essential matters is advanced not at all. The important thing is to possess the formula whereby all the real possibilities may be deduced as required, not to make ad hoc use of the play of permutations without any over-riding notion of what it is all about.

(ee) In studying the *physiology of reflexes*, because the reality of mutual conditioning of elementary reflexes is so complicated, we may quickly get caught in an endless maze, while trying to establish all the possible combinations of certain conditioned reflexes. But knowledge of the integration of reflexes will overcome this endless interchange by helping us to grasp the principle of such an integration, which we can test by a number of well-designed experiments. Such knowledge illuminates for us the endless process and informs it with a principle.

(ff) Generally speaking in all fields of research we find the same enumerative process at work. Clinical syndromes are described and combined endlessly, phenomenological descriptions accumulate and tests of performance multiply.

In research we have to go through the same experiences again and again. We first have to commit ourselves and then embark on a long journey. After countless attempts we have so to feel the impact of our efforts that—saturated with what we have gathered on the way—we at last gain the idea which will bring order, create categories and differentiate between what matters and what does not. Every true discovery is a conquest over endlessness. It is a prime mistake for a scientist, however industrious, to lose sight of this and work away in sterile repetition. We should retain the capacity to be startled and to stop, to feel the challenge of our work and discover in this experience of endlessness the beginning of new possibilities. For a time, it is true, the slide into endlessness is always necessary. Every piece of original work is followed by analogous studies, by repetition of the same experiments on other material, by work which serves the purpose of confirming or enlarging upon the previous findings, until the unending nature of the repetition becomes obvious. But the forward march, the beat in the real rhythm of research, springs from the periodic fertilisation of our consciousness with a new idea which solves the endless riddle that has baffled us so far. In putting the clear question, we already have our reply.

This discussion on the danger of diffuse effort rests on the principle that all concrete reality is infinite. Knowledge lies in discovering concepts whereby we can *master this unendingness* and bring it *under the control of discerning insights* which, though limited, are nonetheless well fitted to help us grasp the essence of their matter, in so far as they grow organically out of it and are not forcibly imposed upon it.

There are many ways in which we can lose the point of our efforts, and we will now describe a few that are typical:

Unlimited 'ad hoc' hypotheses. We need working hypotheses for the interpretation of our facts. They have no value per se but only as a means of widening experience, so that we can pose the right questions and develop a line of research. It is usual to endow these working hypotheses with a certain significance, often quite unconsciously. We keep on making more and more far-reaching concepts, develop our theoretical constructions and employ one concept after another simply for the sake of concept-building. We need only to consider the psychiatric literature attentively to see how much writing consists of unobjective thinking without foundation in experience. We can see how easily this happens. Theoretical possibilities are endless in themselves. To develop them is an intellectual game, differing, according to taste, in line and pattern and in persuasive power. But for thought to have meaning, this endless game has to be controlled. We can set a limit by requiring every concept so to justify itself in the reality of experience that our experience is furthered. This cannot be done by unproductive play with the experiences already available. Thought that leads us away from living experience without again returning to it builds a fable. We must, therefore, ask of every method whether it increases our knowledge and gives it depth and shape, and whether it makes it more possible to identify phenomena as they arise. Does it widen our experience and increase skill? Or does it lead to a void of abstractions and so entangle us with ideas and paper-schemes that we suddenly find ourselves in a world remote from what we see and do, and ourselves moving from one vacuum into another?

Acceptance of endless possibility. If our theoretical explanations are such that a combination and variation of the available facts will explain every possible instance in such a way that no case remains to contradict the theory, we have fallen into the trap of another endless activity—one that tries to explain everything and therefore explains nothing. An initially clarifying theory will encounter contradiction at some time or other. There will be realities which will oppose it. 'Ad hoc' theories may then be formed to explain these new facts and finally a point is reached where so many premises have been made that all thinkable eventualities are provided for. Probably all successful theories that have held sway from time to time have fallen into the practice of this magical, confusing play. Such theories 'explain everything' and thereby nothing and can offer the faithful only an unending application of the theory and the all-embracing possibilities of combination. Every time explanation becomes too complex, scientists should be on their guard against being drawn into an acceptance of endless possibilities, which at one stroke turns them into omniscient individuals, whose only means of progression in fact is to revolve in tautologous circles.

Unlimited use of references. Anyone who does research wants to know what has been discovered previously. In describing a given field of knowledge, one must know the literature referring to it, but too exacting a thoroughness in this comprehensive occupation may go on for ever. We may then consider

important only the collection of ideas, opinions and individual differences as such, the matching and selecting of them. This activity will grow endless once we fail to recognise certain areas of agreement because different terms and phrases have been employed. It will be equally endless if we do not see the indefiniteness of certain aspects because we believe that the whole has already been explained; or if, for lack of proper scrutiny, the author's ideas have overgrown the actual argument; or if the literature has not been extracted on relevant lines and according to the factual value of its contents, there being instead a wholesale collection of it, as if everything described were of equal importance. In the face of the enormous psychiatric literature that has accumulated, we have to acquire a power of discrimination which will protect us from confusing what are only 'efforts of Sisyphus' with the accumulation of knowledge.

(2) *The impasse created by absolutes.* Almost all the methods and material of research come to be regarded as necessary, of central importance and absolute. Once we feel we are on the right course, we are eager to subordinate all our findings to the one point of view which now is no longer seen simply as our method of working, but takes on an ontological value in itself. We believe we have now grasped reality, instead of remembering that we are in fact using a large variety of methods and our enquiry must be kept in a proper perspective. We have come to regard what is only partial knowledge as if it were an absolute, whereas all knowledge is partial and of the particular. To safeguard against this pitfall, we should have a clear idea of the different methods and points of view and weigh them one against the other, those of biology, for instance, as against those of the social sciences, or vice versa; or the psyche against the brain, or nosology against phenomenology. By regarding our own point of view as an absolute we create nothing but prejudice.

In psychopathology and in psychology, theories have grown up from a far too readily satisfied urge to explain the whole in some one particular way by means of a limited number of elements. This has resulted in the construction of 'systems', certain all-embracing frameworks, broad classifications and apparently final, totally comprehensive structures, which need only further perfecting in their details. In all these efforts, theories of the nervous system have always been the model. We, on the contrary, are asking for a systematic grasp of all the existing methods and viewpoints and insist that there should be no confusion of them, and no generalisation beyond certain well-defined limits, and within these limits methods should be systematically used and carefully applied.

From its inception this book has been averse from every kind of fanatical teaching, which creates absolutes so readily out of the human desire for attention. In the course of an enquiry and in following up all its consequences, absolutes may be necessary and even meaningful to an enthusiastic investigator, caught up in some phase of his work. When however we are trying to construct some comprehensive picture, such practices should be discarded. The first requisite is to fight fanaticism—and who is there without it? Only so will theory spring from an appreciation of the whole rather

than from some partial truth that has been raised arbitrarily to the status of an absolute. The unifying whole which we look for is always incomplete. In contrast to the totality of closed and would-be universal systems, my own over-all point of view starts, not from an apparently known, factually demonstrable principle of things, but rather points down many perspectives and in many directions. It suggests movement in various planes and constrains us to remain alert and look far afield, while at the same time we try to keep a firm grasp on all the systematised knowledge we have won so far.

But it is a delicate matter to unify the manifold findings of research. Every investigator is apt to consider the facts in his own field misrepresented by others. He will resent that anybody who has not worked in this same field should interfere with his judgments and he will lightly dispose of arguments which arise from an objective interpretation of the whole field, treating them as purely theoretical. Any such unification would indeed be a distortion, if it were built on ontological principles, but, as it is, our attempt does not take the form of a universal theory bent on explaining everything. It takes the form only of a comprehensive methodology, in which all possible knowledge can be accommodated. Such a methodology must be so constructed that it is an open one which constantly allows for new methods.

The basic attitude expressed in this book is that of fighting against all attempts to create absolutes, of exposing the various forms of endlessness and of doing away with obscurities, but we hope at the same time to recognise every genuine experience and comprehend it in its own way. We want to understand and accommodate all the knowledge that is possible and find a natural place for it within the framework of our method.

(3) *Pseudo-insight through terminology.* Precise knowledge always lends itself to clear formulation. Happy or unhappy formulations have exceptional importance for the effective dissemination and general intelligibility of our discoveries. But only where the knowledge gained is itself clear will the resulting terminology be both factual and of intrinsic value. There is a recurrent demand for some unified terminology in psychology and psychopathology and the difficulty lies not in the words so much as in the actual concepts themselves. If only our concepts were clear, there would be no problem of terminology. As it is, to create a scientific terminology at this juncture by setting up some committee or other appears quite impracticable. We have not yet arrived at any universal acceptance of the necessary concepts. We can expect only that everyone who publishes any work in psychopathology will be familiar with the concepts which outstanding investigators have associated with certain terms and that he himself will deliberately associate precise concepts with the words he himself uses. At present people do not hesitate to introduce new words into scientific publications and discussions, words which carry manifold meanings in general usage. Frequently, too, fruitless attempts are made to suggest a whole number of new words rather than do any real research.

(d) *The relatedness of psychopathological methods to other scientific studies*

Medicine is only one of the roots of psychopathology. Psychopathological

phenomena may also be reinterpreted as *biological events* against a general ground of biological theory, e.g. genetics, where human existence and mental illness can be studied from this point of view. Only when the biological aspects have been clearly distinguished can we proceed to discuss what essentially belongs to Man.

Whenever the object studied is Man and not man as a species of animal, we find that psychopathology comes to be not only a kind of biology but also one of the Humanities. With psychiatry the doctor enters a world which lies outside the other disciplines with which he is already familiar. The fundamentals of his education generally consist of chemistry, physics and physiology, but here he is in need of a different basic training. This situation is responsible for the fact that psychiatry, in so far as it is practised by doctors without training in the Humanities, lacks any consistency in its scientific standing. Young doctors study their psychiatry more or less haphazardly and some psychiatrists can show little more than a dilettante learning.

Psychopathology requires us to study specially, not only to understand the work of others, but to do so methodically and with a reasonable certainty, as well as to make further progress ourselves.¹ The literature is pervaded by inadequate contributions in this respect. The average psychiatrist is officially recognised as an expert only in so far as cerebral pathology, somatic, forensic, nursing and administrative problems are concerned.

According to Kant² expert opinion in the Courts on mental states should fall within the competence of the philosophical faculty. From a purely logical point of view perhaps this is correct but in practice of course it will not do. No one but a doctor can treat mental patients because somatic medicine is indispensable for this. Consequently only a doctor should be concerned with the collection of factual data necessary for the Court. Kant's dictum stands, however, in that the psychiatrist's competence is really commensurate with how far his education and knowledge would qualify him to belong to the philosophic faculty. This goal is not served where (as has occurred in the history of psychiatry) he learns a certain philosophical system by heart and applies it automatically. This is worse than if he had learnt nothing at all. But he should acquire some of the viewpoints and methods that belong to the world of the Humanities and Social Studies.

In fact the methods of almost all the Arts and Sciences converge on psychopathology. Biology and morphology, mensuration, calculation, statistics, mathematics, the Humanities, sociology, all have their application. This dependence on other branches of learning and the proper taking over of their methods and concepts are both matters of some importance to the psychopathologist, who is concerned with the human being as a whole and more especially the human being in times of sickness. The essence of psychopathology as a study can only emerge clearly from a composite framework. It

¹ Külpe, 'Medizin u. Psychologie.', *Z. Pathopsych.*, vol. 1 (1912).

² Kant, *Anthropologie*, 51.

is true that methods taken over from elsewhere may lose thereby and are often misapplied, thus producing a pseudo-methodology, and this is a weakness. Yet psychopathology is impelled to make use of methods that have been perfected elsewhere in order to improve the status of its subject-matter, which is unique and irreplaceable for our apprehension of the world and humanity, and to bring it to a level where it can be properly grasped and its significance fully comprehended.

The channels provided by society for psychopathological enquiry are the hospital practice, the outpatient departments, the institutions, the medical and psychotherapeutic consulting-rooms. Scientific knowledge emerges first as the consequence of 'practical necessity' and most often remains within these confines. More rarely, but then all the more effectively, the thirst for fundamental knowledge has led great personalities within these fields to break new grounds.

(e) *The demands of a satisfactory methodology: a critique of methods in contrast to methods that mislead*

What can we expect from our methods? They should help us to gain new ground and enrich our knowledge in depth while they widen our experience. They should enable us to understand cause and effect and they should indicate to us comprehensible relationships, the verification of which is tied to our presuppositions. They should not involve us with what are mere logical possibilities divorced from observation and experience, and their value should show itself in the extent to which we can assess and influence events that arise from our contact with persons.

Criticism of methods is of value in testing the foundations of our knowledge from time to time. We can then detect pseudo-knowledge due to wrong method. Such a critique also helps us to grasp the inner organisation of our knowledge. It refines our methods of enquiry, making them more practicable and better understood.

Every scientific approach has its pitfalls and methodology is no exception. It can degenerate into an empty, logistic checking and rechecking. Such superficial juggling with figures or shuffling of concepts is merely destructive. The true source of all our knowledge is always the contemplative gaze. It may well happen that a writer who has seen something new cannot formulate what he has seen into an unexceptionable theory; although he is right, formal logic may apparently demonstrate contradiction and error. Constructive criticism, however, will grasp the essential and valuable part of what he wants to say and only improve formulation and clarify method. This necessary, if only formal, correction will be dangerous only if the real significance of the new insight is overlooked. We may find also that clear, correct concepts have been fatal for a particular problem at a certain time, inasmuch as they were premature and as yet unsubstantiated.

Discussion of method makes sense only when there is a concrete case to

consider and when the particular effects can be shown. Discussion of method in the abstract is painful. Only a concrete logic is valid in the empirical sciences. Without factual investigations and concrete material, arguments become suspended in mid-air. There is little point in thinking up methods which are not put into practice and perhaps can never be.

Finally there is a type of methodological approach which works quite categorically and negates 'de facto' every positive attempt at fresh knowledge. It works on purely logical grounds and the result is entirely unproductive. For example, there is the typical objection against any attempt at precise differentiation, which is said to be 'breaking down' what is properly a 'unit' (e.g. body and soul, knowing and living, personality development and morbid process, perceiving and conceiving, etc.). Another such argument is that 'transitions' between the separated elements make differentiation illusory. However broadly true this 'unit' thesis may be, its application to the processes of research is generally untrue. Knowledge can be gained only by differentiation. True unity precedes knowledge in the form of an unconscious comprehension that pervades in the form of Idea, creating clear perspectives that once more unify what has been separated. Knowledge itself cannot anticipate this unity, which can be achieved only through actual practice, through the reality of the live human being. To know is to differentiate; knowledge is always concrete and structured, pregnant with opposites and unlimited in its movement towards unity. The discussion over 'transitions' is usually nothing but a retreat from observation and thinking. It is a negative quibbling and such pseudo-methodology does nothing to strengthen genuine unity; it only makes for greater confusion. An amorphous enthusiasm for unity produces chaos and obscurity instead of knowledge which should have a wide mastery over its means.

Certain standards should be expected from publications in psychopathology. Arguing until domesday should be impermissible. Before communicating any research, writers should live themselves into the major observations of the past, familiarise themselves with the essential differences and be clear about their methods. This is the only way to ensure that ancient matter is not being presented again as something new and perhaps even in inferior form. It is the only way to avoid abstract theorising, a lapse into endlessness and the charge that a great deal of hard-won knowledge has got lost in surmise.

§ 5. WHAT A GENERAL PSYCHOPATHOLOGY HAS TO DO: A SURVEY OF THIS BOOK

General psychopathology is not called upon to collect individual discoveries but to create a context for them. Its achievement should be to clarify, systematise and shape. It should *clarify* our knowledge of the fundamental facts and the numerous methods used; it should *systematise* this knowledge into comprehensible form and finally shape it so that it *enriches the self-*

understanding of mankind. It thus specifically assumes the function of furthering knowledge, a function which far exceeds the simple process of fact-finding. A mere didactic classification that can be of practical use and committed to memory is not enough; only that didactic matter suffices which coincides with a grasp of the essential facts.

General psychopathology takes its place within a stream of earlier attempts to comprehend the whole. It takes its orientation from them and in turn becomes the starting-point for fresh attempts which contradict, elaborate or advance them yet further. Let us turn to some of these earlier contributions:

When my *Psychopathology* appeared for the first time (1913) there were books by *Emminghaus* and *Störring*; later we had those by *Kretschmer* and *Gruhle*.¹ All these works were written with different intentions and it would not be fair to class them all on the same level as to aim and value. Each, however, was the expression of a comprehensive theory, an attempt to mould material of unlimited extent.

General psychopathology is far from being a didactic presentation of available facts; it tries consciously to fit the whole together. Every psychiatrist is characterised by the way he formulates his complex material into some over-all pattern, flexible or rigid as the case may be. Every book on psychopathology wants to contribute to this total picture and find some mode of thinking which will give meaning and definition to the individual methods used. Books which aim at a total presentation gain relative importance from the way in which they take a comprehensive view and represent this throughout the whole of their methodology and line of reasoning. In comparing and characterising the following works I hope to draw an illuminating contrast with what I have tried to do in my own *General Psychopathology*.

Emminghaus. (1878). He chose a medical classification, analogous to other clinical specialities. His book treats 'seriatim' nosology (symptomatology, diagnostic criteria, course, duration and outcome of psychiatric illness), aetiology (predisposition, precipitating factors, etc.) and lastly, pathological anatomy and physiology. His method is purely descriptive and displays the untested general attitudes of medicine based on the natural sciences of his day. In his detailed psychology he makes use of very diverse points of view and there is little conscious criticism or development of ideas. The standard is little more than that of everyday psychology which is obscured by an apparently scientific terminology and the contemporary interest in externals. The advantage of the book is its orderly comprehensive character, but its very comprehensiveness obscures the gulf which always exists between psychiatry and other clinical specialities. (We can make a real synthesis only after a conscious effort to clarify the partly heterogeneous principles and methods involved.) Presentation is attractive and vivid throughout and the extensive bibliography makes the book an excellent reference book even today, for the older literature in particular. A wide perspective (the interest, for instance, in ethnic psychology), which is maintained along with the general medical interest, derives from the psychiatric education of earlier times. The medical classification of earlier times, which *Emminghaus* employed, continues in use in the general psychiatric textbooks.

¹ *Emminghaus*, *Allgemeine Psychopathologie zur Einführung in das Studium des Geistesstörungen* (Leipzig, 1878). *Störring*, *Vorlesungen über Psychopathologie* (Leipzig, 1900); *Kretschmer*, *Medizinische Psychologie* (Leipzig, 1922, 5th edn., 1949). *Gruhle*, 'Psychologie des Abnormen', *Hdbuch der vergleichenden Psychologie*, Kafka, vol. 3, sect. 1 (München, 1922).

Störring (1900): aimed at a different target. He wanted to discuss the importance of psychopathology for normal psychology and stressed the theoretical issues from the beginning, taking Wundt's theories as a standard. He devotes much space to discussions on the genesis of phenomena, using Wundt's methods, which nowadays strike us as rather out of date. Classification follows the old schema: cognition, emotion and volition. He uses 400 pages for cognition, 35 pages for emotion and only 15 pages for volitional phenomena. The trend of thought is consistent throughout and this lends a particular value to the book. Interesting points emerge but the net contribution is so meagre that though the title is attractive one puts the book down with some disappointment. The theoretical approach brings much more shape into the material than the traditional medical classifications used by Emminghaus, but in view of the enormous range of psychic reality, Störring's work offers very limited solutions.

Kretschmer (1922). This book cannot be compared with the other two. Its aim is didactic and it deals with that part of psychology which is supposed to be of real importance to the doctor, but without—as we think quite justifiably—differentiating in principle between normal and pathological. Kretschmer also constructs his over-all picture with the help of a theory and this gives his thought a particular configuration. He conceives a number of psychic levels, which appear as stages of development in history, phylogeny and ontogeny and are simultaneously present in the mature individual. To this he adds a second idea which concerns types of personality and modes of reaction. Both notions are then rigidly schematised. He stresses the value of simplification into a small number of formulae and he refers to the natural sciences which have found this method fruitful in gaining control over subject-matter. He wants to show how, using exact methods, he can reduce the multifarious richness of real life to a few basic biological mechanisms, universally recurrent. In doing this, however, he meets his own confusion. In the natural sciences there is a constant interplay between theory and observation, which then either confirms or disproves the theory so that exact hypotheses emerge which can get exact answers. Science progresses in a generally connected way, step by step, or with the leap of a new formulation. But in psychiatry, and this applies to Kretschmer, theory always has to have the character of a tentative approach which will allow for varied classifications and further observations.

Kretschmer supplies us with an original example of the 'psychology of meaningful phenomena' disguising it as one of the natural sciences to suit the climate of the medical faculty, but in fact he manages to do this only by misusing the logic of the natural sciences and their exact methods. His simplifications were 'to bring life into dry bones'. 'Sometimes I have tried to startle people with the barest of formulae', he says. So much compression of his material, however, and so much theoretical simplification produce an air of omniscience, with which we are only too familiar in the history of psychological medicine. His omniscience rushes to classify and pigeon-hole such phenomena as 'expressionism' or 'historical personality' and the book is pervaded by that incredible delusion adhered to by many psychiatrists that the 'psychology of the neuroses is nothing else but the psychology of the human heart'—'to understand neurosis is, "eo ipso", to understand human nature'. It is perhaps typical that the book should be written in a literary style. It has little respect for the infinite possibilities of the human individual, or for the eternal problem of the psyche. There is no sense of wonder. Instead we are offered a number of clichés, the use of which gives us a satisfactory feeling of penetrating human understanding. But

Kretschmer creates no real concept of the totality of psychic life. He gets as far as an initial selection of problems. His language is figuratively telling rather than conceptually sharp and we are more impressed by the slickness of the expression than by the genuine force of his ideas.

Gruhle (1922): This work seems in perfect contrast to Kretschmer's. The externals of careful work and dry style already point to this. Gruhle tries to find an unbiased classification. He does not theorise schematically but deals with his material as to the whole. He distinguishes quantitative, qualitative and functional abnormalities, the latter to include intentional acts and motivated behaviour. He comments on abnormal relationships between physical and psychic events and on abnormal psychic development. By using broad concepts, such as quality and quantity, he is able to classify all his material and find accommodation for all observed phenomena. No underlying concept or fresh idea is developed. There is no systematic exploration of the inner organisation of phenomena. As he said, he simply sets up a number of boundary-stones, to contain everything that seems of psychopathological importance. His superficially wide-reaching system gives us a number of broad concepts but no creative picture of the whole. He has a passion for formal clarity and this forces him to avoid everything in the way of creative construction. In the end he is left surrounded by his innumerable facts but unable to differentiate the important from the unimportant. This indeed is something which formal classifications cannot achieve; it can be done only by the use of ideas and Gruhle therefore misses the substance of the problem. He does not try to impress and one has the feeling that there is not one inaccurate sentence in the whole book. Yet the writing has a certain charm in spite of the dryness of style. The author is a man of culture and keeps a certain distance from the things he writes about. He would have had no difficulty in cultivating a literary style but he feared nothing more than the confusion of 'belles lettres' with science. If we accept the book for what it purports to be, a careful collection of existing material, we shall find it most useful. A wide literature is referred to, and old, forgotten work has been put to much good use.

My own book (1913) intends something quite different from all the publications both before Gruhle and after. As the author I cannot of course characterise this intention unfavourably. But I want to make it clear from the start that what I intend to do in no way invalidates what others have attempted so far. On the contrary I would recommend everybody who wants to penetrate into the problems of psychopathology to read all these texts and compare them. Only by correcting the one by the other can we hope to gain a proper grasp of this complex subject.

The following are some observations on the purpose and format of this book:

(a) *Conscious critique of methods in place of dogmatism*

In 1913 I described my methodology as follows: 'Instead of forcing the subject-matter into a strait-jacket of systematic theory, I try to discriminate between the different research methods, points of view and various approaches, so as to bring them into clearer focus and show the diversity of psychopathological studies. No theory or viewpoint is ignored. I try to grasp each different view of the whole and give it place according to its significance and limitations. The all-embracing factor will be the mental search. Every theory

that aims at completeness will be taken as valid for that particular standpoint only. I then try to master the sum of all such views in their entirety. But in the end no more can be done than to order them according to the methods and categories by which they have been individually constructed. I indicate how we come to perceive the various aspects of the psyche and each chapter presents one such aspect. There is no system of elements and functions to be applied generally in psychopathological analysis (as one might apply knowledge of atoms and the laws of chemical combination); we must simply be satisfied with a number of different methods of approach. The data are ordered not in terms of any one consistent theory, but simply in terms of the methods used.'

The above statement reflects a common conflict of scientific opinion that cannot be overestimated in its importance. Either we think every piece of knowledge gives us the thing itself, *reality as such*, Being in its totality, or we think that there can be no more than an *approximate appreciation of context*, which implies that our knowledge is rooted in our methods and limited by them. We may thus rest content with a knowledge of 'what is' or know ourselves constantly *on the move against expanding horizons*; we may simply emphasise some *theory of reality* as sufficiently explanatory or prefer the *systematic approach to methods used*, hoping this will throw light on what is after all an unlimited obscurity. We may discard our methods as *temporary but necessary tools*, to be dropped when we supposedly grasp at the thing itself, or *things in themselves* may become *temporary though necessary myths* attending our incessant efforts to know; they are theoretical realities which we discard as incomplete, but which keep the doors open for further experience and research.

A *conscious critique of methods* will keep us prepared in the face of enigmatic reality. *Dogmatic theories* of reality shut us up in a kind of knowledge that muffles against all fresh experience. Our methodological approach, therefore, is in full opposition to the attitude that would establish absolutes. We represent searching in opposition to finding.

We have to remember that methods become creative only when we use them, not when we theorise about them. Early investigators who widened knowledge by their methods sometimes did not understand what was happening. (They paid for their lack of understanding by becoming dogmatic about their discoveries.) The conscious study of methods as such is not creative; it only clarifies, but in doing so it creates the conditions under which discoveries can arise, whereas all forms of dogmatism inhibit fresh findings.

In a naïve thirst for knowledge people want to grasp the whole at once and grope after seductive theories which seem to point in this direction. Critical enquiry, however, would rather know the limitations and possibilities. It wants a clear understanding of the *boundaries* and implications of each viewpoint and fact, as well as a *continuous exploration* of hard-won, ever-expanding possibilities.

It seems to me that only through the use of some systematic methodology

can we obtain the widest extension of our limits and the greatest clarity about what it is possible to know.

(b) *Classification according to methods*

By reducing our methods to some order we become fully aware of the differing modes of apprehension, the various kinds of observation, forms of thought, ways of research and basic scientific attitudes, which we can then test out on appropriate objects of investigation. In this way differentiation between individual entities becomes sharper and our organs of apprehension and enquiry are refined. On each several occasion limits can be clearly drawn and we can test out possible concepts of the whole and put them in some kind of perspective. This training in methodological order provides a reliable critique of the meaning and limits in every piece of knowledge, and enhances our unprejudiced apprehension of facts.

To the psychopathologist, reality displays itself as an individual whole, in the form of a living human being. As we get to know, we analyse, and by one method or another we secure our facts. It follows that (1) all our knowledge is of particulars; we have never seen the whole before our analysis starts; we have already made analysis in the act of seeing. (2) the observable facts and our methods of observation are closely related. We obtain our facts only by using a particular method. Between fact and method no sharp line can be drawn. The one exists through the other. Therefore a classification *according to the method used* is also a *factual classification* of that which is, as it is for us. It is the ever-moving function of knowledge through which empirical being reveals itself to us. By classification of method and the indication of what is revealed thereby, we gradually come to see the basic varieties of existing fact. Only so can we arrive at any well-defined statement about observed facts and grasp the possible range of definable fact. Classification of method introduces an order into observed facts which is in accordance with the order of these same facts.

Where work develops successfully, object and method coincide. A classification according to the one is at the same time in accord with the other. This may seem to contradict the statement that '*every object should be examined by a number of different methods*'. This maxim is correct but means that what is only superficially one single objective fact (what we call an individual person) has to be investigated by a number of different methods, as an illness, an alteration in consciousness, as memory etc. The object becomes in this sense something ill-defined and inexhaustible, a crude fact, indefinable in its totality. What it really is as an object reveals itself only through the methods we use. Whether and to what extent the object which we tackle by so many methods really is a single object and what kind of entity this may finally prove to be can be determined only by methods specific to it.

If on the other hand we have some *theory of reality* to go by, the classification of our knowledge appears much easier. A few principles and basic factors will then afford us a comprehensible whole—'we grasp reality itself'. Hence

the often transitory success of attractive theoretical systems in which the thing in itself seems to be completely comprehended, and every newcomer gets a grasp of the whole very quickly, feeling that he has reached the heart of reality straightaway. All he need do is repeat, confirm, apply and elaborate. A more difficult process, but a truer one, is this process of *classifying by method*. This is neither attractive nor particularly comfortable; it cannot be done quickly and there is no immediate grasp of the whole; it is however a scientific exercise. It will stimulate research and further one's abilities. We can see clearly how far we have got, and what certain methods will tell us, but the total human being is left as an open question.

Classification by method is therefore a task which never finishes. There is no construction of a complete science but a constant endeavour to bring out the structure of idea from the observed facts, in the course of defining them and demonstrating them in their various relationships.

(c) The idea of the whole

Classification of methods provides a scaffolding but by itself this is not enough. We use it only to look for something that lies beyond our reach, namely the whole. But any comprehensive formulation has to be diverse in character. Out of all the diversity therefore we have to select just those basic varieties of fact, those fruitful viewpoints and orientations which will open up for us broad expanses of experience. Superficial connections have to be analysed, true affinities united. In each case the essential unifying agent needs to be clarified. In this way we shall discover basic structures that give meaningful form to the individual parts as they are presented.

Some concentration of basic principles is necessary because we can so easily lose sight of them when presentations ramify. Simple lines of orientation are wanted and we need to confine ourselves to essentials, to the most universal and fundamental considerations only. There is something creative in finding these basic classifications, even if there is no new discovery. Every classification which has been established becomes by its own inconsistencies a stimulus for further research and we make specific experiments to test our views of the whole, since the problematical part of knowledge appears only when we are actually exploring some current concept of the whole.

We try to take the attitude of unprejudiced reason, which is critical of its limits and by a process of classification tries to reach deeper and truer insight into its own activities.

(d) The objective validity of the classifications

If the basic classifications found in the book are objective, arise out of realities and are not mere theoretical speculations, they will lead on to form an over-all picture which cannot but impress the reader more and more convincingly as the exposition proceeds.

The truth of aesthetically satisfying and didactically convenient classifica-

tions can be tested only in the actual application of them. The criterion of their validity lies in their power to increase our insight. A classification that is not merely a loose grouping of events contains objective judgment; it already implies the taking up of a definite attitude.

Classification should bring out basic principles and, where the subject is seen from a number of points of view, show us which are the main points and which are secondary. By defining positions in this way it can lend weight to findings which up to then had not perhaps been considered of importance. At the same time it can show the relativity of all such emphases by again redefining the position gained. The arrangement should be such that every possible experience can be accommodated therein.

Each chapter is presented within the framework of its specific method and illustrates the phenomena obtained by this method. The basic modes of apprehension and enquiry, the various presentations of the subject, Man, follow one another steadily throughout the book. In actual practice, however, this involves some forcing of the situation. When related phenomena appear to fit together readily, classification has succeeded but when the phenomena seem constricted into a forced order, we have a hint that classification is at fault. To note this and use the occasion as a stimulus for further enquiry is a constant challenge. Each of us can reach only as far as his limit, that point where energies run out because inspiration fails, but our successors may well make use of our work to supersede us in their turn.

The arrangement of the book as a whole and in detail is not accidental but most carefully considered. I beg my readers to think hard about the meaning of the classifications used and to study critically the way the chapters follow one another. I would like them to appraise the basic ideas continually right through to the last part. Only if they set themselves to grasp the book as a single whole will they see the total expanse properly, from which the individual chapters with their own particular perspectives have emerged.

(e) *The plan of the book*

The following is a rough outline of the six main parts: The first part presents the *empirical psychic phenomena*. These are presented serially: subjective experiences, somatic findings, concrete performances, meaningful phenomena, i.e. patients' expressions, productions, and personal worlds. The whole of Part I tries to sharpen the perceptiveness of the psychopathologist and demonstrate what are the immediate data.

The second and third parts are concerned with *psychic connections*, that is, the second part with '*meaningful connections*' and the third part with '*causal connections*'. We cannot discover either of these directly from a simple collection of facts but only through a process of enquiry which will verify one set of facts against another. These two parts, so to speak, train the *research capacity* of the psychopathologist. Man is part mind, part nature, and at the same time both. The whole of our learning therefore is needed for his proper

understanding. In the second part our enquiry calls for some knowledge of the Humanities; in the third part, we need a knowledge of biology.

In the fourth part, the predominantly analytical procedures of the previous sections are followed by what is in chief an effort at synthesis. We are now concerned with the way in which we can apprehend the *individual psychic life as a whole*. We present the *comprehensive approach of the clinician*, who has before him the individual man as a whole and thinks, in diagnosis, in terms of a *personal history*, which in its entirety provides the essential setting for every individual life.

The fifth part considers *abnormal psychic life* in its *social setting* and *in history*. Psychiatry differs from the rest of medicine amongst other things because its subject-matter, the human psyche, is not only a product of nature but also of culture. Morbid psychic events depend in their content and in their form on the cultural milieu which is affected by them in turn. The fifth part trains the *appreciation of the scientist for the historical aspects* of human reality.

In the sixth part we finally discuss *human life as a whole*. We are no longer making empirical observations but present a philosophical reflection. The specific frames of reference, which as complex unities contributed a guiding principle to every previous chapter, are in the end all relative. Even the comprehensive approach of the clinician cannot grasp empirically the human life as a whole. The individual is always more than what is known of him. The final discussion, therefore, no longer adds to our knowledge but tries to clarify *our philosophical position*, into which we can gather all that we know and understand of Man.

The book, therefore, sets out to show us what we know. Practical questions of clinical work are outlined in *the appendix* and there is a short survey of the history of psychopathology as a science.

(f) *Comments on the plan of the book*

1. *Empiricism and Philosophy.* In the first five parts I hope I am a thorough-going empiricist and that I am successful in my fight against platitudinous speculation, dogmatic theorising and absolutism in every form. But in the sixth part, and here in this introduction, I have discussed philosophical questions, where these seem to me essential, if as psychopathologists we are to achieve any real degree of clarity. Not only does unprejudiced empiricism bring us to the real boundary where philosophy begins but conversely only philosophical clarity can make reliable, empirical research possible. Philosophy is not so related to science that philosophic studies can find application in the sciences and it has always been a fruitless, though often repeated, undertaking to recast empirical findings into some philosophical terminology. Philosophy can only help towards an inner attitude of mind, which will enhance science by delineating its boundaries, giving it inner direction and stimulating an insatiable thirst for knowledge. Philosophical logic has to grow indirectly into a concrete logic by the conceptual organisation of facts. Psychopathology

does not need philosophy because the latter can teach it anything about its own field, but because philosophy can help the psychopathologist so to organise his thought that he can perceive the true possibilities of his knowledge.

2. *Overlapping of chapters.* In describing the phenomena of experience we sometimes hint at their causal and meaningful connections and vice-versa. So in most of the other chapters we shall encounter phenomenology in one way or another. Thus we review delusional ideas, phenomenologically, as a psychological performance and in their meaningful connections. So with suicide—outwardly it is a straightforward fact the incidence of which can be counted; it can also be investigated by a number of methods, directed towards motive, or in accordance with age, sex and time of year, or with regard to its connection with psychosis, or with social conditions, etc. Thus we shall find the same facts appearing in different chapters and it will become progressively apparent what it is that remains ‘the same’. Different schools of thought (psychoanalysis, for instance, or Kretschmer’s ‘theory of body-build’) also appear in several places, wherever they happen to include different methodological aspects (be it consistently or otherwise). The different chapters therefore do overlap but it should be understood that this is necessary and we should be clear in what sense it is permissible.

In each chapter there is only one method that is paramount, and the reader’s gaze is directed to all that it reveals. But each of these methods is already using other methods and allows an echo to be heard of what is the master-principle of another chapter, though not yet, or no longer, the prevailing principle (for instance, the phenomenology of some memory-failure can be rendered precise only if the facts are also comprehended from the point of view of the psychological performance, while functional defects of memory can be analysed only along with the phenomenology of the experience in question). Or, to express this differently, every method is related to its own subject-matter, but what becomes apparent through it has at the same time some relation to other subject-matter which is duly comprehended by other methods that point towards it. What we therefore regard as the same set of facts has to appear in several chapters which are in fact complementing each other; yet seen severally from these different perspectives the facts are not the same. One method in isolation can always go only so far and no farther. No one method can allow its subject-matter to segregate itself aloofly within it. It is therefore quite natural that in writing one chapter we should relate it, either with facts or references, to one of the others. All divisions are unnatural at some point. The coherence of things themselves demands that the various methods should remain tangible in their relatedness.

There is also the basic fact that every human being is in some sense one, and this brings a universality into all the possible relationships between the facts that can be found out about him. We need the viewpoints of all the different chapters in order to apprehend one man. No single chapter by itself gives us sufficient understanding.

Division into chapters is necessary for clarity but to reach truth and comprehension they must all be reunited. The themes of the different chapters are related to each other and do not lie mechanically side by side. In every chapter however a specific method of approach will be seen to prevail, a particular mode of observation of presentation and explanation.

3. Specific methods and the total picture. In every chapter—to put it rather grandly—the whole field of psychopathology is touched upon, but only from one, single point of view. There is no complete set of facts, ready-made, which are being considered merely from diverse points of view. Through the application of each method, something becomes apparent that belongs only to it, as well as something rather vaguely defined which does not belong. Similarly, the totality that becomes apparent through all our methods is not any consistent total reality nor is there any one universal method which will reveal everything that is. All we can do is to try and apprehend individual realities clearly and unequivocally with the help of individual methods.

Hence enquiry will always be limited by the fact that only one way can be traversed at any given time. Yet there are still many other ways to tread, essential conditions for critical knowledge. In so far as the total picture can remain only a collection of methods and categories, it must stay for ever unfinished; the circle is never closed. The question remains open, not only what will emerge as future additional data, but also what at a later time will appear as new methods of thinking and new perspectives. Therefore the book is probably lacking in that individual chapters may still be insufficiently clarified, with something hiding there that derives from some different principle of which we are not yet aware and which at a later date will have to be extracted. Each chapter tries to give a complete viewpoint but there is no guaranteed completeness; other chapters are possible and to this extent the whole book is incomplete. There is a challenge to develop further chapters, not as simple additions but as part of the connected series of methods. Only so would we keep that total picture of infinite extent which cannot be attained as a concrete reality but only as a system of methods.

It is wrong to call this book 'the principal text of phenomenology'. The phenomenological attitude is one point of view and one chapter has been devoted to it in some detail as the viewpoint is a new one. But the whole book is directed to showing that it is only one point of view among many and holds a subordinate position at that.

(g) Technical lay-out

1. Illustration by example. Experience must in the last resort remain a personal matter. A book can enhance our experience but cannot be a substitute for it. What is seen at a glance, the actual experience of human intercourse and conversation, the confirmation that comes from factual investigation, none of this can be transmitted by a text, even with the most circumstantial presentation. If we have had our own personal experiences we can understand those of

others better, imagine them and use them for our own understanding. Written descriptions cannot substitute for the actual experience, but some account of concrete examples helps us to grasp further possibilities. My book offers many such examples. All my own experience is here and I have added certain striking and characteristic examples from the work of other investigators.

These should help the reader to build up a store of experiences. Though this can be properly achieved only through experiences of his own, he will find good preparation and confirmation in the reports and interpretations set out in the literature.

The essential requirement stands that every speculation should find fulfilment in experience. No experience should be without its theoretical explanation nor should we find theories unsupported by experience. We need plastic views on life, clearly structured and containing neither too much nor too little. They should be the 'fixed lights' to give our thoughts inner direction when the way is uncharted. So it becomes possible for us while we observe and theorise always to know and say what it is we mean.

2. *The form of presentation.* A comprehensive presentation needs to be readable. It should not be simply a reference book. This involves us in maintaining a line of thought throughout and in concentrating on what is essential. Concise definition is desirable even to the point of what might seem a legalistic brevity.

But every idea we formulate has to be lifted out of an endless host of facts and accidental events. Enumeration of these ought to be minimal but they have to be mentioned and their presence felt. The danger of making endless enquiry is always with us but in presenting our material we have always to remember those ever-present, as yet unmastered elements which are important and must be given a place. Interesting accidentals are among our data also, though perhaps as yet nothing much more can come of them than the evocation of a surprised 'well, that is how it is . . .'. We must not forget that undetermined, unmastered elements and surprising happenings are always marks of failing comprehension; we recognise these things but as yet we do not know them.

Every chapter has a prevailing point of view. The reader would do well to familiarise himself with the whole series. In the individual chapters however he may want to leave out this or that, depending on his own particular interests and he will then find the table of contents a useful guide.

3. *References to the literature.* It is always a problem to know how to cope with the continuous stream of publication. The extent of the literature is vast even if we discount all the many repetitions, the muddle of happy ideas, the noisy arguments and indifferent reporting. To get at the factors of value, we must go for the following: first and foremost, the facts themselves, cases, personal histories, self-portrayals, reports and every other kind of *material evidence*; secondly, any really *new insight*; thirdly, the concrete observations made, the images, forms and types adopted, the *pregnant formulations*: fourthly, the

basic attitude behind the new discoveries, their 'atmosphere', shown in the style of the work and the kind of criteria used. There may be an unconscious grasp of the whole, some hidden philosophy, or an attitude determined by the worker's social status, calling or occupation, or it may be a practical attitude founded in the need for action and the wish to help. What publications should be mentioned? It is impossible to give them all. Recently reference books have grown to an unwieldy size,¹ and our aim is something different. We are not after the compilation of facts but what characterises them, so our use of the literature must be selective: First we include epoch-making contributions which have led to the foundation of new schools of research, the classic original papers. Secondly, we mention the most recent summaries, where the bibliographies introduce us to a particular field. Thirdly, we take representative samples from various lines of research, which can stand for much other analogous work. Selection in this case is haphazard and does not imply any value-judgment.

The immense task of a real survey of the literature has hardly begun. In the individual sciences the problem is the same as in the great libraries. A hierarchy of importance is sorely needed, so that really valuable material can be recognised and not tend to get lost among the rabble. Inessentials could well be dispensed with, yet they have to be categorised somehow, for the use of specialists. At present there seems no hope of any final evaluation nor of any formal purge by some scientific court. At a later date investigators may well find something of value among the discards; so far as psychopathology goes, we have at present only an unselective set of references.

(h) *Psychopathology and culture*

A comprehensive presentation aims at more than mere knowing; it tries to cultivate. It would like to see psychopathologists exercise their thinking, differentiate their knowledge, discipline their observations and introduce method into their experiences. While preserving a great tradition, we also wish to serve it by re-shaping it. Knowledge as such is only relevant when it contributes to the further cultivation of sight and thought.

I would like my book to give the reader a wide education in psychopathology. It is indeed much simpler to learn up formulae and technical terms and appear to have the answer to everything. An educated attitude has to grow slowly from a grasp of limits within a framework of well-differentiated knowledge. It lies in the ability to think objectively in any direction. An educated attitude in psychiatry depends on our own experiences and on the constant use of our powers of observation—no book can give us that—but it also depends on the clarity of the concepts we use and the width and subtlety of our comprehension, and it is these which I hope my book will enhance.

¹ The following texts cover the literature: the specialist journals and original contributions: Aschaffenburg, *Handbuch der Psychiatrie*. Bumke, *Handbuch der Geisteskrankheiten*, Zentralblatt für Neurologie u. Psychiatrie (Berlin, 1910, onwards); *Fortschritte der Neurologie* (Leipzig, 1929, onwards); the reference section of many journals.

PART I
INDIVIDUAL PSYCHIC PHENOMENA

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Introduction

Phenomena form the groundwork of our knowledge. Empirical research depends on our seeking out as many phenomena as possible, since it is through them alone that our ideas receive verification.

The collection of phenomena always means collection of *individual* phenomena. These are far from uniform and the need for clarification forces us to group them according to certain *basic types*. Such classification is sometimes of a superficial character only, that is according to the source material, e.g. case histories, Court records, patients' own writings, photographs, departmental files, school reports, statistics, experimental test results. But a real classification must work on the principle that its basic phenomena are of an observable nature. We shall, therefore, classify our phenomena into four main groups: the patients' subjective experiences, objective performances, somatic accompaniments and meaningful objective phenomena (i.e. expression, actions and productions).

Group 1. The psyche *experiences* life—and experience is a psychic phenomenon. Metaphorically we call it the stream of consciousness, a unique flow of indivisible occurrences which, however many people we take, never seems to flow in quite the same way. How then is it best apprehended? Experiences crystallise out for us in their course into a number of objective phenomena and take relatively fixed forms. We can speak of an hallucination, an affect, a thought, as if we were dealing with some definite object; it at least maintains a certain span of existence in our mind. *Phenomenology* is the study which describes patients' subjective experiences and everything else that exists or comes to be within the field of their awareness. These *subjective* data of experience are in contrast with other *objective* phenomena, obtained by methods of performance-testing, observation of the somatic state or assessment of what the patients' expressions, actions and various productions may mean.

Group 2. *Psychic performances* (for instance, those of apperception, memory, work-capacity, or intelligence) provide the material for what we call the *study of psychological performance* (Leistungspsychologie). Performance can be measured as to quality and quantity. The common factor is the use of set tasks in an attempt to answer specific enquiries or meet the accidental problems posed by some given situation.

Group 3. *Somatic accompaniments of psychic events* provide the material for what we call somatopsychology, the *study of bodily events* (Somato psychologie). Here somatic events are observed which are not psychological in

character and in no way express the psyche nor are they meaningful. Psychologically they are incomprehensible and have only a factual relationship with psychic events or happen to coincide with them.

Group 4. Meaningful objective phenomena are perceivable phenomena that show their psychic origin only because we understand their meaning. They fall into three categories: bodily appearance and movements that we directly understand (giving rise to a psychology of expression—Ausdruckspsychologie); personal worlds of meaningful activity and behaviour (giving rise to a psychology of the personal environment—Weltpsychologie); and meaningful literary, artistic and technical productions (giving rise to a psychology of creativity—Werkpsychologie).

These four main groups of phenomena will be set out in the four following chapters. From these we shall see that (*a*) every datum described raises the immediate question—*why* is it as it is, *how* is it so and *to what end*? The answer to these questions will be discussed in the latter part of this book. We continually experience dissatisfaction in the face of mere facts, though we also experience a very special satisfaction in establishing facts as such, 'This is a fact!' 'We have found something!', but in the end we find this field of pure fact is infinitely wider than the field where such facts stand properly related and fully understood. (*b*) *Apparently identical phenomena* can be *aetiologically different* from each other; so that the realisation of meaningful relationships can throw light on the facts themselves and show differences between them which at first sight had gone unobserved. External facts, such as murder, suicide, hallucination, delusion etc., mask a heterogeneous reality. Therefore even during the stage of fact-finding we are always going beyond the facts themselves. (*c*) All individual phenomena derive their specific quality from *a whole to which they currently belong*: for instance, the phenomena of experience arise within a consciousness; somatic symptoms arise within a body-mind unit; individual performances within a unified intelligence and expression, actions and productions within what is sometimes called the level of development (Formniveau), the psychic totality or some such name.

CHAPTER I

SUBJECTIVE PHENOMENA OF MORBID PSYCHIC LIFE

(PHENOMENOLOGY—PHENOMENOLOGIE)

Introduction

Phenomenology¹ sets out on a number of tasks: it *gives a concrete description* of the psychic states which patients actually experience and *presents them for observation*. It reviews the inter-relations of these, *delineates* them as sharply as possible, differentiates them and creates a suitable terminology. Since we never can perceive the psychic experiences of others in any direct fashion, as with physical phenomena, we can only make some kind of representation of them. There has to be an act of empathy, of understanding, to which may be added as the case demands an enumeration of the external characteristics of the psychic state or of the conditions under which the phenomena occur, or we may make sharp comparisons or resort to the use of symbols or fall back on a kind of suggestive handling of the data. Our chief help in all this comes from the patients' own *self-descriptions*, which can be evoked and tested out in the course of personal conversation. From this we get out best-defined and clearest data. Written descriptions by the patient may have a richer content but in this form we can do nothing else but accept them. An experience is best described by the person who has undergone it. Detached psychiatric observation with its own formulation of what the patient is suffering is not any substitute for this.

So we always have to fall back on the 'psychological judgment' of the patient himself. It is only in this way that we get to know the most vital and graphic pathological phenomena. The patients themselves are the observers and we can only test their credibility and judgment. At times we have accepted patients' communications too readily and at times on the contrary we have doubted them too radically. Psychotics' self-descriptions are not only unique but yield reliable results and through

¹ Cf. my paper, 'Die phänomenologische Forschungsrichtung in der Psychopathologie', *Z. Neur.*, vol. 9 (1912), p. 391. The term *phenomenology* was used by Hegel for the whole field of mental phenomena as revealed in consciousness, history and conceptual thought. We use it only for the much narrower field of *individual psychic experience*. Husserl used the term initially in the sense of 'a descriptive psychology' in connection with the phenomenon of consciousness; in this sense it holds for our own investigations also, but later on he used it in the sense of 'the appearance of things' (*Wesensschau*) which is not a term we use in this book. Phenomenology is for us purely an *empirical method of enquiry* maintained solely by the fact of *patients' communications*. It is obvious that in these psychological investigations descriptive efforts are quite different from those in the natural sciences. The object of study is non-existent for the senses and we can experience only a representation of it. Yet the same logical principles are in operation. Description demands the creation of systematic categories, as well as a demonstration of relationships and orderly sequences on the one hand and of sporadic appearances, unheralded and unforeseen, on the other.

them we have discovered many of our basic concepts. If we compare what patients say we find much that is similar. Some individuals are very reliable and also very gifted. On the other hand with hysterical patients and psychopaths (those suffering from personality disorder) there is very little one can trust. Most of their extensive self-description has to be taken very critically. Patients will report on experiences in order to oblige and please. They will say what is expected of them and often if they realise that they have aroused our interest, they will more than rise to the occasion.

The first step, then, is to make some representation of what is really happening in our patients, what they are actually going through, how it strikes them, how they feel. We are not concerned at this stage with connections nor with the patients' experience as a whole and certainly not with any subsidiary speculations, fundamental theory or basic postulates. We confine description solely to the things that are present to the patients' consciousness. Anything which is not a conscious datum is for the present non-existent. Conventional theories, psychological constructions, interpretations and evaluations must be left aside. We simply attend to what exists before us, in so far as we can apprehend, discriminate and describe it. Experience shows us that this is by no means easy to do. We refuse to prejudge when studying our phenomena, and this openmindedness, so characteristic of phenomenology, is not something which one just has, but it has to be acquired painfully through much critical effort and frequent failure. When we were children we drew things not as we saw them but as we imagined them, so, as psychopathologists, we go through a phase in which we have our own notions about the psyche and only gradually emerge into a direct, unprejudiced apprehension of psychic phenomena as they are. Phenomenological orientation is something we have to attain to again and again and involves a continual onslaught on our prejudices.

Close contemplation of *an individual case* often teaches us of phenomena common to countless others. What we have once grasped in this way is usually encountered again. It is not so much the number of cases seen that matters in phenomenology but the extent of the inner exploration of the individual case, which needs to be carried to the furthest possible limit.

In histology, when we examine the cerebral cortex, we expect to account for every fibre and every cell. So in phenomenology we *expect to account for every psychic phenomenon*, every experience met with in our investigation of the patient and in his own self-description. In no circumstances should we rest satisfied with a general impression or a set of details collected ad hoc, but we should know how to appreciate every single particular. If we persevere in this way we shall cease to marvel at the phenomena we see so frequently but which those who are satisfied with general impressions either miss or find extraordinary according to how they feel at the time and how impressionable they are. On the other hand this method draws attention to what is really out of the ordinary and therefore justifies our wonder. There is no danger that wonder will ever be exhausted.

In phenomenology, therefore, the main thing is to train ourselves in a

fruitful scrutiny of what the patient's immediate experiences are, so that we come to recognise what is identical in all the manifold manifestations. We need to collect a rich store of observed phenomena in the form of concrete examples and in this way provide ourselves with some measuring-rod and frame of reference when we come to the examination of any new case.¹

There is value too in the description of unusual and unexpected phenomena and the ability to recognise them for what they are, i.e. fundamental phenomena of conscious existence. Normal phenomena are also often better understood following some study of the abnormal, but there is little point in a purely logical differentiation without concrete examples.

We shall now proceed to deal with (1) *individual phenomena*, isolated for purposes of study, e.g. hallucinations, emotional states, instinctual drives, and (2) a clarification of the properties of the *conscious state*, which in its own way influences the phenomena studied and lends them different meanings according to the different psychic contexts in which they appear.²

SECTION ONE

ABNORMAL PSYCHIC PHENOMENA

(a) *The dissection of the total relational context of the phenomena*

In all developed psychic life we find the confrontation of a subject with an object and the orientation of a self towards a content as an absolutely basic phenomenon. In this respect *awareness of an object* may be contrasted with *self-awareness*. This first distinction enables us to give an independent description of objective abnormalities (e.g. altered perceptions, hallucinations) and then ask in what ways awareness of the self may have changed. But the state

¹ The following are good self-descriptions: Baudelaire, *Paradis artificiels*. Beringer and Mayer-Gross, *Z. Neur.*, vol. 96 (1925), p. 209. J. J. David, 'Halluzinationen', *Die neue Rundschau*, vol. 17, p. 874. Engelken, *Allg. Z. Psychiatr.*, vol. 6, p. 586. Fehrlin, *Die Schizophrenie* (Selbstverlag, 1910) Fr. Fischer, *Z. Neur.*, vol. 121, p. 544; vol. 124, p. 241. Forel, *Allg. Z. Psychiatr.*, vol. 34, p. 960. Fraenkel and Joel, *Z. Neur.*, vol. 111, p. 84. Gruhle, *Z. Neur.*, vol. 28 (1915), p. 148. Ideler, *Der Wahnsinn* (Bremen, 1848), pp. 322 ff., 365 ff. *Religiöser Wahnsinn* (Halle, 1848), vol. 1, p. 392 ff. Jakobi, *Annalen der Irrenanstalt zu Siegburg* (Köln, 1837), p. 256 James, *Die religiöse Erfahrung in ihrer Mannigfaltigkeit* (Leipzig, 1907). Janet, *Les obsessions et la psychasthenie*. Jaspers, *Z. Neur.*, vol. 14, pp. 158 ff. Kandinsky, *Arch. Psychiatr.* (D), vol. 11, p. 453. *Kritische u. klinische Betrachtungen im Gebiet der Sinnestäuschungen* (Berlin, 1885). Kieser, *Allg. Z. Psychiatr.*, vol. 10, p. 423. Klinke, *J. Psychiatr.*, vol. 9. Kronfeld, *Mscr. Psychiatr.*, vol. 35 (1914), p. 275. Mayer-Gross, *Z. Neur.*, vol. 62, p. 222. Mayer-Gross and Steiner, *Z. Neur.*, vol. 73, p. 283. Meinert, *Alkoholwahnsinn* (Dresden, 1907). Nerval, *Aurelia* (München, 1910). Quincey, *Bekenntnisse eines Opiumessers* (Stuttgart, 1886). Rychlinski, *Arch. Psychiatr.* (D), vol. 28, p. 625. Gerhard Schmidt, *Z. Neur.*, vol. 141, p. 570. Kurt Schneider, 'Pathopsychologie im Grundriss', *Handwörterbuch der psychischen Hygiene* (Berlin, 1931). Schreber, *Denkwürdigkeiten eines Nervenkranken* (Leipzig, 1903). Schwab, *Z. Neur.*, vol. 44. Serko, *J. Psychiatr.*, vol. 34 (1913), p. 355. *Z. Neur.*, vol. 44, p. 21. Stadenmaier, *Die Magie als experimentelle Naturwissenschaft* (Leipzig, 1912). Wollny, *Erklärungen der Tollheit von Haslam* (Leipzig, 1889).

² Regular annual reports on phenomenological research appear in *Fortschritte der Neurologie, Psychiatrie u. ihrer Grenzgebiete* (Leipzig, 1929 ff.). Initial reports by Kurt Schneider; since 1934 by K. F. Scheid; since 1939 by Weitbrecht.

of self-awareness and the objective aspects of that 'other', to which the self directs itself, interlock in a mutual movement whereby the 'self' is caught up by what is given externally and is at the same time driven internally to grasp at what is there. Description of what is objective leads on to the meaning of this for the self and a description of the states of the self (emotional states, moods, drives) turns into a description of the objective aspects under which these states become apparent.

Subjective orientation towards an object is certainly a constant and basic factor in all meaningful psychic life but we cannot achieve differentiation of the phenomena by this alone. Immediate experience is always *within a total relational context* which we have to dissect if the phenomena are to be described.

This total relational context is founded in the way we *experience space and time*, in the mode of *body-awareness* and the *awareness of reality*; it is moreover self-divided through the opposition of *feeling-states* and *drives*, and these create further self-divisions in their turn.

The division of phenomena into *direct* and *indirect* cuts across all these other divisions. Every phenomenon has the character of direct experience but for analytical and purposive thought it is essential for the psyche to stand outside this immediate experience. The basic phenomenon that renders such thinking and purpose possible may be called *reflection*, the turning-back of experience on itself and on its content. Hence indirect phenomena come into being and indeed all human psychic life shows the pervasiveness of this reflective activity. Conscious psychic life is not just an agglomeration of separable and isolated phenomena, but presents a total relational context which is in constant flux and from it we isolate our particular data in the very act of describing them. This total relational context changes with the *conscious state* in which the psyche may be at the time. All differentiations that we make are transient and must grow obsolete at some point, if we do not discard them altogether.

According to this broad principle of a total relational context it follows that (1) phenomena can only be partially *delimited and defined*, simply to the extent that they can again be identified. Isolation of phenomena makes them clearer and sharper than they really are. However, we have to accept this limitation if we are to aim at any fruitful points of view, precise observation or accurate presentation of the facts. (2) Phenomena can *reappear* in our descriptions *repeatedly* according to the particular aspect stressed (e.g. qualitative phenomena of perception may appear in respect of object-awareness or in respect of feelings).

(b) Form and content of phenomena

The following points are of general application for all the phenomena to be described: Form must be kept distinct from content which may change from time to time, e.g. the fact of a hallucination is to be distinguished from its content, whether this is a man or a tree, threatening figures or peaceful landscapes. Perceptions, ideas, judgments, feelings, drives, self-awareness, are all

forms of psychic phenomena; they denote the particular mode of existence in which content is presented to us. It is true in describing concrete psychic events we take into account the particular contents of the individual psyche, but from the phenomenological point of view it is only the form that interests us. According to whether we have the content or the form of the phenomenon in mind, we can disregard for the time being the one or the other—the phenomenological investigation or the examination of content. For patients content is usually the one important thing. Often they are quite unaware of the manner in which they experience it and they muddle up hallucinations, pseudo-hallucinations, delusional awarenesses, etc., because they have never had to differentiate what seems to them so unimportant a matter.

Content, however, modifies the mode in which the phenomena are experienced; it gives them their weight in relation to the total psychic life and points to the way in which they are conceived and interpreted.

Excursus into form and content. All knowledge involves a distinction between form and content, and throughout psychopathology from the simplest of psychic events right up to the most complex wholes this distinction is in constant use. For example:

1. In all psychic experience there is a *subject* and *object*. This objective element conceived in its widest sense we call psychic content and the mode in which the subject is presented with the object (be it as a perception, a mental image or thought) we call the form. Thus, hypochondriacal contents, whether provided by voices, compulsive ideas, overvalued ideas or delusional ideas, remain identifiable as content. In the same way we can talk of the content of anxiety and other such emotional states.

2. *The form of the psychoses* is contrasted with their *particular content*: e.g. periodic phases of dysphoria are to be contrasted as a form of illness with the particular type of behaviour that furnishes the content (e.g. dipsomania, wandering, suicide).

3. Certain very *general psychic changes*, which can only carry a psychological interpretation, may also be formally conceived, e.g. the schizophrenic or hysterical experience. Every variety of human drive and desire, every variety of thought and phantasy, can appear as content in such forms and find a mode of realisation (schizophrenic, for instance, or hysterical) in them.

Phenomenology finds its major interest in form; content seems to have a more accidental character, but the psychologist who looks for meaning will find content essential and the form at times unimportant.

(c) *Transitions between phenomena*

Many patients seem mentally able to view the same content in quick succession in a number of widely varied phenomenological forms. Thus in an acute psychosis the same jealous content may come up in the most diverse shapes (as an emotional state, a hallucination or as a delusion). We might well talk of 'transition' between these several different forms but this would be a mistake. 'Transition' as a general term is simply a cloak for insufficient analysis. The truth is that the fabric of the individual momentary experience is woven

from a number of phenomena which we can separately discern by description. For instance, a hallucinatory experience is pervaded by delusional conviction; the perceptual elements gradually disappear, and in a given case we can often be no longer sure whether they ever existed or, if so, in what form. There are, therefore, clear differences between phenomena, real phenomenological gulfs (as for instance between physical and imaginary events) which remain in contrast to phenomenological transitions (from awarenesses, for example, to hallucinations). Psychopathology should reach a clear understanding of these differences and should deepen, extend and classify them since only this will help us in the analysis of our cases.

(d) *Classification of groups of phenomena*

The following paragraphs give a description *seriatim* of abnormal phenomena. We proceed from concrete experiences to the experience of space and time, then to body-awareness, to the awareness of reality and to delusion. Next we deal with emotional states, drives and will and so on to the awareness of self. Finally we present the phenomena of self-reflection. The paragraphs are determined by the distinctness and singularity of the relative phenomena. They are not arranged according to any preconceived scheme, since at present it is not possible to classify our phenomenological data in any satisfactory manner. Phenomenology, though one of the foundation-stones of psychopathology, is still very crude. Our present effort at description does not hide this fact, but we have to classify somehow, even if tentatively. This is best done by a classification which gives some plastic impression of what the facts will naturally yield. The inevitable discrepancies will at the same time stimulate us to try and grasp the full significance of the phenomena, not on the basis of some purely theoretical order but by trying to master them repeatedly from more comprehensive and profounder points of view.

§ I. AWARENESS OF OBJECTS

Psychological preface. We give the name 'object' in its widest sense to anything which confronts us; anything which we look at, apprehend, think about or recognise with our inner eye or with our sense-organs. In short anything to which we give our inner attention, whether it be real or unreal, concrete or abstract, dim or distinct. Objects exist for us in the form of *perceptions* or *ideas*. As perceptions the objects stand *bodily* before us (as 'tangibly present', 'vividly felt' and 'apperceived' or 'with a quality of objectivity'). As ideas they stand before us imaginatively (as 'not actually there', 'with a quality of subjectivity'). In any of our perceptions or ideas we can discern three elements: the *qualitative aspect of sensation* (red, blue, pitch of sound, etc.), the *spatial and temporal arrangement* and the *purposeful act of perception* (apperception and objectification). The purely sensory factors are, so to speak, brought to life by the purposeful act and only gain objective meaning through it. We can term this act 'thought' or 'awareness of meaning'. There is the further phenomenological fact that these purposeful acts need not always be founded in sense-data. For instance, we

can be abstractly aware of something, there can be a mere knowing of it (e.g. in rapid reading). We are clearly aware of the meaning of the words without actually conjuring up the precise image of what is alluded to. This abstract representation of content is termed *an awareness*. Depending on the type of perception this awareness may be *physical*, e.g. awareness of 'someone's presence' without actually seeing him and with no mental image of him (colloquially a 'feeling that someone is there'), or it may be a purely *ideational* awareness, which is by far the most common.

The following are certain first-hand accounts of how objects may be experienced in an abnormal way:

(a) *Anomalies of perception*

(1) *Changes in intensity.* Sounds are heard louder, colours seem brighter, a red roof is like a flame, a closing door thunders like a cannonade, crackling in the bushes sounds like a shot, wind like a storm (in deliria, in the initial stages of narcosis, in poisoning, before epileptic seizures, in acute psychoses).

A patient who had suffered for some years from a non-penetrating shot-wound in the head wrote: 'Since my head-injury I feel from time to time that my hearing has become extraordinarily sharp. This is so at intervals of 4-8 weeks, not in the day but at night when I am in bed. The change is sudden and surprising. Noises which, when I am normal, are almost inaudible strike me with a shattering intensity and are uncannily clear and loud. I am forced to try and lie perfectly still as even the slight crackling of sheets and pillows causes me a lot of discomfort. The watch on the bedside-table seems to have become a church clock; the noise of passing cars and trains to which I am accustomed and which normally never bothers me now roars over me like an avalanche. I lie drenched in sweat and instinctively assume a rigid posture until I suddenly find normal conditions have returned. It lasts about 5 minutes but it seems absolutely interminable' (Kurt Schneider).

On the other hand a diminution of intensity may also occur. The environment seems dimmed, taste is flat or everything tastes almost the same (melancholia). A schizophrenic gave the following description:

'The sunshine pales when I face it directly and talk loudly. I can then look quietly into the sun and am only dazzled moderately. On the days when I am well looking into the sun for several minutes would be quite impossible for me as it must be for anyone else' (Schreber).

Absence or reduction of pain (analgesia and hypalgesia) may occur in local or generalised form. The local kind is usually neurological in origin, sometimes psychogenic (Hysteria). The generalised form occurs as a hysterical or hypnotic phenomenon or as the result of strong affect (soldiers in battle). It also occurs as the sign of a particular constitution (hypalgesia only). Hyperalgesia shows the same diversity of conditions.

(2) *Shifts in quality.* While one is reading, the white paper suddenly appears red and the letters green. The faces of others take on a peculiar brown tint, people look like Chinese or Red Indians.

Serko observed himself in the early stages of mescalin intoxication and noted that everything he perceived took on an infinite richness of colouring so that he was actually *intoxicated with colours*: 'The most inconspicuous objects outside one's normal attention suddenly lit up in a host of brilliant colours difficult to describe. Objects like cigarette-ends, and half-burned matches on the ash-trays, coloured glass on a distant rubbish heap, ink-blots on the desk, monotonous rows of books, etc. In particular, certain indirectly viewed objects attracted my attention almost irresistibly through their vivid colouring—even the fine shadows on the ceiling and on the walls and the dim shadows which the furniture cast on the floor had a rare and delicate colour which gave the room a fairy-tale magic.'

(3) *Abnormal concomitant perceptions.* A schizophrenic gives the following description:

'With every word spoken to me or near me, with every slight noise, I feel a blow on my head, producing a certain pain. The pain-sensation feels like an intermittent pulling in my head, probably linked with a rending of part of the skull-bone' (Schreber).

In such cases, which are fairly common in schizophrenia but which may also appear quite independently of it, we are dealing with genuine concomitant perceptions and not with the well-known association of sound and colour images. (*Audition colorée, synopsia.*)¹

(b) *Abnormal characteristics of perception*

Perception has a number of characteristics, it may seem familiar or strange, or have an emotional quality or seem imbued with a certain atmosphere. The following appear to be abnormal characteristics:

(i) *Alienation from the perceptual world²—Derealisation*

'Everything appears as through a veil; as if I heard everything through a wall' . . . 'The voices of people seem to come from far away. Things do not look as before, they are somehow altered, they seem strange, two-dimensional. My own voice sounds strange. Everything seems extraordinarily new as if I had not seen it for a long time' . . . 'I feel as if I had a fur over me . . . I touch myself to convince myself that I exist.'

These are complaints of patients who have this disturbance in a relatively mild form. Such patients are never tired of describing how strangely their perceptions have altered. Their experience is so odd, peculiar, eerie. Description always proceeds by metaphor as it is impossible to express the experiences directly. Patients do not think that the world has really changed but only feel as if everything were different to them. We should always remember that in

¹ On the theory of synaesthesia cp. Bleuler, *Z. Psychol.*, vol. 65 (1913), p. 1. Wehofer, *Z. angew. Psychol.*, vol. 7 (1913), p. 1. Hennig, *Z. Psychother.*, vol. 4 (1912), p. 22. Georg Anschuetz, *Das Farbe-Ton-Problem in psychischen Gesamtbereich* (Halle, 1929). (*Deutsche Psychologie*, Bd. V, vol. 5) (careful investigation of a rare and interesting case).

² Oesterreich, *J. Psychiatr.*, vol. 8. Janet, *Les Obsessions et la psychasthénie*, 2nd edn. (Paris, 1908).

reality they can see, hear and feel sharply and distinctly. We are dealing, therefore, with a disturbance in the actual process of perception, not in its material elements nor in the apprehension of meaning nor in judgment. Thus in every normal perception there must be yet another factor which would elude us had these patients not presented us with these peculiar complaints. Where there is a severer degree of disturbance the descriptions become more noteworthy:

'All objects appear so new and startling I say their names over to myself and touch them several times to convince myself they are real. I stamp on the floor and still have a feeling of unreality' . . . Patients will feel lost and think they cannot find their way about though they can do this as well as ever. In really unknown surroundings this feeling of strangeness will increase. 'I held on to my friend's arm in panic; I felt I was lost if he left me for one moment'—'All objects seemed to retreat into infinity.' (This is not to be confused with physical illusions of distance.) 'One's own voice seems to die away into infinity.' Patients often think they can no longer be heard any more; they feel as if they have floated away from reality, away into outer space in a frightening isolation—'Everything is like a dream. Space is infinite, time no longer exists; the moment endures for ever, infinite expanses of time roll by'—'I am entombed, totally isolated, no human is by me. I only see black; even when the sun is shining, it is still all black'. Yet we find such patients see everything and have no disturbance in the sensory part of their perception.

With these more severe grades of disturbance (if we explore the patients carefully) actual judgment does not seem disturbed at first but the feelings are so forceful that they cannot entirely be suppressed. Patients have to handle things to make sure they are really still there, have to convince themselves of the existence of the ground by stamping on it. In the end, however, the psychic disturbance becomes so serious that we can no longer speak of patients having any judgment at all. Other severe disturbances usually appear as well. Terrified and restless, the patients begin to experience their feelings as the reality itself and are then inaccessible to reason. Now the world has escaped them. Nothing remains. They are alone in terrible isolation, suspended between infinities. They have to live for ever because time no longer exists. They themselves no longer exist; their body is dead. Only this fake-existence remains as their horrible fate.

(2) Just as the perceptual world may be experienced as something strange or dead, so it can be experienced as something *entirely fresh* and of *overpowering beauty*:

'Everything looked different—I saw in everything the touch of a divine magnificence'—'It was as if I had come into a new world, a new existence. Every object wore a bright halo, my inner vision was so enhanced I saw the beauty of the universe in everything. The woods rang with celestial music.' (James.)

(3) These descriptions have shown that objects are not only perceived in a purely sensory manner but are accompanied by an emotional atmosphere. *Empathy into other people* is an important instance of this, in that we no longer have pure sense-perception but the latter has now become an occasion for psychic understanding. The pathological phenomena consist either in a *failure*

of *empathy*—other people seem dead, patients feel they only see the outside and are no longer conscious of the psychic life of others, or in an *unpleasantly forceful empathy*—the psychic life of others impinges with a fierce vividness on the defenceless victim, or finally in a *fantastically mistaken empathy*—where this is entirely unwarranted:

A patient with encephalitis lethargica reported: 'During that time I had an incredibly fine feeling for imponderables, atmospheres etc. For instance I would feel immediately the minutest misunderstanding among two of my student friends'. The patient also reported that he did not really share in these feelings, he only registered them. 'It was not a natural participation' (Mayer-Gross and Steiner).

Increased empathy into highly differentiated psychic states is found among other signs at the beginning of process-disorders. A patient many years before the onset of an acute psychosis experienced an increased sharpening of his feeling-sensitivity, which he himself regarded as abnormal. Works of art appeared to him profound, rich, impressive, like ravishing music. People appeared much more complex than before and he felt that he had a much more intricate understanding of women. Reading gave him sleepless nights.

There is one particular mode of misunderstanding the psychic life of others which may be found in the initial stages of process-disorders. Other people appear so curious and baffling to the patient that he considers these healthy people as mentally ill rather than himself (Wernicke—Transitivismus).

(c) *Splitting of perception*

This term covers phenomena described by schizophrenic patients and patients in toxic states:

'A bird chirrups in the garden. I hear it and know that it is chirruping but that it is a bird and that it is chirruping are two things which are poles apart. There is a gulf between them and I am afraid I shall not be able to bring them together. It is as if the bird and the chirruping have nothing at all to do with each other' (Fr. Fischer).

In mescalin intoxication: 'When I opened my eyes I looked towards the window without actually appreciating it as a window and I saw a number of colours or green and light blue blotches; I knew they were the leaves of a tree and the sky which could be seen through them, but it was impossible to relate these perceptions of different things with any definite location in space.' (Mayer-Gross and Steiner).

(d) *False perceptions*

We have now described all abnormal perceptions in which no fresh set of unreal objects is perceived, but only a set of real objects which somehow appear to be different. Now we turn to false perceptions as such, in which fresh, unreal objects seem to be perceived.¹ Since the time of Esquirol a discrimination has been made between illusions and hallucinations. *Illusion* is the term for perceptions which in fact are transpositions (or distortions) of real per-

¹ Johannes Müller, *Über die phantastischen Gesichterscheinungen* (Koblenz, 1826). Hagen, *Allg. Z. Psychiatr.*, vol. 25, p. 1. Kahlbaum, *Allg. Z. Psychiatr.*, vol. 23. Kandinsky, *Kritische u. klinische Betrachtungen im Gebiete der Sinnestäuschungen* (Berlin, 1885). I myself have written a detailed account of false perception in *Z. Neur.* (Referaten-teil), vol. 4 (1911), p. 289. See my further work

ceptions; here external sensory stimuli unite with certain transposing (or distorting) elements so that in the end we cannot differentiate the one from the other. *Hallucinations* are perceptions that spring into being in a primary way and are not transpositions or distortions, of any genuine perception.

(aa) There are three types of illusions (*illusions due to inattentiveness, illusions due to affect and pareidolia*):

1. *Illusions due to inattentiveness.* Experimental investigation into perception shows that almost every perception collects some elements of reproduction that tend to transpose or distort it. When attention is scanty and therefore external sensory stimuli are meagre, the latter are nearly always filled out in some way or other. For instance, in listening to a lecture we constantly piece out the meaning and only notice we are doing this when occasionally we make a mistake. We overlook misprints in a book and complete the meaning correctly according to the context. Illusions of this sort can be corrected immediately once our attention is drawn to them. Errors in identification and inexact, faulty perceptions that arise in General Paralysis and deliria, etc., belong to some extent to this category. Illusions of this sort (failure to identify) play a part in these patients' mistakes in reading and hearing and in the way they recast their visual impressions.

2. *Illusions due to affect.* When walking alone in the woods at night we may become frightened and mistake a tree-trunk or a rock for a human figure. A melancholic patient beset by fears of being killed may take the clothes hanging on the wall for a corpse, or some trivial noise may strike him as the clang of prison chains. Illusions of this sort are mostly rather fleeting and always comprehensible in terms of the affect prevailing at the time.

3. *Pareidolia.* Imagination can create illusionary forms from ill-defined sense-impressions, such as clouds, old patchy walls, etc. No particular affect is involved nor any reality-judgment, but the imaginary creation need not disappear when attention is directed upon it. Johann Mueller gives us the following description:

'As a child I was often teased by this vivid gift of imagination. I remember one fantasy particularly. From the living-room I could see a house opposite, old and shabby with blackened plaster and patches of various shape through which the colours of older plaster could be seen. As I looked through the window at this dark, dilapidated wall I made out a number of faces in the contours of the peeling plaster. As time went on they became more and more expressive. When I tried to draw other people's attention to these faces in the dilapidated plaster no one would agree with me. All the same I saw them distinctly. In later years I could still remember them clearly though I could not recreate them again in the contours which had given them birth.'

Similar illusions can be observed in patients. They appear to the onlooker as something alien; only the patients observe them and see them constantly

'Zur Analyse der Trugwahrnehmungen', *Z. Neur.*, vol. 6, p. 460. More recent works are W. Mayer-Gross and Johannes Stein, 'Pathologie der Wahrnehmung' in Bumke's *Handbuch der Geisteskrankheiten* (Berlin, 1928), vol. 1.

coming and going, whereas with the other two types of illusion they either vanish when attention is drawn to them or when the affect from which they sprang undergoes a change.

A patient in the clinic at Heidelberg, while fully collected, saw animal and human heads 'as if embroidered' on the counterpane and on the wall. She also saw grimacing faces in the spots of sunlight on the wall. She knew they were deceptions and said: 'My eye evokes faces in the unevenness of the wall'. Another patient reported with surprise: 'Things shape themselves; the round holes in the window-frames [the fastenings] become heads and seem to be biting at me'.

Another patient described the following illusions while he was out hunting: 'On all the trees and bushes I saw, instead of the usual crows, dim outlines of pantomime figures, pot-bellied fellows with thin bow-legs and long thick noses, or at another time elephants with long trunks swinging. The ground seemed to swarm with lizards, frogs and toads; sometimes of portentous size. All kinds of animal forms and evil shapes seemed to surround me. Trees and bushes took on wild, provoking shapes. At other times a girl's figure rode on every bush, and on the trees and reeds. Girls' faces smiled from the clouds, enticing me and when the wind moved the branches, they waved at me. The rustle of the wind was their whispering' (Staudmaier).

Illusions which are a matter of sensory experience must be clearly differentiated from *misinterpretations*, or wrong deductions. If shining metal is mistaken for gold or a doctor for a public prosecutor, this does not imply any alteration in the actual sense-perception. The perceived object remains exactly the same but a wrong interpretation has been put upon it. Illusions must also be differentiated from the so-called *functional hallucinations*; a patient, for instance, hears voices while the water is running but they stop when the tap is turned off. He hears the running water and the voices simultaneously. While illusions contain an element of genuine perception with functional hallucination we have simultaneous hallucinations running alongside with a constant element of genuine sense-perception and disappearing at the same time as the sense-perception.

(bb) *Hallucinations proper* are actual false perceptions which are not in any way distortions of real perceptions but spring up on their own as something quite new and occur simultaneously with and alongside real perceptions. This latter characteristic makes them a different phenomenon from dream-hallucination. There are a number of normal phenomena *comparable* to hallucinations proper. For instance, the after-images which arise in the retina, the rarer phenomenon of *sense-memory* (the subsequent, deceptive yet real hearing of words already heard, and the seeing of microscopic objects at the end of a heavy day of microscope work, all phenomena particularly common when one is tired). Lastly there are the *fantastic visual phenomena* classically described by Johannes Mueller and the now well-known phenomenon, *the subjective eidetic image*.

An example of *sense-memory* has been given me personally by Geheimrat

Tuzcek of Marburg: 'I had been gathering apples for the greater part of the day without a break. I had been standing on a ladder to work the apple-picker and had been gazing continuously up into the branches as I pulled away at the long stick of the 'picker'. As I walked back through the dark streets to the station, I was painfully hindered by the fact that I kept on seeing apple-hung branches before my eyes. The image was so powerful that I could not stop myself from waving my stick in front of me as I walked. The state persisted for several hours until at last I went to bed and fell asleep.'

The following is an extract from the self-observations made by Johannes Mueller on *fantastic visual phenomena*:

'I would shorten my sleepless nights by wandering as it were among my own visual creations. If I want to watch these bright images, I relax my eye-muscles, close my eyes and look into the darkness of the visual field. With a feeling of complete relaxation in my eye-muscles I let myself down into the sensuous stillness of my eyes or into the darkness of the visual field. I ward off any thought or judgment . . . at first the dark field shows patches of light here and there, hazy clouds, shifting and moving colours; these are soon replaced by well-defined pictures of all sorts of objects, at first dim, then increasingly clear. There is no doubt that they are really luminous and sometimes coloured as well. They move and change. Sometimes they arise at the margin of the visual field with a vividness and distinctness which ordinarily never occurs in that area. With the slightest movement of the eye they are usually gone. Reflection too will chase them away. They rarely represent known figures; usually they are strange people and animals I have never seen, or an illuminated room in which I have never been . . . I can conjure up these visions not only at night but at any time during the day. At night I have spent many sleepless hours watching them with my eyes closed. I have only to sit down, shut my eyes, abstract myself from everything and watch the automatic arrival of these images which I have known and loved from my childhood . . . Bright pictures frequently appear in the dark visual field but equally often the dark field brightens into a kind of mild, inner daylight before the actual picture appears, which it then does immediately. The gradual brightening of the visual field seems to me as remarkable as the actual appearance of the luminous images. It is astonishing to sit as a spectator, in the daytime, with eyes closed and see the 'daylight' entering gradually from inside and in the daylight of one's eyes to witness luminous moving figures, produced apparently by the private life of the senses, and all this happening in a waking state, a state of quiet reflection, with nothing magical about it nor any sentimental fancy. I can determine with the greatest precision the exact moment when the images will become luminous. I sit with my eyes closed for a long time. If I try to imagine anything deliberately it remains a mere idea, which does not shine or move within the dark visual field; but suddenly there is a congruence between the fantasy and the light-nerve, suddenly there appear luminous forms, quite apart from the train of ideas. These are sudden apparitions not forms imagined in the first place and then growing luminous. I do not see what I make up my mind to see. I simply have to accept what lights up in front of me without any effort on my part. The short-sighted objection that these are the same as luminous dream-images or 'merely fancied' can certainly be discarded. I can weave fancies for hours but what I imagine never becomes living and vivid in

this way. There must be a disposition to experience these luminous phenomena. Something bright suddenly appears which has not previously been imagined, is unwilling and has no recognisable associations. This phenomenon which I see in my waking state shines as brightly as the flashes which we can create in the visual field by pressing on the eyeballs'.

Subjective eidetic images are sensory phenomena found in 50 per cent of all adolescents and among a certain number of adults (the so-called eidetics). If pictures of flowers, fruit or other objects are laid on grey paper and then removed, these people will see the objects again in full detail on the paper, sometimes in front or behind the plane of the paper. Such images are distinct from after-images since they are not complementary. They can also shift and change and they are not exact copies but modifiable by reflection. They can be recalled even after some considerable time. According to Jaensch, before an examination an eidetic person could read out extensive texts from such a visual image alone.¹

(cc) A certain class of phenomena were for a long time confused with hallucinations. Looked at closely these proved to be not really perceptions but a special kind of imagery. Kandinsky has described these phenomena very fully under the title of *Pseudo-hallucinations*. The following is an example:

'During the evening of August 18th, 1882, Dolinin took 25 drops of tincture opii simplicis and went on working at his desk. One hour later he observed great facilitation in the way his imagination worked. He stopped what he was doing and still conscious and with no inclination for sleep he noticed in the course of one hour while his eyes were closed a number of faces and figures seen during the day, faces of old friends not seen for a long time and faces of unknown people. Now and then there appeared white pages with different kinds of writing; then repeatedly a yellow rose and finally—pictures of people in various costumes standing in all sorts of positions but quite motionless. These pictures appeared for a moment then vanished. They were followed at once by a fresh set, not logically connected. They were projected outward distinctly and seemed to stand there in front of his eyes. They were in no relation whatever with the dark visual field of his closed eyes. It was necessary to divert his gaze away from this field if he was to see the pictures. Fixing on the visual field interrupted the visual phenomena. In spite of many attempts he failed to make the subjective picture part of the dark background. In spite of the sharp outlines and vivid colours and the fact that the pictures seemed to stand out in front of the subject's gaze they lacked the character of objectivity. Dolinin felt that though he saw these things with his eyes, they were not his outward, physical eyes, which only saw a black visual field flecked with patches of foggy light; they were "inner eyes" located somewhere behind the outer ones. The distance of the pictures from these "inner eyes" varied from 0·4–6·0 metres. Usually it was that of clearest vision which in his case was very small, because of his short-sightedness . . . The human figures varied in size from normal to that of a photograph. Optimal conditions for the pictures to appear were as follows: "An attempt must be made to make the mind blank as far as possible and direct one's attention idly to the sense-activity concerned [in Dolinin's

¹ Urbantschitsch, *Über subjektive optische Anschauungsbilder* (Vienna, 1907). Silberer, 'Bericht über eine Methode gewisse symbolische Halluzinationserscheinungen hervorzurufen', *Jb. Psycho-anal.*, vol. 1 (1909), p. 513. E. R. Jaensch, *Über den Aufbau der Wahrnehmungswelt u. ihre Struktur im Jugendalter*.

case, the visual sense]. Where the spontaneous pseudo-hallucination is actively appreciated, it is possible to retain this for a little in the focus of awareness and longer than one could do without such active effort. Direction of attention to another sense-activity (for instance from vision to hearing) whether in part or wholly will interrupt the pseudo-hallucination that first appeared. Interruption also will take place when attention is focused on the black visual field of the closed eyes or on real objects in the environment when the eyes are open; also when there is any onset of spontaneous or deliberate abstract thinking." (Kandinsky).

The first thing one notices about this description is that the phenomena in question are seen by an 'inner eye'; they are not within the black visual field, like the previous fantastic visual phenomena nor do they possess the reality of perception (the character of objectivity—Kandinsky). If we are to get our orientation among these many phenomena of our imagination, of which Dolinin furnishes only one example, it would be as well to arrange the varying characteristics in some order whereby normal perception and normal imagery can be phenomenologically distinguished. Thus:

Sense-perception (Wahrnehmung)

1. Perceptions are of *concrete reality*. They have a character of objectivity.
2. Perceptions appear in *external objective space*.
3. Perceptions are *clearly delineated* and stand before us in a detailed fashion.
4. The *sensory elements* are *full, fresh*. Colours, for instance, are bright.
5. Perceptions are *constant* and can easily be *retained* unaltered.
6. Perceptions are *independent of our will*. They cannot be voluntarily recalled or changed, and are accepted with a feeling of passivity.

Image or Idea (Vorstellung)

- Images are *figurative*. They have a character of subjectivity.
Images appear in *inner subjective space*.

Images are *not clearly delineated*, and come before us *incomplete*, only individual details evident.

Though occasionally *sensory elements* are individually the equal of those in perception, *most are relatively insufficient*. The majority of people's visual images are neutral-toned.

Images *dissipate* and have always to be *recreated*.

Images are *dependent on our will*. They can be conjured up or deliberately altered. They are produced with a feeling of activity.

With regard to point 2, we must add that objective space and subjective space can appear to coincide, for instance, when I form the visual image of something behind me. I can also imagine something standing between certain objects in front of me but I do not see it there (in that case it would be a hallucination). Both spaces only seem to coincide; there is always a jump from the one to the other and they are widely separated in fact.

From the above table we may now be able to derive the specific characteristics of pseudo-hallucinations. The only absolute difference from sense-perception appears in points 1 and 2 (i.e. pseudo-hallucinations are figurative, not concretely real and occur in inner subjective space, not in external objective

space). These two opposing characteristics divide perception sharply from imagery, as by a gulf, and there are no transitions. With the other characteristics, as shown in points 3 and 4, the differences are not so clear-cut. Images which always remain configurations of our inner space may progressively assume certain characteristics ascribed to perceptions. Thus we find an infinite variety of image-phenomena ranging from normal imagery to fully developed pseudo-hallucinations. We may now characterise these as follows: pseudo-hallucinations lack concrete reality and appear in inner subjective space. To the 'inner eye' however they seem to have definite contours and are fully detailed (point 3); in their sensory elements they have all the sufficiency of normal perception (point 4). We may be fully conscious and find ourselves suddenly confronted with them, sharply articulated and with a wealth of vivid detail. They do not dissipate at once but may be retained as constant phenomena until they abruptly take their departure (point 5). Lastly, they cannot be deliberately altered or evoked. The subject is receptive and passive (point 6) in regard to them.

Such fully developed phenomena are, however, by no means the most common. The phenomena are generally rather more imprecise and show only one or two of the above characteristics. We may get pale, vague images which appear involuntarily, or detailed, constant phenomena that have been deliberately invoked. Thus a patient recovering from an acute psychosis could imagine things most vividly for a time. He inwardly visualised a chessboard with all the men on it but he soon lost this capacity. Pseudo-hallucinations have so far been found only in the visual and auditory field in the form of inner pictures and voices.

In describing sense-experience in false perception, we distinguished illusions from hallucinations and similarly we draw a clear distinction between sense-phenomena and the phenomena of imagery (i.e. between hallucination and pseudo-hallucination). This does not prevent us from finding actual 'transitions' in that pseudo-hallucination can *change over* into hallucination and there may be a florid sensory pathology in which all the phenomena *combine*. We cannot reach any analysis, however, unless we attempt sharp distinctions of this sort which provide us with some kind of standard.

Illusions, hallucinations and pseudo-hallucinations are extremely varied and range from elementary phenomena, such as sparks, flames, rushing sounds, bangs and cracks, to the perception of shapes and forms, heard voices, and visions of figures and landscapes. If we review the different sense-fields we will get a certain over-all picture:

*Vision:*¹ Real objects are seen enlarged or diminished or distorted or in motion. Pictures jump about on the walls, the furniture comes to life. Optical hallucinations in alcoholic delirium are myriad and changing, in epilepsy their colouring is vivid (red, blue) and they tend to be overpowering. In acute psychoses hallucinations have

¹ For illustrations of visual hallucinations see Serko, *Z. Neur.*, vol. 44, and Morgenthaler, *Z. Neur.*, vol. 45.

been observed that take the form of whole scenic panoramas. Here are some examples:

(aa) *In inner subjective space*: A schizophrenic patient, while awake, saw ghastly pictures, she did not know how. They were inner pictures; she knew they were really nothing. But the pictures crowded in on her. She saw a graveyard with half-open graves; figures walking about without heads; the pictures were agonising. By diverting her attention to external objects, she could make them go.

(bb) *With open eyes*: Figures appear in the whole visual field, but there is no integration with objective space: 'The figures grouped themselves round me 3-6 metres away. Grotesque human figures, who made some kind of noise like a jumble of voices. The figures were there in space, but as if they had their own private space, peculiar to themselves. The more my senses were diverted from their usual objects, the more distinct grew this new space with its inhabitants. I could give the exact distance but the figures were never dependent on the objects in the room nor were they hidden by them; they could never be perceived simultaneously with the wall or the window etc.'

'I could not accept the objection that I had only imagined these things; I could not find anything in common between these perceptions and my own imagination nor can I do so to this day. I feel the figures of my imagination are not in space but remain faint pictures in my brain or behind my eyes while with these phenomena I experienced a world which had nothing to do with the world of the senses. Everything was "real", the forms were full of life. Later on the ordinary world still contained this other one with its own separate space and my consciousness was gliding between the two as it chose. The two worlds and their perceptions are utterly dissimilar' (Schwab).

Serko described false-perceptions during mescaline intoxication as follows:

'They appear in the one constant, disc-like and microscopic visual field and are greatly diminished in size; they are not integrated with the real surroundings but form a miniature theatre of their own; they do not touch on the immediate content of consciousness and are always subjective . . . they are chiselled to the finest particular, and vividly coloured. They appear in sharp relief and change constantly . . . when my eye moves, they do not change position in space.' The content of these false perceptions is 'in continuous movement' . . . 'Patterns dissolve into bouquets, whirls, domes, Gothic doorways . . . and so on; there is an everlasting coming and going and this restless moving to and fro seems to be their hallmark'.

(cc) *With eyes closed*. A schizophrenic counterpart to Johann Mueller's description is as follows:

'With closed eyes I would perceive a diffused, milky-white light out of which appeared exotic forms of plants and animals in relief and often in shining colours. I thought the pale light lay in the eye itself but the shapes were like an experience and seemed to come from another world. The perception of light was not always the same. When my mental state was better the light was brighter but after some trivial social set-back (annoyance, excitement) or some physical discomfort (e.g. after over-eating) it would get darker and sometimes it was pitch-black night. Light appeared about 1-2 minutes after my eyes were shut. When I travelled by train through a tunnel and shut my eyes it would become bright and I thought wrongly that the train was in the open again but when I opened my eyes suddenly there was nothing but the pitch black of the tunnel. The light vanished not only because I opened my

eyes but because I tried to look and see. As soon as I stopped looking fixedly I could see the light with my eyes open even during the day, but less clear. The shapes did not appear every time. The plants were beyond imagination; I was astounded by their loveliness and grace; there was something magnificent about them as if the plants I ordinarily know were only their degenerate descendants. The animals were prehistoric; they had something benign about them. Occasionally some one part became extremely prominent, but I was surprised how harmoniously the rest of the form was adapted to these peculiarities so that a certain type emerged. There was no movement among them, they seemed three-dimensional and after a few minutes disappeared' (Schwab).

(dd) *Integration with outer objective space:* Kandinsky described his own psychotic experiences thus: 'Some of my hallucinations were relatively pale and indistinct. Others were bright with all sorts of colours, like real objects. They obscured real objects. For a whole week I saw on one and the same wall, which was covered with a smooth, plain wallpaper, a series of gilt-framed frescoes, landscapes, seascapes, and sometimes portraits.'

Uhthoff¹ described the following:

'The patient suffered from an old choroiditis. Central positive scotoma. Had it for 20 years without particular symptoms; one day, a dull feeling in the head and tiredness. The patient looked out of the window and suddenly noticed a "vine" moving and growing in size on the pavement of the courtyard. The appearance of leaves persisted for six days and then it became a tree with buds. Walking along the street she saw the tree as in a fog between the real bushes. On closer observation real leaves could be distinguished from the fictitious ones; the latter were "as if painted"—the colour was bluer and greyer "as if shaded"; the "fantasy leaves" were as if "pasted on" while the natural ones "stand out from the wall". After a time the patient also saw "exquisite flowers, of every possible colour, little stars, sprays, bouquets". On closer scrutiny this intelligent patient gave the following description: "The leaves, bushes, etc., seemed localised in the positive, central visual field defect and the size changed with distance. At 10 cm. the phenomena had a diameter of 2 cm." If projected on to a house across the street they were so big as to cover the whole window. When the eyes were moved, the phenomena moved too. This was the criterion by which the patient realised that they were not real objects. When the eyes were closed, the phenomena disappeared and gave way to patterns (golden star on a black background—and round it often a concentric blue and red ring). The hallucinatory objects hid the background and were opaque.'

A patient suffering from a schizophrenic process gave the following description:

'Once I was visited for a few days by a pretty young woman. A few days later I was lying in bed at night and turning over on to the other side I saw to my great surprise on the right beside me the girl's head protruding from the bedclothes as if she was lying by me. It looked magical, beautiful, ethereally transparent and softly gleaming in the dark room. I was completely dumbfounded for a moment but the next moment I knew what I was dealing with, all the more as at the same time a rough, unkind voice whispered sarcastically inside me. I turned crossly on to the left side and swore without paying any more attention to the phantom. Later a friendly inner voice said—The girl has gone' (Staudenmaier).

¹ Uhthoff, 'Beiträge zu den Gesichtstaeuschungen bei Erkrankungen des Sehorgans', *Msch. Psychiatr.*, vol. 5, pp. 241, 370.

A schizophrenic girl reported:

'At first I was very busy catching the "Holy Ghost" with my eyes; by this I mean those little white transparent flecks which jump in the air or out of the eyes of those around me and look like dead, cold light. I also saw people's skins emitting fine black and yellow rays; the air too became pervaded with other strange rays and layers . . . All day I have been afraid of wild animals which race through the closed doors; they steal, slow and black, along the wall to hide under the couch and watch me from there, with bright eyes. I have been frightened by headless men who walk about the passages and by soul-less bodies of murdered people that lie in the middle of the parquet floor; when I look at them they vanish at once; I "catch them away" with my eyes' (Gruhle).

Hearing: In acute psychoses patients hear tunes, confused noises, whistling and the rattling of machines, a racket which appears to them louder than guns. Here as in the chronic states we often find 'voices' as well, the 'invisible' people who shout all kinds of things at the patient, ask him questions and abuse him or order him about. As to content, this may consist of single words or whole sentences; there may be a single voice or a whole jumble of voices; it may be an orderly conversation between the voices themselves or between them and the patient. They may be women's, children's or men's voices, the voices of acquaintances or unknown people, or quite indefinable human voices. Curses may be uttered, actions of the patient may be commented on or there may be meaningless words, empty repetitions. Sometimes the patient hears his own thoughts spoken aloud. (*Voiced thoughts*—Gedankenlautwerden.)

Here is a self-description (Kieser):

'It is amazing, horrible and for me humiliating, to think what acoustic exercises and experiments—musical ones too—have been conducted with my ears and body for nearly 20 years. Sometimes I could hear one and the same word repeated without interruption for two to three hours. I had to listen to long continuous speeches about me; frequently the content was insulting and there was often an imitation of well-known persons. These lectures, however, had little truth about them, usually they were infamous lies and slanders about my person, sometimes also of others. . . . it was often proclaimed that "I" said all these things . . . the scoundrels wanted to pass the time with onomatopoeia, paronomasia and other figures of speech and kept up a perpetuum mobile of speech. Sometimes one could only just hear these incessant, uninterrupted sounds but sometimes one could hear them a half or full mile away. They were being catapulted out of my body and the most varied sounds and noises got slung about, especially when I entered some house or village or town. This is the reason I have been living like a hermit for the last few years. All the time my ears keep ringing and sometimes so loudly that it can be heard far and wide. When I am among woods or bushes and the weather is stormy, some horrible, demoniacal poltergeist is aroused; when it is quiet, each tree starts rustling and uttering words and phrases when I approach. So with water—all the elements are being used to torture me.'

Another patient had been hearing voices for months, on the street, in the shops, in trains and restaurants. The voices talked and called out quietly but clearly and distinctly. 'Do you know him, he is crazy Hagemann'. 'He is looking at his hands again.' 'Lie down, now, your spinal cord is diseased.' 'He is a man without character', etc.

Schreber gives a description of those *functional hallucinations* that are heard at the same time as a real noise. They can be heard only then, not when it is quiet:

I should remark on the circumstance that all the noises I hear, specially those that last rather long, like the rattle of trains, the throbbing of a steamer, the music at concerts, all seem to speak. It is a subjective feeling, of course, not like the speech of the sun or of the miraculous birds. The sound of words spoken or developed by me links up with my sense-impressions of train, steamer, squeaking boots etc. I would not think of saying that the train, steamer etc. are really speaking as in the case of the sun and the birds'.—Schizophrenic patients often hear the voices localised inside, in the body-trunk, head, eyes, etc.

We have to differentiate 'inner voices' ('voices of the mind') that is 'pseudo-hallucinations' from 'voices proper':

Perewalow, a chronic paranoid, distinguished voices that talked directly from the outside, through walls and pipes, from those voices brought by a current which his persecutors used to *force him sometimes to hear inwardly*. These inward voices were neither localised outside nor were they physical; he distinguished them from 'made thoughts' unaccompanied by any inner hearing and directly conducted into his head. (Kandinsky). Mrs. K. reported she had two memories; with one she could recall at will like anyone else; with the other, voices and inner pictures would appear before her involuntarily.

'Voices' are of particular importance with schizophrenic patients. Many different names and interpretations are given to them; for instance (Gruhle), communications, rapport, magical talk, secret language, voices in uproar etc.

Taste and smell: These senses have no objective pattern. In principle and sometimes in practice we can differentiate spontaneous hallucinations from those false perceptions in which objective smells and tastes are sensed as smelling and tasting somehow differently: A patient gives the following description—'It is odd about taste . . . food may taste just anyhow; sprouts like honey or the soup so unsalty I want to salt it heavily but, just before I do, it seems to me over-salted' (Koppe). Other patients complain about coal-dust, sulphur, air that stinks, etc.

Simultaneous activity of several senses. In actual sense-perception we deal ultimately not with one single sense, but with an object. This object seems to us as one and the same through the operation of several senses. So with hallucination, one sense supplements the other.

But there is a mêlée of the senses, a different matter altogether, which makes clarity impossible. Experiences have been observed where the object is never exhibited to the patient in any clearly defined way by any one sense but is mixed up in a whirling confusion of shifting sense-data in which consciousness vainly tries to establish some meaning. We are not dealing here with a co-ordinated hallucination of several senses but with real synaesthesias that have become the dominant mode of perception. Genuine perceptions are now one with hallucinatory and illusory ones. Bleuler describes how he 'tasted' juice on his finger-tips. Under mescalin intoxication it is reported:

'One thinks one hears noises and sees faces and yet everything is still one and the same . . . what I see, I hear; what I smell, I think . . . I am music, a grating, everything is one and the same . . . then there are the auditory hallucinations which are

also visual perceptions, zig-zag, angular, like oriental ornamentation . . . all this is not only thought by me, but felt, smelt, seen by me and seem to be my own movements as well . . . all is clear and definite . . . in the face of this actual experience of the impossible, criticism becomes nonsensical' (Beringer).

(e) Abnormal Imagery—False Memory

The phenomena of abnormal perception have now been described and our account of pseudo-hallucinations brings us to the phenomenology of abnormal imagery.

Abnormal imagery has some correspondence with alienation from the perceptual world. The anomaly is not so much of the image itself but only of certain aspects which we might call the '*character of the image*'. Some patients complain they are quite unable to imagine anything; such images as they can summon up are pale, shadowy, dead and do not seem to appear in consciousness.

One of Foerster's patients complained: 'I cannot even imagine how I look, how my husband and children look . . . when I look at an object, I know what it is but as soon as I close my eyes afterwards it has gone completely. It is as if one tried to imagine what air looked like. Surely, doctor, you can hold an object in your mind, but I can't keep an idea of it at all. I feel as if my thought had gone black.' Foerster found on examination that this patient could describe things perfectly from memory and that she was in fact extremely sensitive to colours, etc.

We are not dealing, therefore, with real inability to imagine but rather with something like derealisation in perception. The sensory elements and the mere direction of attention to an object are not all there is to a perception nor to an image. There are certain accessory characters which are of even greater importance for imagery than for perception, as with imagery the sensory elements tend in any case to be few, slight and fleeting. As a result we seem far more dependent upon these 'accessory' characters. If they are in abeyance we can well understand the patient when he says that he cannot imagine anything at all.

In the discussion of imagery a special place must be assigned to memories, that is the images which occur with the conscious knowledge that they constitute a previous perception of ours, that we have experienced their content before and that the object they represent is or was real. False perceptions mislead our judgment and false memories can do the same. Later on, when we discuss theories of memory, we shall see how nearly all memories are slightly falsified and become a mixture of truth and fantasy. It is necessary to differentiate *Kahlbaum's hallucinatory memory* from simple falsification of memory. For example:

A patient suffering from a process schizophrenia reports during the final stage of an acute phase of paranoid anxiety: 'For the past few weeks so many things have suddenly occurred to me over what happened with Emil [her lover] . . . just as if someone had told me'. She had completely forgotten these things. Later she even talked of the time 'when I suddenly remembered so many things'. The things she

remembered were of this sort: 'Emil had, I'm sure, hypnotised me, because I was sometimes in such a state that I surprised myself; I had to kneel down on the floor of the kitchen and eat out of the pig-bucket. Afterwards he told it all triumphantly to his wife . . . I once had to go into the pig's sty. How long I was there and how I got there I don't know; I only came to as I was coming out of the sty on my hands and feet . . . Emil also nailed a couple of boards together and I had to say I wanted to be crucified after which I had to lie face downwards . . . once it seemed to me as if I had been riding a broomstick . . . once I felt as if Emil had me in his arms and there was a terrible wind . . . once I stood in the muck and was being pulled out . . .' Sometime before she had to go for a walk with Emil, and she knew exactly what happened under the lamp but did not know how she got home again.

Three criteria distinguish these cases which have often been observed.¹ The patients know for certain that *what comes to their mind is something they have forgotten*. They have the feeling that at the time they were in *an abnormal state of consciousness*. They talk of doped states, attacks of faintness, being half-asleep or half-awake, being in some peculiar state, a state of hypnosis, etc. Lastly there are indications that the patients feel that they must have been the *passive tools* of someone or something at the time and could not do anything about it. They were just made to do things. The mode of description in such cases is suggestive of false memory but in certain individual cases it has been shown (Oetiker) that the behaviour of the patient was actually disturbed during the period to which the false memory referred.

With the phenomena of false memories the patient gets a sudden image of a previous experience that has all the vivid feeling of a memory, but in actual fact nothing, not even a slender basis for it, is really remembered. Everything is *freshly created*. There are however apparently similar phenomena where everything is not freshly created but there is a *distortion of actual scenes*, for instance an innocuous scene in a public-house is distorted into an experience of being poisoned or hypnotised. There are, lastly, false memories that seem to have a neutral content: the patient announces that an hour ago he had a visitor when actually he was alone in bed. The only feature left here sometimes to differentiate such phenomena subjectively from normal falsifications of memory is the 'sudden coming to mind', which gives us an impression of primary phenomena.

This 'sudden coming to mind' of supposed 'forgotten' experiences can be difficult to distinguish from a progressive illumination of memory regarding real experiences which have been undergone during a twilight state.² Alter described the case of a high-ranking civil servant, who recalled step by step the details of a sexual murder he thought he had committed some time previously. Some circumstantial evidence indicated this. After his death, a detailed self-accusation was found among his papers, but neither the patient's other psychopathic symptoms nor the objective data were

¹ Oetiker, *Allg. Psychiatr. Z.*, vol. 54. Cp. Schneider's case, *Z. Neur.*, vol. 28, p. 90. Cp. Blume, *Z. Neur.*, vol. 42, p. 206, regarding a possible relation between falsification of memory and dreams.

² Alter, 'Ein Fall von Selbstbeschuldigung', *Z. Neur.*, vol. 15, p. 470.

definite enough to support any conclusion. However the phenomena as described by Alter suggest that he really went through this experience. There was a gradual illumination of memory through the help of a number of individual facts which could have aroused associations, and there was no sign that he felt he had been a passive tool, or subject to alien influences, etc.

Another false-memory phenomenon looks rather like *a déjà vu*, but here the patient consciously *accepts* everything *as real*. For example:

A dementia praecox patient reported that she couldn't help noticing that she saw faces in the clinic which she had seen at home a few weeks before; a witch-like form, for instance, that walked through the ward during the night as an attendant; she said that she had also seen the Matron some time ago in Pforzheim dressed in black. 'There was my recent experience in the garden when Dr. G. asked why didn't I work . . . I had already told this to my landlady four weeks ago. It struck me as very funny and I asked him with surprise what he had in mind.' When conversing in the clinic, she thought it had been like this before; she believed in any case that she had been in a mental hospital before.¹

The patients accept these phenomena as real and because of this they should be distinguished from *déjà-vu* experiences proper, which are never thought to be real. Moreoever, the total experience itself leaves one with a different impression. This certainty of having seen or experienced something before may only refer to certain aspects of the present, sometimes it may refer to the whole situation; sometimes it occurs for only a brief period, a few minutes at the most, and sometimes it accompanies psychic events for weeks on end. It is not an uncommon phenomenon in schizophrenia.

The above examples of hallucinatory memory and this latter special form of *déjà vu* are phenomenologically all of the same character. The following group of falsifications of the past are not strictly speaking false memories and *do not have this same phenomenological character*:

(a) *Pathological lying.* Stories about the past which are pure fantasy are eventually believed by their inventor himself. Such falsifications range from harmless tall stories to a complete falsification of the whole past.

(b) *Reinterpretation of the past.* Insignificant past scenes suddenly acquire new meaning as the patient looks back at them. 'A meeting with an officer of high rank means the patient was of noble origin etc.'

(c) *Confabulations.* We use this term for a shifting series of false memories, briefly retained or immediately lost. They can appear in a number of forms: Confabulation out of embarrassment, which involves filling in the gaps of a severely impaired memory, e.g. in senile patients. With these and in cases with severe head injuries we find productive confabulations as part of the Korsakow syndrome. Patients will tell long stories about accidents they have had, a walk they have taken and other activities when they have been quietly in bed all the time. Lastly we have the well-characterised phenomena of the fantastic confabulations common in paranoid processes: A patient had lived through the Great War when he was about 7

¹ Other instances are given by Pick, *Fschr. Psychol.*, vol. 2 (1914), pp. 204 ff.

years old; in Mannheim he had seen large armies fighting; he had a special decoration because of his noble descent; he made a journey to Berlin with a big entourage to visit his father, the Kaiser; all that happened a long time ago; he was changed into a lion and so it goes on, endlessly. One patient called his whole fantastic world 'the novel'. The content of these confabulations can be influenced by the investigator. One can sometimes bring completely new stories to light. On the other hand, we can observe individual cases, for instance after head injury, where one of the confabulatory contents is tenaciously and continuously held.

(f) *Vivid physical awarenesses*

In discussing false perception, false memory and pseudo-hallucinations, etc., emphasis was laid on the concrete vividness. We can now add to these phenomena one which is not vivid in the concrete sense but is for all that an equally forcible deception. This is the phenomenon of a false awareness.¹

A patient felt someone was always walking next to him or rather obliquely behind him. When the patient got up, this one got up too; when he went, the other went with him; when he turned round, the other kept behind him so that the patient could never see him. He always remained in the same position though sometimes he came a little nearer or moved a little further away. The patient had never seen or heard him and had never felt him nor touched him and yet he experienced with an extraordinary certainty the feeling that somebody was there. In spite of the keenness of the experience and though he sometimes let himself be deceived, he concluded in the end that in reality no one was there.

If we compare phenomena such as this with normal experiences of a similar character, the following points emerge: For instance, we know when we are at a concert that someone is sitting behind us; we have just seen him; while walking in a dark room we suddenly stop because we think a wall is in front of us, etc. In such cases we are *aware that something is present* which at that moment is not based on any obvious sensory sign. Nevertheless these normal phenomena are either based on previous perceptions or on fine momentary ones which can be demonstrated if one will examine the situation more carefully (such as changes in sound, or density of atmosphere as in the case of the awareness of a wall), but with pathologically vivid awarenesses, the experience appears as a completely primary phenomenon and has the character of *urgency, certainty and vividness*. We have termed phenomena of this sort vivid physical awarenesses in contrast to other vaguer awarenesses which bring something abstract or fantastic before the psyche (e.g. awarenesses of thoughts or delusional awarenesses).

There are transitions from vivid physical awareness to hallucination proper:

'One thing is always with me. I feel and see a wall around me about 3–4 metres away; it is made of some wavy and hostile substance and under certain conditions devils keep on breaking out from it' (Schwab).

¹ Cp. my article on 'Concrete Awareness', *Z. Pathopsychol.*, vol. 2 (1913).

There are transitions to primary delusions as well: patients feel they are 'being observed' or 'watched' without anyone near them. A patient said, 'I did not feel free any longer, *that* wall in particular kept me.'

§ 2. EXPERIENCE OF SPACE AND TIME

Psychological preface. Space and Time are *always present* in sensory processes. They are not primary objects themselves but they invest all objectivity. Kant calls them 'forms of intuition'. They are *universal*. No sensation, no sensible object, no image is exempt from them. Everything in the world that is presented to us comes to us in space and time and we experience it only in these terms. Our senses cannot transcend the space-time experience of existence nor can we escape from it but are always confined within it. We do not perceive space and time as such, as we do other objects, but we perceive them along with these objects, and even in experience barren of any object we are still within time. Space and time do not exist on their own account; even where they are empty, we have them only in conjunction with objects that inform and define them.

Space and Time, underivative and primary, are always present in abnormal as well as in normal life. They can *never vanish*. Only the way in which they are present, how they appear to us, our mode of experiencing them, our estimate of their extent and duration, only these may be modified.

Space and Time are real for us only through their content. It is true we conceive them as a void, although we try to picture this emptiness to ourselves in vain. As *voids*, they share a *basic characteristic* of a quantitative kind: we find dimensions, homogeneity, continuity, infinity. The parts so constituted are not, however, instances of a universal called space or time, but parts of a perceptual whole. *Informed with content*, they immediately become qualitative. Although space and time are inseparable, they are radically different from each other; space being a homogeneous manifold and time a spaceless occurrence. If we want to bring these primary things home to ourselves in some neat phraseology we may say that they both represent the sundered existence of Being, separated from itself. Space is extended being (the side-by-side) and time is sequential being (the-one-after-the-other).

We can sometimes *do without* space and enjoy a kind of inner objectless experience, but time is always there. Or can we also break through time? The mystics say we can. In breaking through time, eternity is experienced as time standing still, an everlasting now, a 'nunc stans'. Past and future become one lucid present.

If space and time only become real for us through the objects that give them content the question arises what can we regard as the *essence* of space and time? Their universality has misled us in the past to take them as the very basis of Being. But it is a mistake to consider space and time as absolutes of Being itself and the experience of them as an absolutely basic one. Although everything that exists for us is spatial and temporal, whether real or symbolic, we should not impute to space and time that which gives them their content and intrinsic value. Though we all fulfil our fate in space and time in such a way that both gain substance for us in the all-embracing present, they are both nothing but the outer covering of events, with no significance but that which comes from our attitude towards them. It is the significance, not the specific experience, which turns them both into a psychic language, a psychic form,

which should be kept out of the discussion when space and time are themselves the theme. In this chapter we are concerned only with *space and time as they are actually experienced*. It is altogether another matter that this experience, if it suffers any change, will modify all the psychic contents and be itself altered by the psychic contents—that is, the awareness of the significance of space and time may be changed.

Both space and time exist for us in a *number of basic configurations*, though what they have in common is not always immediately clear. In regard to *space* we have to distinguish: (1) the space I perceive as a qualitative structure, when I view it from my present orientation within the centre of my body, e.g. left to right, up and down, far and near. This is the space I contact around me as I live and move, which my eye grasps, the place where I am. (2) objective three-dimensional space, the space through which I move, which I constantly have with me as my immediate space of orientation. (3) theoretical space, including the non-euclidean space of mathematics—the space which is simply a theoretical construct. What *significance* I feel may lie in the configurations of space, in the spatial experience itself and in spatial change is another matter. As to *Time*, we have to distinguish: the time-experience, clock-time, chronological and historical time and time as the historical aspect of the individual's Existence.

For phenomenological purposes there is no point in psychopathology taking these philosophical problems as a starting-point, however relevant they may be for philosophy itself. It will be better to work out the actual abnormal phenomena and, as the case may be, see whether this theorising about space and time may not contribute something towards a clearer comprehension of the phenomena.

(a) Space¹

Appreciation of space can be assessed quantitatively as a performance, but there may be a very poor performance and yet the experience of space may still be normal. On the other hand space as a phenomenon may be being experienced quite differently. Where this experience is unconscious, we can only see it through its effects, i.e. through faulty performance. Where it is conscious, the patient can himself compare his present changed experience of space with what he remembers of his normal experience or with what normal spatial perception still remains to him.

i. Objects may seem smaller (*micropsia*) or larger (*macropsia*) or aslant, larger on one side than the other (*dysmegalopsia*). We also know of double vision or multiple vision up to a sevenfold vision. (All these phenomena may occur in deliria, epilepsy, and in acute schizophrenic psychoses, but we can also find them in psychasthenic conditions.)

Exhaustion neuroses. An overworked student sometimes saw letters and music, sometimes the wall and door as small and distant. The room became a long corridor. At other times his movements appeared to take on enormous dimensions and a mad speed. He thought he made enormous strides.²

Lubarsch (quoted by Binswanger) reported fatigue experiences when in bed in

¹ L. Binswanger, 'Das Raumproblem in der Psychopathologie', *Z. Neur.*, vol. 145 (1933), p. 598.

² Veraguth, 'Über Mikropsie u. Makropsie', *Dtsch. J. Nervenheilk.*, vol. 24 (1903).

the evening at the age of 11–13 years. ‘My bed became longer, wider and so did the room, stretching into infinity. The ticking of the clock and my heartbeats thudded like huge hammers. A passing fly seemed like a sparrow.’

A presumably schizophrenic patient reported: ‘There were times when everything I saw around me assumed enormous proportions. Men seemed gigantic, everything near and far seemed to me as if seen through the end of a telescope. I always seem when looking outside, for instance, to see everything through field-glasses; so much perspective, depth and clearness in everything’ (Ruemke).

2. Experience of infinite space. This occurs as an alteration of the whole spatial experience:

A schizophrenic reported: ‘I still saw the room. Space seemed to stretch and go on into infinity, completely empty. I felt lost, abandoned to the infinities of space, which in spite of my insignificance somehow threatened me. It seemed the complement of my own emptiness . . . the old physical space seemed to be apart from this other space, like a phantom’ (Fr. Fischer).

Serko described the feeling of infinite space under mescaline. The depth dimension of space seemed to enlarge. The wall moved away and space diffused itself everywhere.’

3. As with the contents of perception, so it is with the appreciation of space, which also takes on an affective character. L. Binswanger called it ‘*space with an atmosphere*’ (or *emotionally-coloured space*). Space can have something of a psychic character so that it can exist as a threatening or a pleasing reality. Even in the previous examples it is difficult to distinguish sharply what are the actual changes in perception and what are merely alterations in the affective components of perception, although conceptually it is important to keep these two situations apart.

A schizophrenic patient of Carl Schneider said: ‘I see everything as through a telescope, smaller and at a very great distance, yet not smaller in reality but more in the mind . . . less related to each other and to myself as it were . . . colours are dimmer and so is the significance . . . everything is far away . . . it is more a mental remoteness . . .’

Here the described alterations in perception are clearly already in essence affective changes. In the following example of schizophrenic experience, the fact of a reality experience seems to be in the foreground, although perception itself seems altered:

A schizophrenic reported: ‘Suddenly the landscape was removed from me by a strange power. In my mind’s eye I thought I saw below the pale blue evening sky a black sky of horrible intensity. Everything became limitless, engulfing . . . I knew that the autumn landscape was pervaded by a second space, so fine, so invisible, though it was dark, empty and ghastly. Sometimes one space seemed to move, sometimes both got mixed up. . . . It is wrong to speak only of space because something took place in myself; it was a continuous questioning of myself’ (Fr. Fischer).

Another schizophrenic reported: ‘when he looked at objects, things often seemed

so empty, sometimes there, sometimes here. The air was still there between things, but the things themselves were not there.'

Another patient said: He only saw the space between things; the things were there in a fashion but not so clear; the completely empty space was what struck him. (Fr. Fischer).

(b) Time

Preliminary remarks. We have to make three distinctions:

1. *Knowledge of time.* This relates to objective time and the performance of judging time-intervals rightly or wrongly. It also relates to wrong or delusional ideas on the nature of time (e.g. a patient says his head is a clock, that he is making time; or another patient says: 'new time is being produced so they must be turning the black-white knob' (Fr. Fischer).

2. *Experience of time.* The subjective experience of time is not the estimation of any particular span of time but a total awareness of time, in respect of which the ability to assess the time-span is only one of many other characteristics.

3. *Handling of time.* Everyone has to handle the basic fact of time. We may or may not be able to wait, to allow something to mature; we have to make decisions; we have to handle time in the context of our over-all awareness of our past life and our whole existence.

Knowledge of time concerns the study of psychological performance; *handling of time* is a matter for the psychology of meaningful phenomena (Verstehende Psychologie); in the following paragraphs we shall deal with the *experience of time* only. We are merely describing phenomena and there is no need to explain or grasp the meaning of these immediately.

In addition to the three above lines of enquiry, we are left finally with the biological problem of the *time-bound nature of life*, including psychic life. Every life has its own time, peculiar to it, whether it be the mayfly or man; each has its own life-span, its own life-curve and periodicity. This vital time is an objective, biological and qualitatively differentiated time. Time always plays a part in physiological events. (For instance, the beginning of the hormonal impulse which brings about a timely puberty.) It also plays a part in all forms of regulation; not only those which are merely chemical, varying in rate according to the temperature, for instance, but also those which show a rhythmic build-up, as interplay of stimuli, harmoniously ordered in their time-relationships. Finally, time plays a part in that extraordinary 'inner time-keeping' which can accurately determine any time interval (for instance, during sleep after a resolve to wake at a certain hour or after hypnotic suggestion).¹

The reality of this vital time raises *certain questions*: Do time-events, if they differ for different species, also vary within the species in power, impetus, increase or decrease of tempo? Can time-events be disturbed as a whole, not only in one or other of their constituent factors? Is our experience of time, experience of events as such and therefore disturbed by any disturbance of these events? What kind of perception is implied in our experience of time? Do we perceive some kind of objective, every-day event, such as the objects of ordinary sense-perception or is it the vital bodily event

¹ Ehrenwald (*Z. Neur.*, vol. 134, p. 512) reports two cases of Korsakow syndrome; the time-sense was severely disturbed and he induced the patients by hypnosis to wake at certain times with some accuracy; conscious awareness was lost but a primitive, unconscious time-sense seemed there.

which we perceive? Do we perceive something concrete or are we experiencing something that is basically ourselves, or do both these things happen? We can ask all these questions but so far we are left without answer. Carrell is still circling round the riddle when he writes: 'Time is told in the tissues of our body. Possibly when this reaches the threshold of consciousness, it explains our deep-rooted, indefinable feeling of the flow of silent waters on which our conscious states waver like search-lights on some great, dark river. We realise we are changing and are no longer one with our previous self and yet we realise our identity.' We cannot explain the experience of time nor can we derive it from anything else; we can only describe it. We cannot avoid asking what are the causes of abnormal experience of time but so far demonstrable answers do not exist.

The following points are material when we come to discuss the phenomena of the experience of time: *Knowledge of time* (and actual orientation in time) takes place on the basis of our experience of time but it is not the experience of time itself. Our *experience of time* involves a basic awareness of the constancy of our existence; without this constancy in time there can be no consciousness of time passing. Consciousness of time passing is an *experience of basic continuity* (Bergson's *durée*, Minkowski's *temps vécu*). Experience of time is also an experience of *having a direction*, a growing forward, in which the awareness of the present stands as a reality between the past as memory and the future as planned. Finally there is the *experience in time of timelessness*, of Being as the eternal present, as the transcendence of all becoming.¹

(i) *Momentary awareness of time.* Normal experience of the momentary passage of time varies understandably. Interesting and changing occupation makes us aware how rapidly time passes; idleness, lack of events and waiting, all make us feel how slowly the time goes and generally bring about a state of boredom, though not always. Mental patients do nothing for years on end without suffering from boredom. Exhausted and tired people can have the feeling of vacuity without boredom. These are all understandable variations, but there is an abnormal experience of the time-lapse found in seizures, psychoses and poisoning. The manner of the experience is altogether different and rooted in the vital events themselves:

(aa) *Time hurrying or slowed.* Klien² reports a boy who had attacks during which he would be frightened and run to his mother, saying:

'It's starting again, mother, what is it? Everything starts going so quickly again. Am I talking faster or are you?' He also thought the people on the street were walking faster.

In mescalin intoxication, Serko had the feeling that the immediate future was rushing on at chaotic speed:

'At first you have the peculiar feeling that you have lost control over time, as if it were slipping through your fingers; as if you were no longer capable of holding on

¹ Re abnormal experience of time see E. Straus, *Mschr. Psychiatr.*, vol. 68, p. 240. v. Gebstallt, *Nervenarzt*, vol. 1, p. 275. Also Roggenbau, *Die Störungen des Werdens u. Zeiterlebens* (Stuttgart, 1939). Fr. Fischer, *Z. Neur.*, vol. 121, p. 544; vol. 132, p. 241. G. Kloos, *Nervenarzt.*, vol. 11 (1938), p. 225 (*Störungen des Zeiterlebens in der endogen Depression*).

² Klien, *Z. Psychopath.*, vol. 3 (1917), p. 307.

to the present in order to live it out; you try to cling on to it but it escapes you and streams away . . .'

(bb) *Lost awareness of time.* As long as there is some awareness the feeling of time cannot be lost altogether but it can be reduced to a minimum. Patients, for instance, if severely exhausted, may say that they do not feel time any more at all. If activity is lost, there is also a corresponding loss in the awareness of the passage of time:

In mescalin intoxication, when the chaotically racing moments of time are streaming away, when the intoxication is at its height, time vanishes altogether. Serko: 'Particularly when there is a wealth of hallucination, you have the feeling of swimming in a boundless stream of time, somewhere, somehow . . . you have to pull yourself up repeatedly and make a real effort to appreciate the time situation actively so as to escape from the chaotic flight of time, if only for a moment; only for a moment, however, since as soon as you relax, boundless time returns.' As Beringer commented, it is life 'for the moment only, no past or future'.

(cc) *Loss of reality in the time-experience.* Consciousness of time is primarily linked with feelings of immediacy, of something being present or absent, feelings of reality. With the disappearance of a time-sense, the present disappears and with it reality. Reality is felt purely as a temporal immediacy; or, to put it another way, we feel as if nothing were timelessly there. Some psychasthenic or depressive patients describe this experience as follows: 'It feels as if it is always the same moment, it is like a timeless void.' They do not live their time any more, although in some way they know it.

A depressed patient feels as if time did not want to go on. This experience has not got the elementary character of the previous cases but there is something of an elementary character in this particular feeling, which symbolises self and time locked together . . . 'The hands of the clock move blankly, the clock ticks emptily . . . they are the lost hours of the years when I could not work' . . . Time goes backwards. The patient sees that the hands move forward but, for her, actual time is not going on with them but is standing still. 'The world is all of a piece and cannot go forward or backward; this is my great anxiety. I have lost time, the hands of the clock are so light . . .' On looking back, on recovery, the patient said: 'It seems to me that January and February passed just like a blank, all of a piece, at a standstill; I couldn't believe time really went on. As I kept working and working and nothing came of it, I had the feeling that everything was going backwards and I would never be done' (Kloos).

(dd) *The experience of time standing still.* A schizophrenic patient reported:

'I was suddenly caught up in a peculiar state; my arms and legs seemed to swell. A frightful pain shot through my head and time stood still. At the same time it was forced on me in an almost superhuman way how vitally important this moment was. Then time resumed its previous course, but the time which stood still stayed there like a gate'. (Fr. Fischer).

2. *Awareness of the time-span of the immediate past.* After a hard day and

many experiences we are understandably conscious of having had a long day, while an empty, slowly passing day is felt in retrospect to have been short. The livelier our memory of past events, the shorter seems the time-span that has passed, but the more experiences intervene, the longer does this time-span appear. There is, however, a mode of recalling the time-span which is of a different order and has something new and primary at its root:

Following an acute and florid psychosis a paranoid patient reported: 'My own memory gives me the impression that this time-span, 3-4 months by ordinary reckoning, was an immensely long time for me, as if every night had the length of centuries.'

Serko experienced an enormous subjective over-estimation of the length of time during mescalin intoxication. 'Time seemed stretched out', 'Recent experiences seemed far away'.

Frequent reports are made of an overwhelming richness of experience packed into seconds, for instance during a crash or in a dream. A French investigator of dreams (quoting from Winterstein) reported as follows: 'He dreamed of the terror régime of the Revolution, of scenes of death, tribunals, condemnation, of a journey to the guillotine, of the guillotine itself; he felt his head severed from his trunk and then he woke up; the head of the bed had collapsed and hit him on the back of the neck.' 'The end of the dream was its source.'

The authenticity of similar reports cannot be doubted. But in one second of time we do not experience as a sequence what has become a series in our memory. There has to be some concerted act of intense momentary representation which gathers up together all those things that our memory has interpreted as a sequence in time.

Psychasthenic and schizophrenic patients report ecstatic experiences lasting in fact a few minutes as if they might have lasted for ever.

With the epileptic aura, a second in time is experienced as timeless or as eternity itself (Dostoievski).

3. Awareness of time-present in relation to time-past and future. A number of remarkable but very varied phenomena have been described:

(aa) *Déjà vu and jamais vu.* Patients are seized at moments by an awareness that everything they see has been seen before in exactly the same way. The moment has been clearly experienced before, down to the last detail. Objects, persons, postures and movements, words, even the tone of the voice, are all surprisingly the same, everything has been like this before. Conversely the 'jamais vu' experience consists in the awareness that everything is seen for the very first time, everything strikes as unfamiliar, fresh and incomprehensible.

(bb) *Discontinuity of time.* Individual schizophrenic patients report, for example, that one has fallen from heaven between one moment and the next: that time appears void, that awareness of the flow of time is lost (Minkowski); a patient of Bouman's (Korsakow) suddenly felt (during transfer from one institution to another) as if he were abruptly transplanted from one place to another; the two moments stood side by side; no time-span intervened.

(cc) Months and years fly by with excessive speed. 'The world races on and

when it is autumn, spring is here already. It never used to be as fast as that in the old days' (A schizophrenic woman—Fr. Fischer).

(dd) *The shrinking of the past.* Bouman's patient felt a past of twenty-nine years had lasted only four years at most and the smaller time-spans within this period were correspondingly shortened.

4. Awareness of the future. The future vanishes:

A depressed patient, suffering from 'terrible emptiness' and a feeling of 'having lost all feeling' reported—'I cannot see the future, just as if there were none. I think everything is going to stop now and tomorrow there will be nothing at all'. Patients know there is another day tomorrow but this awareness has changed from what it was like before. Even the next five minutes do not lie ahead as they used to do. Such patients have no decisions, no worries, no hopes for the future. They have also lost the feeling for past stretches of time. 'I know the exact number of years, but I have no real appreciation of how long it was' (Kloos).

This is not an elementary experience of time. Changes in the emotional atmosphere of the patient's perception and in his awareness of things also make themselves noticeable in the experience of time. What is lost is the feeling of immediate content. Things are there but the patient can only know them, not feel them, so the future disappears like everything else. The concept of time is there and the correct knowledge of time but not the actual time-experience.

5. *Schizophrenic experience of time standing still, flowing together, and stopping.* Schizophrenic patients report that sometimes during transient, brief attacks, they have remarkable, elementary yet somehow significant experiences, sensorily keen but of a supernatural strangeness. They report these experiences as some kind of transformation of their time-experience:

A schizophrenic described one attack thus: 'Yesterday I looked at the clock . . . I felt as if I was put back, as if something past was coming to me . . . I felt as if at 11.30 a.m. it was 11.0 a.m. again but not only the time went back but what had happened to me during it. Suddenly it was not just 11.0 o'clock but a time long past was there too . . . midway in time I came towards myself out of the past. It was terrible. I thought perhaps the clock was put back; the attendants had played a stupid trick . . . then I had a feeling of frightful expectation that I could be drawn into the past . . . the play with time was so uncanny . . . *an alien time* seemed to dawn. Everything blended with everything else and I said in a strained way to myself: I must hold on to everything . . . then lunch came and everything was as usual . . .' (Fr. Fischer).

A schizophrenic woman said: 'There is no more present, only a backward reference to the past; the future goes on shrinking—the past is so intrusive, it envelops me, it *pulls me back*. I am like a machine which stands in one place and works by itself. It is worked to breaking-point but it still stands . . . I am living much faster than before . . . It is the contact with old things. I feel this sustains me. I let myself be carried away, so that at least one can reach an end and be at peace . . . if I were to hang on to all this speed I would get swept away with it . . . time chases me and ravenously eats itself away and I am in the middle of it all' (Fr. Fischer).

Another schizophrenic woman described the painful admixture she suffered of

emptiness, non-existence, time standing still and the return of the past: 'Life is now a running conveyor-belt with nothing on it. It runs on but is still the same . . . I did not know death looked like this . . . I am now living in eternity . . . outside everything carries on . . . leaves move, others go through the ward but for me time does not pass . . . when they run around in the garden and the leaves fly about in the wind, *I wish I could run too so that time might again be on the move* but then I stay stuck . . . time stands still . . . one swings between past and future . . . it is a boring, endless time. It would be fine to start again from the beginning and *find myself swinging along with the proper time*, but I can't . . . *I get pulled back*, where to? . . . there where it comes from, where it has been before . . . it goes into the past—that is what is so elusive . . . time slips into the past . . . the walls which used to stand firm have all fallen down . . . do I know where I am, oh yes—but the elusive thing is there is no time and how can one get hold of it? Time is in collapse' (Fr. Fischer).

Another schizophrenic described his attack: 'One evening during a walk in a busy street, I had a sudden feeling of nausea . . . afterwards a small patch before my eyes, no bigger than a hand. The patch glimmered inwardly and there was a to and fro of dark threads . . . the web grew more pronounced . . . I felt drawn into it. It was really *an interplay of movements* which had replaced my own person. *Time had failed* and stood still—no, it was rather that time re-appeared just as it disappeared. *This new time* was infinitely manifold and intricate and could hardly be compared with what we ordinarily call time. Suddenly the idea shot through my head that time did not lie before or after me but in every direction. It came to me from looking at the play of colours . . . but the disturbance was soon forgotten'.

This patient also reported: Thinking stood still; everything stood still *as if there were no more time*. I seemed to myself as a timeless creature, clear and transparent, as if I could see right down into myself . . . at the same time I heard quiet music far away and saw dimly lit sculptures . . . it all seemed a never-ceasing flow of movement very different from my own state. These distant movements were, it seemed, a "folie" of my condition.'

Yet another experience of the same patient was as follows: 'I was *cut off from my own past*, as if it had never been like that, so full of shadows . . . as if life had started just now . . . then the past turned round . . . *everything got intermingled* but in no comprehensible way; everything shrank, fell together, packed up, like a wooden shack which has collapsed, or as if a well-perspectived painting became two-dimensional and everything flicked together' (Fr. Fischer).

(c) Movement

Perception of movement involves space and time simultaneously. Disturbances in the perception of movement are principally reported as disturbances of function following neurological lesions. So far as abnormal experiences go, our description of the time-experience has already covered movement, thus, there is discontinuity; movement is not perceived, but the object or person is now here, now there, without any time intervening. There is also the speeding up or slowing down of visible movements etc.

Perceptions of movement in an object have been noted even though this has made no actual change of position:

Under the influence of scopolamine: 'I suddenly saw how the pen—apparently

surrounded by a kind of fog—crawled towards me like a caterpillar with fine wavy movements. It seemed to get nearer. At the same time I realised that the distance between the end nearest me and the line of the cover on the desk never got any smaller' (Mannheim—quoted from C. Schneider), (*Z. Neur.*, vol. 131).

§ 3. AWARENESS OF THE BODY

Psychological preface. I am aware of my body as my existence. I also see it and touch it. The body is the only part of the world that is both felt from within and—so far as its surface goes—at the same time perceived. The body provides me with an object and I am also that body. There is a difference, it is true, between what I feel about myself as a body and how I perceive myself as an object, yet the two are inextricably interwoven. Bodily sensations whereby a certain object builds itself up for me and sensations which remain as a feeling of my bodily state are the same and indissoluble, though one can differentiate between them: *Sensations that give rise to feelings* blend into *an awareness of our physical state*. Awareness of our body's existence, normally an unnoticed, neutral background for consciousness—neither a disturbing nor an influential factor, may undergo a number of exceptional changes as a whole: states of sexual excitement, anxiety or pain may involve the body profoundly, absorbing the individual and compelling him to further effort or destroying him completely.

Our body becomes *an object* to us because we are aware of our own body, which follows our every movement not as a clear-cut, isolated object but as an intuition of our three-dimensional self. Head and Schilder¹ have clarified this phenomenon. According to Head the impressions relating to space—kinaesthetic, tactile, optical—build up organised models of ourselves which may be termed *body-schemata*. What we make of our bodily sensations and how we execute our movements are both maintained through the relationship these sensations and movements have with previous bodily impressions that have found their way unconsciously into the body-schema.

The awareness of our physical state and the three-dimensional body-schema combine as a whole to form what Wernicke called the *somato-psyche*. Awareness of the *physical state* has to be analysed physiologically according to the specific sense-perceptions which go to build it up. All the senses play some part in this, those of the eye and ear to the smallest degree, only reaching such a level if the external content is accompanied by intensive stimuli which give rise to a bodily sensation. Taste and smell play a larger part and the bodily sensations continuously so. These latter can be classified into three groups: those of the body-surface (thermic, haptic, hygric etc.); those belonging to movement and posture (kinaesthetic, vestibular); and those belonging to the organs (which intimate the condition of the inner organs). The physiological basis for these sensations lies in the histologically well-known nerve-endings. Whether this list exhausts all the sensations we receive may be questioned.

Awareness of the body has to be clarified *phenomenologically* by relating it to our experience of the body as a whole. *The close relationship of the body to awareness of self* is best exemplified in the experience of muscular activity and movement, rather

¹ Paul Schilder, *Das Körperschema. Ein Beitrag zur Lehre vom Bewusstsein des eigenen Körpers* (Berlin, 1923).

less well in the sensations contributed by the heart and circulatory system and least of all in the vegetative changes. Specific feelings of one's bodily existence arise from the following: movement and posture, the style, ease and grace of our motor-activity or its heavy and clumsy nature, the impression we think our physical presence makes on others, our general weakness or strength and any alteration in our normal feeling-state. All the above are factors of our *vital self*. There are wide variations in the extent to which we feel *our oneness* as well as in the amount of *distance* we establish between ourselves and our body. This may reach a maximal distance in medical self-observation when we see our pains only as symptoms and consider the body as some alien object, consisting of anatomical findings, or as a kind of garment, something in the last resort quite different from ourselves and in no way identical, though our unity with it in fact is inseparable.

Awareness of our body need not be confined to the actual *boundaries of our body*. We may still feel at the end of the stick which guides us in the dark. Our proper space, the space of our anatomical body, may be extended by the feeling of something at one with ourselves. So the car I drive, if I am a good driver, becomes part of my body-schema or image and is like an extended body which I invest fully with my own senses. External space begins where my senses and I come up against objects that emerge from it.

My bodily awareness is able to detach itself from objective, organised space, that is from the realities of space, in two directions: either negatively, in giddiness (as loss of vital feeling and certainty) or positively, in dancing (as an access of vital feeling and sense of freedom).¹

The experience of one's body as one's own is phenomenologically closely linked with the experience of feeling, drive and awareness of self.

We should distinguish between phenomenological description of *actual bodily experiences* and any discussion of the *significance* for the individual of his own body, in terms of the effective meaningful connections, where there are hypochondriacal, narcissistic or symbol-forming tendencies influencing the self-awareness.

(a) Amputated limbs

It is remarkable how amputated limbs may be sensed as a result of habituation to the body-schema, which remains a reality after the amputation has taken place. The body-schema is not a mere free-floating concept of one's own body but a mode of apprehending oneself that has been deeply imprinted throughout all one's life, a mode in which at any one time all the body sensations are unified into a whole. Just as we think we can see within the normal blind spot in the visual field, so we still sense the lost limb as real and fill out the gap that has been rent in the body-schema. These sensations must be localised in the cerebral cortex. Head saw such a phantom limb disappear following a focal cortical lesion.

Riese² describes a healthy leg-amputee thus: in all his body movements the lost leg was still sensed. When he got up, the knee extended; it bent again when he sat

¹ E. Straus, 'Die Formen des Räumlichen', *Nervenarzt.*, vol. 3 (1930).

² Riese, 'Neue Beobachtungen am Phantomglied', *Dtsch. Z. Nervenkd.* (1932), p. 127. D. Katz, *Zur Psychologie der Amputierten* (Leipzig, 1921).

down; he could stretch the leg luxuriously along with all the other limbs; when asked whether he really believed all this, the patient knew the leg was no longer there, but it somehow still kept its own peculiar reality for him.

(b) *Neurological disturbances*

With localised cerebral lesions orientation in relation to one's own body is disturbed in a number of ways. For instance (taking psychological performance) the ability to recognise an irritable place on the body-surface or the position of a limb is partially or wholly absent. Patients can no longer touch nose, mouth or eyes or the orientation for the left and right side of the body may be disturbed. Patients can no longer say on which side of their body the stimulus is applied etc. In these states we do not know how the bodily awareness itself is altered phenomenologically.¹

Giddiness may be either (1) vertigo (2) a sensation of falling (3) general unsystematised dizziness, experienced as an uncertain awareness, without rotation of objects or any sensation of falling. Here we are dealing with three heterogeneous phenomena. They have in common a total uncertainty as to posture and position.

This uncertainty normally occurs at the critical point of transition from one state to another, whether due to one's physical surroundings or some psychological reason. It arises neurologically from somatic causes, particularly in the vestibular apparatus. It may arise neurotically in connection with the upset of psychic conflict. Giddiness is the experience of an existence which as a whole has lost its ground; as such it is a symbol for everything that is on the verge but not yet brought within the orderly clarity of immediate being. This is the reason why philosophers could adopt the expression 'giddiness' for the original experience from which their basic insights into Being as a whole derived.

(c) *Bodily sensations, perception of bodily shape, hallucinations of the bodily senses, etc.*

These may be classified and grouped as follows:

(1) *Hallucinations of the bodily senses.* We may distinguish between *thermic* hallucinations (the floor is burning hot, unbearable feelings of heat) and *haptic* ones (cold wind blows on the patient, insects creep under the skin, the patient is being stung all over). Within the latter category, *hygric* hallucinations have been further differentiated (perceptions of wetness and fluids). The hallucinations of *muscle sense* (Cramer)² are interesting. The floor rises and sinks, the bed is raised, patients sink, fly, feel they are light as a feather, an object in the hands feels very light or heavy, patients feel they are making movements, although motionless themselves; they think they are speaking, when actually they are silent (hallucinations of the speech apparatus). 'Voices'

¹ Cf. Schilder, *Das Körperschema. Ein Beitrag zur Lehre vom Bewusstsein des eigenen Körpers* (Berlin, 1923).

² Cramer, *Die Halluzinationen im Muskelsinn* (Freiburg, 1889).

can be in part conceived as hallucinations of this sort but some of them must be interpreted as hallucinations of the vestibular apparatus.

2. *Vital sensations.* These give rise to feelings which make us aware of our vital bodily state. Reports from patients about their bodily sensations are inexhaustible. They feel turned into stone, dried up, shrunk, tired, empty, hollow or blocked. Sensations such as these cannot but alter the feeling of bodily existence. The patient feels he is a soap-bubble, or that his limbs are made of glass or describes himself in one or other of the countless ways in which patients try to depict their feelings. We have a host of reports on these puzzling sensations, particularly from schizophrenic patients. It is difficult to separate the actual sense experience from the delusion-like interpretation and in the latter case to clarify the underlying sensory events.

3. *Passivity experiences in the form of bodily sensation.* Bodily sensations may be accompanied by the vivid experience that they have been contrived from outside. In such cases the patients are not merely interpreting various abnormal organic sensations in one way or another but have an immediate perception of this 'coming from outside'. We observe that patients will correctly perceive pain and other sensations such as may be caused by physical illness (angina, rheumatoid arthritis), but they will experience these specific sensations as something externally contrived. Schizophrenic patients know the experience of being made to be sexually excited, of being raped and of being made to have sexual intercourse without any person being present. They may feel that wires are pulling at their hair and their toes.

4. *Experience of bodily distortion.* The body enlarges, gets stronger, becomes coarse and heavy and along with this the pillows and bed grow bigger and bigger.¹ Head and limbs get thick and swollen, parts are twisted, limbs become alternatively larger or smaller.

Serko describes himself during mescalin intoxication (the picture presents us with a vivid analogy to some psychotic experiences): 'I feel my body is exceptionally three-dimensional and highly detailed . . . I suddenly have a sensation that my foot has left my leg; I feel it lying apart from my body below the truncated leg. (N.B.—it is not just the sensation that the foot is missing but rather that there are two positive sensations—that of the foot and that of the truncated leg with the hallucinatory sensation of a lateral shift in position) . . . then I have the sensation that my head is being turned right round, 180°, that my abdomen is becoming a soft fluid mass, my face growing to gigantic dimensions, my lips swelling, my arms becoming peculiarly wooden and serrated in outline, like the Nurnberg puppets, or growing long and ape-like, while the lower jaw hangs down heavily. Among many other things I have the hallucination that my head has become separated from my body and is floating free in the air half a mile behind me. I really feel it floating and yet still belonging to me. To control myself I say a few words aloud and even the voice seems to come from a certain distance behind me. More peculiar still are the transformations; for instance,

¹ R. Klein, 'Über Halluzinationen der Körpervergrösserung', *Msch. Psychiatr.*, vol. 67 (1928), p. 78 (cases of head-injury and encephalitis).

my feet become key-shaped and turn into spirals, while my lower jaw twists into the curls of a section-mark; my chest seems to melt away . . .'

In states of altered consciousness, the integration of bodily awareness with the space in which the body senses its objects may take on grotesque forms. A patient feels 'he is the water-mark on the paper which is being written upon'. Serko again describes his mescaline intoxication:

'Haptic hallucinations sometimes fuse with visual ones in an odd way difficult to describe. In a vaguely illuminated visual field there form certain strips of light with a lively movement, turning into spirals which move to and fro in the visual field while rapidly rotating. There is at the same time a transformation in the haptic field whereby my leg assumes a spiral form too. The light spirals and the haptic spirals fuse together in consciousness so that the same spiral that is visually hallucinated is also perceived haptically . . . one feels a complete bodily and visual unity . . .'

Under hashish intoxication the proband states: 'my body feels like a husk, a coffin in which the soul is suspended, as something delicate, transparent, like spun-glass and floating free within the confines of the shell. Arms and legs can see, all the senses are one; the shell is heavy and immobile; but the kernel thinks, feels, and experiences.' All this was not just imagined but actually felt to be real. The proband was afraid of being damaged by others (Fraenkel and Joel).

A schizophrenic patient said: 'I saw my new "self" like a new-born baby; power came from it but it could not fully pervade my body; it was too big and I wanted them to take a leg or an arm off so that it could be filled completely. Things got better later and at last I felt my "self" sticking out of my body into space.' (Schwab).

The phenomena recounted above show a good deal of variety but it is difficult to sort them out any more clearly than this. For the most part these abnormal experiences of the body-schema have no analogy with normal experience of the body. Vital sensations, experience of symbolic meanings, neurological disturbances, all merge into each other. Awareness of self permits each to represent itself in the other.

(d) *The 'Double' or Heautoscopy*

Heautoscopy is the term used for the phenomenon when someone vividly perceives his own body as a double in the outer world, whether as an actual perception or as an imaginary form, as a delusion or as a vivid physical awareness. There have been patients who will actually speak with their doubles. The phenomenon is not at all uniform.¹

1. Goethe (in *Drang und Verwirrung*) had seen Frederika for the last time and was riding to Drusenheim when the following happened: 'In my mind's eye, not with my physical eyes, I saw myself distinctly on the same road riding towards myself. I was dressed as I had never been before in grey and gold. Immediately I shook myself out of this dream, the figure went . . . 'The strange phantom gave me a certain peace of mind at that moment of parting.' What is noteworthy in the episode is the dreamy

¹ Menninger-Lerenthal, 'Eine Halluzination Goethes', *Z. Neur.*, vol. 140 (1932), p. 486.

state, the mind's eye and the satisfaction derived from the meaning of the apparition—he was riding in the opposite direction back to Sesenheim—he will return.

2. A schizophrenic patient of Menninger-Lerenthal complained that 'she sees herself from behind, naked; she has the feeling that she is not dressed and sees herself naked and feels cold too; it is her mind's eye that sees'.

3. A schizophrenic patient (Staudenmaier) said: 'During the night while I walked up and down in the garden I imagined as vividly as possible that there were three other people present besides me. Gradually the corresponding visual hallucination took shape. There appeared before me three identically clothed Staudenmaiers who walked along in step with me; they stopped when I did and stretched out their hands when I stretched out mine.'

4. A patient of Poetzl with a hemiplegia and diminished self-perception felt the hemiplegic side did not belong to him. While looking at his paralysed left hand he explained it by saying that it probably belonged to the patient in the next bed; during nocturnal delirium he affirmed that another person lay on his left side in the same bed and wanted to push him out.

We can see that we are dealing with phenomena that are really not the same although they are superficially similar. They may occur in organic brain lesions, in deliria, in schizophrenia and in dream-like states, never at least without a mild alteration in consciousness; day-dreaming, intoxication, dream-sleep or delirium. The similarity consists in the fact that the body-schema gains an actuality of its own out in external space.

§ 4. DELUSION AND AWARENESS OF REALITY

Since time immemorial delusion has been taken as the basic characteristic of madness. To be mad was to be deluded and indeed what constitutes a delusion is one of the basic problems of psychopathology. To say simply that a delusion is a mistaken idea which is firmly held by the patient and which cannot be corrected gives only a superficial and incorrect answer to the problem. Definition will not dispose of the matter. Delusion is a primary phenomenon and the first thing we have to do is to get it into a proper focus. The experience within which delusion takes place is that of experiencing and thinking that something is real.

Awareness of reality—logical and psychological comment. Things that are for the moment most self-evident are also the most enigmatic. Thus it is with Time, the Self and Reality. If we have to say what we think reality is we find ourselves answering something like this: it means *things in themselves* as compared with how they appear to us; it means *what is objective* in the sense of something generally valid as opposed to subjective error; it means *underlying essence* as distinct from masking effects. Or we may call reality *that which is in time and space*, if we want to differentiate it from the theoretically valid objectivity of ideal Being—that for instance of mathematics.

These are the answers of our reason and through them we define to ourselves a concept of reality. But we need something more than this purely logical concept of reality; there is also *the reality we experience*. Conceptual reality carries conviction

only if a kind of presence is experienced, provided by reality itself. As Kant says, 100 imaginary dollars cannot be distinguished from a 100 real dollars so far as the actual concept goes; the difference is only noted in practice.

What the *experience of reality* is in itself can hardly be deduced nor can we compare it as a phenomenon with other related phenomena. We have to regard it as a primary phenomenon which can be conveyed only indirectly. Our attention gets drawn to it because it can be disturbed pathologically and so we appreciate that it exists. If we want to describe it as a phenomenon, we shall have to take the following points into account:

1. What is real is what we *concretely perceive*. In contrast with our imaginings, perception has a quality not determined by the particular sense-organ, e.g. the eye or ear, but rooted in the actual mode of what is sensed, which is something absolutely primary and constitutes sensory reality (normally connected with external stimuli). We can talk about this primary event, name and rename it, but we cannot reduce it any further.¹

2. Reality lies in the simple *awareness of Being*. Awareness of reality may fail us, even when we concretely perceive. For instance it is lost in 'derealisation' and 'de-personalisation'. Awareness of reality must therefore be a primary experience of existence and as such Janet called it a 'fonction de réel'. Descartes' 'cogito ergo sum' holds even for the person in a state of derealisation who says paradoxically: 'I am not but have to go on being nothing for ever'. Descartes' phrase therefore cannot convince us by logic alone; in addition it requires the primary awareness of Being and the awareness of one's own existence in particular. 'I exist and thereby the things in the world outside me are experienced as equally existent.'

3. What is real is *what resists us*. Whatever may inhibit our bodily movements or prevent the immediate realisation of our aims and wishes is a resistance. The achievement of a goal against resistance or defeat thereby brings with it an experience of reality; all experience of reality, therefore, has a root in the practice of living. But the reality itself which we meet in practice is always an *interpretations*, a meaning, the meaning of things, events or situations. When I grasp the meaning, I grasp reality. The resistance we meet in the world gives us the wide field of the real which extends from the concreteness of tangible objects to perceived meanings in things, behaviour and human reaction. This brings to us awareness of the reality with which in practice we have to reckon and deal, to which we have to accommodate every moment, which fills us with expectation and which we believe in as something which is. Awareness of this reality pervades us all more or less clearly as a knowledge of the reality with which we are individually most concerned. This individual reality is embedded in a more general reality that has been structured and amplified for us through the traditional culture in which we have grown up and been educated. What is real for us in all this has many grades of certainty and usually we are not completely clear about it. We only need to test how much we would risk in our ordinary judgments of what is real or not for us to see the measure of this certainty.

We have to distinguish between *immediate certainty of reality* and *reality-judgment*. A vivid false perception may be recognised as a deception and judged as such

¹ Gerhard Kloos, *Das Realitätsbewusstsein in der Wahrnehmung und Trugwahrnehmung* (Leipzig, 1938). This is an excellent survey of all the efforts made at definition hitherto and makes its own fresh contribution, but an unsuccessful one in my opinion, though it helps us to appreciate the primary nature of the phenomenon.

and yet continue to be what it is, as happens with simple after-images and sometimes in the case of hallucinated mental patients. Even when the deception is recognised the patient may still act unawares as if the content were real. For instance, an amputee has a phantom limb, steps on it and falls; or there was the case of the famous botanist Naegeli who wanted to put a glass of water on a hallucinated table. Reality-judgment is the result of a thoughtful digestion of direct experiences. These are tested out against each other; only that which stands the test and is confirmed in this way is accepted as real; and hence only that is real which is commonly identifiable and accessible to others and not merely a private and subjective matter. A judgment of reality can itself be transformed into a new direct experience. We live continuously with a knowledge of reality acquired in this way but not always made fully explicit in the form of a judgment. The characteristics of this reality as evinced by our judgments (implicit or explicit) are: that reality is not a single experience '*per se*' but only as it is there *in the context* of the experience and ultimately in the experience as a whole; reality is *relative* in so far as it is recognised only up to the point at which it has disclosed itself; it can alter; reality *discloses* itself; it rests on insight and how certain this is; it does not depend on concreteness nor on an immediate experience of reality as such; the latter are only supporting features for the whole, they are indispensable but have constantly to be checked. Hence, the reality of our reality-judgments is a flexible reality—a movement of our reason.

If now we want to characterise the field of *delusion*, we shall have to make some distinctions. There is first *diminished awareness of Being and of one's own existence*, which were discussed under derealisation of perception and which we shall meet again among the disturbances of self-awareness. Then there is *hallucinatory vividness*, which was discussed under false perceptions. Delusion proper, however, implies *a transformation in our total awareness of reality* (including that secondary awareness which appears in the form of reality-judgments). This builds itself up on judgmental experiences as well as on the world of practical activity, resistance and meanings, in which, however, hallucinatory vividness plays only an accidental and relatively minor part beside the transformation of basic experience which we have such great difficulty in grasping.¹

(a) *The concept of delusion*

Delusion manifests itself *in judgments*; delusion can only arise in the process of thinking and judging. To this extent pathologically falsified judgments are termed delusions. The content of such judgments may be rudimentary but take a no less effective form as mere awareness. This is usually spoken of as a 'feeling' that is also an obscure certainty.

The term delusion is *vaguely* applied to all false judgments that share the following external characteristics to a marked, though undefined, degree: (1) they are held with an *extraordinary conviction*, with an incomparable, *subjective certainty*; (2) there is an *imperviousness* to other experiences and to compelling

¹ Gerhard Schmidt, 'Der Wahn im deutschsprachigen Schrifttum der letzten 25 Jahre' (1914-29), *Zbl. Neur.*, vol. 97, p. 115.

counter-argument; (3) their content is *impossible*. If we want to get behind these mere external characteristics into the psychological nature of delusion, we must distinguish the original *experience* from the *judgment* based on it, i.e. the delusional contents as presented data from the fixed judgment which is then merely reproduced, disputed, dissimulated as occasion demands. We can then distinguish two large groups of delusion according to their *origin*: one group *emerges understandably* from preceding affects, from shattering, mortifying, guilt-provoking or other such experiences, from false-perception or from the experience of derealisation in states of altered consciousness etc. The other group is for us *psychologically irreducible*; phenomenologically it is something final. We give the term '*delusion-like ideas*' to the first group; the latter we term '*delusions proper*'. In their case we must now try and get closer to the facts of the delusional experience itself, even though a clear presentation is hardly possible with so alien a happening.

With every hallucination proper, a need is experienced to regard the hallucinated object as real. The need remains even when the false judgment of reality has been corrected in the light of the total context of perception and subsequent knowledge. But should the patient, although such a correction is feasible, retain his false judgment of reality in spite of the known objections, in spite of reflection and with absolute certainty—overcoming indeed any initial doubts he may have had—then we are dealing with delusion proper: such a belief is no longer understandable in terms of hallucination alone. With delusion-like ideas that originate from hallucinations we only find a tendency towards false judgment of reality (or a quite transient certainty) but with delusion proper all doubt has ceased. Some other psychic factors than mere hallucinations must be at work and these we will now try to explore.

The content of the delusions which the patient may disclose to us in the course of an interview is always a secondary product. We are faced with a customary formulation of a judgment, which simply differs from other judgments perhaps in having a different content. When investigating, therefore, we are always confronted with the question—what is the primary experience traceable to the illness and what in the formulation of the judgment is secondary and understandable in terms of that experience? There are *three existing points of view*: the *first* denies that there is any experience at all of delusion proper; all delusions are understandable in themselves and secondary. The *second* believes that lack of critical capacity due to poor intelligence allows delusion to emerge from any kind of experience; the *third* requires the singular phenomenon of delusional experience, which it regards as the essential pathological element. The first point of view is represented by Westphal.¹ According to him the first step is an awareness of change in one's personality, much as one might feel, for instance, if one had put on a uniform for the first time and felt conspicuous. So paranoics think that the change in themselves, which they alone appreciate, is also noticed by their environment. From this delusion that one has become noticeable arises the delusion that one is watched and from that the delusion

¹ Westphal, *Allg. Z. Psychiatr.*, vol. 34, pp. 252 ff.

that one is being persecuted. It is true such understandable connections do play a part, particularly in paranoid developments of personality, and in psychoses so far as content is concerned. We can thus understand over-valued ideas and secondary delusions in general, but we are still without an explanation of the essential nature of delusion. The same may be said for the attempt to derive delusion from preceding affects, the affect of distrust, for instance. There is no clear delineation here of the specific phenomenon, the actual delusional experience; we are only offered an understandable context for the emergence of certain stubborn misconceptions. If these misconceptions turn into delusion, something new has to arrive, which as an experience can also be grasped phenomenologically. The *second* point of view holds that the cause—or perhaps more modestly the precondition—for delusion lies in *weakness of intelligence*. We always tend to look for the logical errors and blunders in the paranoid patient's thought in order to prove some such weakness. Sandberg,¹ however, pointed out quite rightly that paranoics have by no means a poorer intelligence quotient than healthy persons and in any case the mentally ill person surely has as much right to be illogical as the healthy one. It is wrong to consider the failure in reasoning a morbid symptom in one case but normal in the other. Actually we find every degree of mental defect without delusions of any kind and the most fantastic and incredible delusions in the case of people of superior intelligence. The critical faculty is not obliterated but *put into the service of the delusion*. The patient thinks, tests arguments and counter-arguments in the same way as if he were well. A highly critical attitude is as rare in paranoics as in healthy people, but if it does occur it naturally colours the formal expression of the delusional content. For any true grasp of delusion, it is most important to free ourselves from this prejudice that there has to be some poverty of intelligence at the root of it. Any dependence on the latter is purely formal. We have to assume some *specific alteration in psychic function*, not a failure of intelligence, if after some delusional experience an individual, who is fully conscious and—as occasionally happens—quite free from any other morbid symptom, maintains a delusion that everyone else recognises as such, and if he simply declares: 'Well, that is how it is; I have no doubts about it, I know it is so'. With delusion proper there is material falsification while formal thinking remains intact. Where there is formal thought disturbance, then misapprehensions, confused association and (in acute conditions) the wildest notions may follow, which as such do not have the character of delusion proper. The *third* point of view, that there is some phenomenologically peculiar delusional experience, sets out to find what this basic primary delusional experience may be.

Methodologically delusion can be viewed from a number of standpoints: *phenomenologically* it is an experience; from the point of view of *psychological performance* it is a disturbance of thinking; as a psychological product, it is a *mental creation*: from the

¹ Sandberg, *Allg. Z. Psychiatr.*, vol. 52.

point of view of *meaningful connections*, it is motivated, dynamic content; and in the framework of *nosological-biographical* study we may ask whether we are to comprehend it as a break in the normal life-curve or simply as a part of the continuum of personality development.

(b) Primary delusions

If we try to get some closer understanding of these primary experiences of delusion, we soon find we cannot really appreciate these quite alien modes of experience. They remain largely incomprehensible, unreal and beyond our understanding. Yet some attempts have been made.¹ We find that there arise in the patient certain primary sensations, vital feelings, moods, awarenesses: 'Something is going on; do tell me what on earth is going on', as one patient of Sandberg said to her husband. When he asked what she thought was going on, the patient said, 'How do I know, but I'm certain *something is going on*.' Patients feel uncanny and that there is something suspicious afoot. Everything gets a *new meaning*. The environment is somehow different—not to a gross degree—perception is unaltered in itself but there is some change which envelops everything with a subtle, pervasive and strangely uncertain light. A living-room which formerly was felt as neutral or friendly now becomes dominated by some indefinable atmosphere. Something seems in the air which the patient cannot account for, a distrustful, uncomfortable, uncanny tension invades him (Sandberg). The use of the word 'atmosphere' might suggest psychasthenic moods and feelings perhaps and be a source of confusion; but with this *delusional atmosphere* we always find an 'objective something' there, even though quite vague, a something which lays the seed of objective validity and meaning. This general delusional atmosphere with all its vagueness of content must be unbearable. Patients obviously suffer terribly under it and to reach some definite idea at last is like being relieved from some enormous burden. Patients feel 'as if they have lost grip on things, they feel gross uncertainty which drives them instinctively to look for some fixed point to which they can cling. The achievement of this brings strength and comfort, and it is brought about only by forming an idea, as happens with healthy people in analogous circumstances. Whenever we find ourselves depressed, fearful or at a loss, the sudden clear consciousness of something, whether false or true, immediately has a soothing effect. As judgment gains in clarity, the feelings loosed by the situation will (*ceteris paribus*) dwindle in their force. Conversely no dread is worse than that of danger unknown' (Hagen). Experiences such as these give rise to convictions of persecution, of having committed crime, of being accused or, by contrast, of some golden age, transfiguration, sanctification, etc.

It is doubtful whether the foregoing analysis will hold in all cases. Content sometimes seems immediately present, vividly clear. In the former instances,

¹ Hagen, *Fixe Ideen in: Studien auf dem Gebiete der ärztlichen Seelenkunde* (Erlangen, 1870). Sandberg, *Allg. Z. Psychiatr.*, vol. 52.

however, it is certainly possible to wonder whether the patients have found any content adequate for their actual experience. We will try therefore to explore the original experience further, with its feelings and sensations rather than the content itself, though it is true our exploration can only be a limited one. The content in these cases is perhaps accidental; it is certainly not meant literally and is quite differently experienced from similar content in the case of a person whom we can fully understand.

Let us now try to imagine what the psychological significance is of this delusional experience of reality in which the environment offers a *world of new meanings*. All thinking is a thinking about meanings. If the meaning is perceived directly with the senses, if it is directly present in imagination and memory, the meaning has the character of reality. Perceptions are never mechanical responses to sense-stimuli; there is always at the same time a perception of meaning. A house is there for people to inhabit; people in the streets are following their own pursuits. If I see a knife, I see a tool for cutting. If I look at an unfamiliar tool from another culture, I may not see its precise meaning but I can appreciate it as a meaningfully shaped object. We may not be explicitly conscious of the interpretations we make when we perceive but nevertheless they are always present. Now, the *experiences of primary delusion are analogous to this seeing of meaning*, but the awareness of meaning undergoes a radical transformation. There is an immediate, intrusive knowledge of the meaning and it is this which is itself the delusional experience. If we distinguish the different sense-data in which meaning of this sort can be experienced, we can speak of delusional perception, delusional ideas, delusional memories, delusional awarenesses etc. In fact there is no kind of experience with a known object which we could not link with the word 'delusion' provided that at the level of meaning, awareness of meaning has become this experience of primary delusion (Kurt Schneider, G. Schmidt).¹

We will now look more closely at delusional perceptions, delusional ideas, and delusional awarenesses:

(aa) *Delusional perceptions*. These may range from an experience of some vague meaning to clear, delusional observation and express delusions of reference.

Suddenly things seem to mean something quite different. The patient sees people in uniform in the street; they are Spanish soldiers. There are other uniforms; they are Turkish soldiers. Soldiers of all kinds are being concentrated here. There is a world war (this was before 1914). Then a man in a brown jacket is seen a few steps away. He is the dead Archduke who has resurrected. Two people in raincoats are Schiller and Goethe. There are scaffoldings up on some houses; the whole town is going to be demolished. Another patient sees a man in the street; she knows at once he is an old lover of hers; he looks quite different it is true; he has disguised himself with a

¹ Kurt Schneider, 'Eine Schwierigkeit im Wahnproblem', *Nervenarzt.*, vol. 11 (1938), p. 462. He recognises only delusional perception as a two-stage phenomenon and specifically distinguishes this from other sources of delusion, the 'delusional notions'.

wig and there are other changes. It is all a bit queer. A male patient says of such experiences—‘everything is so dead certain that no amount of seeing to the contrary will make it doubtful’.

These are not considered interpretations but direct experiences of meaning while perception itself remains normal and unchanged. In other cases, particularly at the beginning of process disorders, no clear, definite meaning accompanies the perceptions. Objects, persons and events are simply eerie, horrifying, peculiar, or they seem remarkable, mystifying, transcendental. Objects and events signify something but nothing definite. *Delusional significance* of this sort appears in the following examples:

A patient noticed the waiter in the coffee-house; he skipped past him so quickly and uncannily. He noticed odd behaviour in an acquaintance which made him feel strange; everything in the street was so different, something was bound to be happening. A passer-by gave such a penetrating glance, he could be a detective. Then there was a dog who seemed hypnotised, a kind of mechanical dog made of rubber. There were such a lot of people walking about, something must surely be starting up against the patient. All the umbrellas were rattling as if some apparatus was hidden inside them.

In other cases patients have noticed transfigured faces, unusual beauty of landscape, brilliant golden hair, overpowering glory of the sunlight. Something must be going on; the world is changing, a new era is starting. Lights are bewitched and will not burn; something is behind it. A child is like a monkey; people are mixed up, they are imposters all, they all look unnatural. The house-signs are crooked, the streets look suspicious; everything happens so quickly. The dog scratches oddly at the door. ‘I noticed particularly’ is the constant remark these patients make, though they cannot say why they take such particular note of things nor what it is they suspect. First they want to get it clear to themselves.

The patients arrive at defining the meaning more clearly when there are *delusions of reference*. Here the objects and events perceived are experienced as having some obvious relation to the patient himself:

Gestures, ambiguous words provide ‘tacit intimations’. All sorts of things are being conveyed to the patient. People imply quite different things in such harmless remarks as ‘the carnations are lovely’ or ‘the blouse fits all right’ and understand these meanings very well among themselves. People look at the patient as if they had something special to say to him.—‘It was as if everything was being done to spite me; everything that happened in Mannheim happened in order to take it out of me.’ People in the street are obviously discussing the patient. Odd words picked up in passing refer to him. In the papers, books, everywhere there are things which are specially meant for the patient, concern his own personal life and carry warnings or insults. Patients resist any attempt to explain these things as coincidence. These ‘devilish incidents’ are most certainly not coincidences. Collisions in the street are obviously intentional. The fact that the soap is now on the table and was not there before is obviously an insult.

The following is an account extracted from the report of a patient who

went on working, while finding throughout the day all sorts of imaginary connections among otherwise quite real perceptions:

'I was hardly out of the house when somebody prowled round me, stared at me and tried to put a cyclist in the way. A few steps on, a schoolgirl smiled at me encouragingly.' He then arrived at his office and noticed leg-pulling and ragging by his colleagues . . . 'at 12 o'clock there were further insults, the time when the girls came from school; I tried hard to confine myself to just looking at them; I simply wanted to see a bevy of girls, not to make any gesture . . . but the lads wanted to make out I was after something immoral and they wanted to distort the facts against me but nothing could be further from my mind than to be a nuisance staring and frightening . . . in the middle of the street they imitated me and laughed straight in my face and in a hateful way they pushed humorous drawings my way. I was supposed to read likenesses to third persons from the faces . . . the lads talked about me afterwards at the police station . . . they fraternised with the workers . . . the nuisance of being stared at and pointed at went on during meals . . . before I entered my flat somebody always had to annoy me with some meaningless glance but the names of the police and the private people involved I did not know . . .' The patient objected to 'eye-language' used even by the judge who examined him. In the street 'the police tried to stalk me several times but I drove them away by my looks . . . they became a kind of hostile militia . . . all I could do was to stay on the defensive and never take the offensive with anybody.'

A fine example of delusional reference is provided by a 17-year-old patient reported by G. Schmidt.¹ She was suffering from a schizophrenic psychosis and recovered after a few months. There is a mass of detailed self-reference:

'My illness first showed itself in loss of appetite and a disgust for "serum". My periods stopped and there came a kind of sullenness. I didn't speak freely any more; I had lost interest; I felt sad, distraught and was startled when anyone spoke to me.

My father, who owned a restaurant, said to me the cookery examination (which was to take place next day) was only a trifle; he laughed in such an odd tone that I felt he was laughing at me. The customers were looking oddly at me too as if they had guessed something of my suicidal thoughts. I was sitting next to the cash desk, the customers were looking at me and then I thought perhaps I had taken something. For the last five weeks I had had the feeling that I had done something wrong; my mother had been looking at me sometimes in a funny, piercing way.

It was about 9.30 in the evening (she had seen people whom she feared would take her away). I got undressed after all. I lay in bed rigidly and made no move so they wouldn't hear me; I was listening hard for the least noise; I believed the three would get together again and tie me up.

In the morning I ran away; as I went across the square the clock was suddenly upside down; it had stopped upside down. I thought it was working on the other side; just then I thought the world was going to end; on the last day everything stops; then I saw a lot of soldiers on the street; when I came close, one always moved away; ah, I thought, they are going to make a report; they know when you are a 'wanted' person; they kept looking at me; I really thought the world was turning round me.

In the afternoon the sun did not seem to be shining when my thoughts were bad

¹ Gerhard Schmidt, *Z. Neur.*, vol. 171 (1941), p. 570.

but came back when they were good. Then I thought cars were going the wrong way; when a car passed me I did not hear it. I thought there must be rubber underneath; large lorries did not rattle along any more; as soon as a car approached, I seemed to send out something that brought it to a halt . . . I referred everything to myself as if it were made for me . . . people did not look at me, as if they wanted to say I was altogether too awful to look at.

At the police station I had the impression that I wasn't at the station but in the Other World; one official looked like death himself. I thought he was dead and had to write on his typewriter until he had expiated his sins. Every time the bell rang I believed they were fetching away someone whose lifetime had ended. (Later I realised the ringing came from the typewriter as it reached the end of the line.) I waited for them to fetch me also. A young policeman had a pistol in his hand; I was afraid he wanted to kill me. I refused to drink the tea they brought me as I thought it was poisoned. I was waiting and longing to die . . . it was as on a stage, and marionettes are not human. I thought they were mere empty skins . . . the typewriter seemed upside down; there were no letters on it, only signs which I thought came from the Other World.

When I went to bed I thought someone else was in it already because the eiderdown was so bumpy; the bed felt as if people were lying in it already; I thought everybody was bewitched; I mistook the curtain for Aunt Helena; I found the black furniture uncanny; the lampshade over the bed moved continuously, figures kept on swirling round; towards morning I ran out of the bedroom and shouted 'What am I? I am the devil!' . . . I wanted to take my nightdress off and run out into the street, but my mother just caught me . . .

The illuminated signs of the town were very scanty—for the moment I did not think of the blackout due to the war; it seemed to me extraordinary; the glowing cigarette-ends of people were uncanny . . . something must be the matter; everything was looking at me; I felt I was brightly illuminated and visible when others were not . . .

At the clinic I found everything unnatural; I thought I was going to be used for something special; I felt like a guinea-pig; I thought the doctor was a murderer, because he had such black hair and a hook nose. Another man outside pushing an apple-cart seemed like a puppet. He was walking so hurriedly, just like in the pictures. . . .

Later at home things were changed, partly they were smaller; it was not so homely as before, it had become cold and strange. My father had got me a book; I thought it had been written specially for me; I did not think I had lived through all the scenes it described but it was more than they seemed meant for me. I was annoyed that now they knew all this.

Today I can see clearly how things really are; but then I always thought something unusual was up, even on the most trivial occasion. It was a real illness.'

Ideas of reference can also be experienced during hashish intoxication, and in a remote way resemble schizophrenic ideas of reference:

'Feelings of uncertainty spread; things lose their self-evident nature. The intoxicated person feels defeated and finds himself in a situation of distrust and defence. Even the most banal question sounds like an examination or an inquisition, and harmless laughter sounds like derision. An accidental glance leads to the reaction—"stop

gawping at me". One constantly sees menacing faces, one senses traps, hears allusions. New powers seem to grow under the intoxication, and ideas of reference spread to the inflated ego (Fraenkel and Joel). What then happens, happens because of oneself, not to one's detriment, but purely for one's benefit.'

(bb) *Delusional ideas.* These give new colour and meaning to memory or may appear in the form of a sudden *notion*—'I could be King Ludwig's son'—which is then confirmed by a vivid memory of how when attending a parade the Kaiser rode by on his horse and looked straight at the patient.

A patient wrote: 'It suddenly occurred to me one night, quite naturally, self-evidently but insistently, that Miss L. was probably the cause of all the terrible things through which I have had to go these last few years (telepathic influences, etc.). I can't of course stand by all that I have written here, but if you examine it fairly you will see there is very little reflection about it; rather everything thrust itself on me, suddenly, and totally unexpectedly, though quite naturally. I felt as if scales had fallen from my eyes and I saw why life had been precisely as it was through these last years . . .'

(cc) *Delusional awarenesses.* These constitute a frequent element particularly in florid and acute psychoses. Patients possess a knowledge of immense and universal happenings, sometimes without any trace of clear perceptual experience of them, and when there is sensory experience, pure awarenesses will often intermingle among the forms in which the actual content is given. When there is delusional experience of some emotional depth, content will usually appear for the most part in the form of awareness. For example:

A girl was reading the Bible. She read about the waking of Lazarus from the dead. She immediately felt herself to be Mary. Martha was her sister, Lazarus a sick cousin. She vividly experienced the events about which she read just as if they were her own experience. (The vividness was a feeling rather than a sensory vividness) (Klinke).

From the phenomenological point of view the delusional experience is always the same: besides sensory experience of illusory, hallucinatory or pseudo-hallucinatory contents, there is a kind of experience where sensory richness is not essentially changed, but the recognition of certain objects is linked with an experience totally different from normal. The mere thinking about things gives them a special reality—which does not have to become a sensory experience. The new and special significance may be associated as much with thoughts as with things perceived.

All primary experience of delusion is an experience of meaning, and simple, 'one-stage' delusional notions do not exist. For example, a patient suddenly has the notion that a fire has broken out in a far-away town (Swedenborg). This surely happens only through the meaning he draws from inner visions that crowd in on him with the character of reality?

A basic feature of the first experience of delusional meaning is 'the establishment of an unfounded reference' (Gruhle). Significance appears unaccountably, suddenly intruding into the psychic life. Later the identical experience of

significance is repeated, though in other contexts. The trail is blazed and the preparedness for the significant experience then permeates almost all perceived contents. The now dominant delusion motivates the apperceptive schema for all future percepts (G. Schmidt).

(c) *Incorrugibility of delusion*

Delusional experiences proper, false perceptions and all the other primary experiences we have so far described give rise to errors of judgment. They are the source for the great variety of delusional syndromes which we encounter in individual patients. After the creation of the primary delusion from his experiences, the patient often takes *a further step*, and *holds on* to his delusion as truth. He will maintain it as such in the face of all other experiences to the contrary and against all argument. He does this with a conviction far beyond normal, even perhaps stamping down on any occasional, initial doubt he may have himself.

Psychological digression. Normal convictions are formed in a context of social living and common knowledge. Immediate experience of reality survives only if it can fit into the frame of what is socially valid or can be critically tested. Experience of reality leads us to judgments of reality. Individual experience can always be corrected but the total context of experience is something stable and can hardly be corrected at all. The source for incorrigibility therefore is not to be found in any single phenomenon by itself but in the human situation as a whole, which nobody would surrender lightly. If socially accepted reality totters, people become adrift. What is left to them? A set of habits, survivals, chance events? Reality becomes reduced to an immediate and shifting present.

Incorrugibility however has another source as well. The fanaticism with which opinions are held in a discussion or over long periods of time does not always prove that their content is really believed in, but only that in the holder's judgment such opinions will have some desired effect, sometimes no more than his personal advantage, to which his instinctive drives unconsciously direct him. It is the behaviour which will show clearly enough what is held to be reality; since only the reality that is actually believed will compel to action. Fanatic opinions that are not believed in can be dropped at any time and in this sense they become corrugible. But genuine reality judgments which are the expression of a believed-in reality and according to which people in fact conduct themselves (e.g. belief in hell) are extremely difficult to correct. Should they be so, it will mean a revolution in the individual's whole conception of life.

Normal mistakes are also very largely incorrigible. It is astonishing how most people tend to maintain the realities they believe in during a discussion, although the mistakes they are making seem to the knowledgeable person little else but 'sheer delusion'. 'Delusions' on a national scale, as commonly discussed, are not really delusions but mass-beliefs that change with the times and are typical illusions. Only those that reach the highest ranks of absurdity deserve the term delusion—belief in witches, for example—and even that need not be a delusion in the psychopathological sense.

Speaking methodologically, the concept of incorrigibility does not belong to phenomenology but to the study of psychological performance and the

psychology of meaningful connections. Phenomenologically, we have only to decide whether there is more than one kind of incorrigibility which may indicate different phenomena as the source.

We may sum up the position briefly as follows: *Errors in normal people* are the errors common to their social group. Conviction has a root in the fact that *all* believe. Correction of belief comes about not on the ground of any logical argument but through historical change. *Delusion-like errors* on the part of individuals always imply some segregation from what all believe (i.e. 'what one believes') and in this case the incorrigibility cannot be distinguished psychologically from the unwavering force of a true insight, asserting itself against a whole world. *Delusion proper* is incorrigible because of an *alteration in the personality*, the nature of which we are so far unable to describe, let alone formulate into a concept, though we are driven to make some such presupposition. The decisive criterion seems to be not the 'intensity' of the direct evidence, but the maintaining of what is evident to the patient in the face of subsequent reflection and external criticism. Delusion cannot be grasped as a change in one of the thought processes nor as an alteration in any one of our activities, nor as mere confusion, nor is it the same as the normal fanaticism of dogmatic people. One need try only to suppose an ideal case of a paranoid with a high level of critical insight—a born scientist, perhaps—who shows incorrigibility as a pure phenomenon in the midst of his general scepticism—well, he would no longer be a paranoid! Patients are in a state of clear consciousness and have continual possibilities for testing their ideas but correction of their delusion does not come. We cannot say the patient's whole world has changed, because to a very large extent he can conduct himself like a healthy person in thinking and behaving. But his world has changed to the extent that a changed knowledge of reality so rules and pervades it that any correction would mean a collapse of Being itself, in so far as it is for him his actual awareness of existence. Man cannot believe something that negates his existence. Such formulations, however, are only trying to make us understand what in its essence cannot be understood—i.e. the specific schizophrenic incorrigibility. We can only hold on to the fact that it is found where formal thinking is maintained, the capacity for thought undamaged and where there is not the slightest clouding of consciousness.

On the other hand we should look at *what* it is that is actually incorrigible. The patient's behaviour will show this more readily than any conversation with him. Reality for him does not always carry the same meaning as that of normal reality. With these patients persecution does not always appear quite like the experience of people who are in fact being persecuted; nor does their jealousy seem like that of some justifiably jealous person, although there is often some similarity of behaviour. Hence the attitude of the patient to the content of his delusion is peculiarly inconsequent at times. The content of the delusion strikes one as a symbol for something quite different; sometimes content changes constantly though the delusional meaning remains the same.

Belief in reality can range through all degrees, from a mere play with possibilities via a double reality—the empirical and the delusional—to unequivocal attitudes in which the delusional content reigns as the sole and absolute reality. During the play of possibilities, each individual content may perhaps be corrected but not the attitude as a whole and once the delusional reality has become absolute, incorrigibility is also absolute.

Once we are clear that the criteria for delusion proper lie in the *primary experience of delusion* and in the *change of the personality*, we can see that a delusion may be correct in content without ceasing to be a delusion, for instance—that there is a world-war. Such correctness is accidental and uncommon—mostly it appears in delusions of jealousy. A correct thought ordinarily arises from normal experience and is therefore valid for others. Delusion however arises from a primary experience not accessible to others and it cannot be substantiated. We can recognise it only by the way in which the patient subsequently tries to give it ground. A delusion of jealousy, for instance, may be recognised by its typical characteristics without our needing to know whether the person has genuine ground for his jealousy or not. The delusion does not cease to be a delusion although the spouse of the patient is in fact unfaithful—sometimes only as the result of the delusion.

(d) *Elaboration of the delusion*

Thinking accompanies the first step which brings delusion about. This may be no more than the unsystematic, blurred thinking of the acute psychoses and states of chronic defect, yet even here patients look for some kind of connection. Or the thinking may be more systematic as in the case of better-preserved chronic conditions. Here the thought works over the delusion on the basis of the primary experiences, trying to link them harmoniously with real perceptions and the patient's actual knowledge. To do this sometimes calls for the full strength of an intelligent personality. In this way a *delusional system* is constructed which in its own context is comprehensible, sometimes extremely closely argued and unintelligible only in its ultimate origins, the primary experience.¹ These delusional systems are objective meaningful structures and methodologically we can assign them to the psychology of creativity. (*Werkpsychologie*).

(e) *Delusion proper and delusion-like idea*

The term delusion should properly only be given to those delusions which go back to primary pathological experiences as their source, and which demand for their explanation a change in the personality. As such, they constitute a group of primary symptoms. The term delusion-like ideas is reserved by us for those so-called 'delusions' that emerge comprehensibly from other

¹ Examples of closely argued delusional systems may be found in Wollay, *Erklärungen der Tollheiten von Haslam* (Leipzig, 1889), pp. 14 ff. Schreber, *Denkwürdigkeiten eines Nervenkranken* (Leipzig, 1903).

psychic events and which can be traced back psychologically to certain affects, drives, desires and fears. We have no need here to invoke some personality change but on the contrary can fully understand the phenomenon on the basis of the permanent constitution of the personality (*Anlage*) or of some transient emotional state. Among these delusion-like ideas we put the transient deceptions due to false perception, etc.; the 'delusions' of mania and depression ('delusions' of sin, destitution, nihilistic 'delusion', etc.)¹ and over-valued ideas.

Over-valued ideas are what we term those convictions that are strongly toned by affect which is understandable in terms of the personality and its history. Because of this strong affect the personality identifies itself with ideas which are then wrongly taken to be true. Psychologically there is no difference between scientific adherence to truth, passionate political or ethical conviction and the retention of over-valued ideas. The contrast between these phenomena lies in the falsity of the over-valued idea. This latter occurs in psychopathic and even in healthy people; it may also appear as so-called 'delusion'—'delusions' of invention, jealousy, or of querulant behaviour etc. Such over-valued ideas must be clearly differentiated from delusion proper. They are isolated notions that develop comprehensibly out of a given personality and situation. Delusions proper are the vague crystallisations of blurred delusional experiences and diffuse, perplexing self-references which cannot be sufficiently understood in terms of the personality or the situation; they are much more the symptoms of a disease process that can be identified by the presence of other symptoms as well.

(f) *The problem of metaphysical delusions*

Patients may display their delusions in some supra-natural mode and such experiences cannot be adjudged true or untrue, correct or false. Even when empirical reality is concerned it is difficult enough to be decisive, though some evaluation can usually be made. We can study the metaphysical experience in its schizophrenic manifestations as it is conditioned by the morbid process and yet realise that the metaphysical intuitions (the images themselves, the symbols) that have arisen in the course of these experiences have acquired cultural significance in the minds of normal people for quite different reasons.

For us reality is the reality of time and space. Past, present and future are real for normal people in the form of 'no longer', 'not yet' and 'now' but the constant flux of time makes everything seem unreal, the past is no longer, the future is not yet and the present disappears irresistibly. *Temporal reality* is not *reality itself*. This reality lies athwart time and all metaphysical awareness is experience and affirmation of this reality. Where it is truly felt, we call it faith. When it is externalised into something tangibly existing in this world (where it becomes mere reality again) we talk of superstition. We can tell how much people need this absolute hold on the reality of the world when we see the abysmal despair into which they fall should they lose it.

¹ Depressive delusions can only be attributed to affect comprehensibly if we presuppose in severe melancholia a temporary change in the psychic life as a whole.

Superstition we might say is the 'delusion' of normal people. Only faith, transcending in the world, can by virtue of its own unconditioned living and acting be sure of the Being which all our existence symbolises. Only faith can hover above both without fear of falling into bottomless confusion.

The shattering of the self is said to be mirrored in the schizophrenic experience of the end of the world. This is not sufficiently explicit. Experiencing the end of the world and all that this implies involves a deep religious experience—of a symbolic truth that has served human existence for thousands of years. We have to regard this experience as such and not merely as some perverted psychological or psychopathological phenomenon if we really want to understand it. Religious experience remains what it is, whether it occurs in saint or psychotic or whether the person in whom it occurs is both at once.

Delusion is the morbid manifestation of knowledge and error in regard to empirical reality, as it is of faith and superstition in regard to metaphysical reality.

§ 5. FEELINGS AND AFFECTIVE STATES

Psychological Preface. There is fairly general agreement as to what we mean by sensation, perception, image, thought, also perhaps what we mean by instinctual urge and act of will. But confusion still reigns regarding the word and concept 'feeling'. We may still ask what is meant by it in any individual case. Commonly the term 'feeling' is given to any psychic event that does not clearly belong to the phenomena of object-awareness, nor to instinctual excitation and volitional acts. All undeveloped, undefined psychic manifestations tend to get called 'feeling'. That is, everything intangible, analytically elusive, everything for which we can find no other name. Someone feels he does not care, or that something is not right. He feels that the room is too small or that everything is clear or he feels uneasy, etc. *This diverse set of phenomena* which we term 'feelings' has never been satisfactorily analysed from the psychological point of view. We do not know what constitutes the basic element or elements nor do we know how to classify, whereas with sensation the basic elements have been both well examined and classified. There are very few scientific investigations into feeling and we will mention them when necessary. On the other hand there is an extensive literature on the pathological phenomena of object-awareness as well as on the perversion of instinct.

It is difficult to know how we should set about it. However, psychologists¹ have laid some foundations for the analysis of feelings and we can get an orientation from the leading schools of thought, a methodological approach which will help us to evaluate more precisely what has been established so far. Extensive analysis of every different kind of feeling would only end in a vast array of trivialities.² First therefore we will review the *different ways* in which feelings have been *classified*:

¹ Geiger, 'Das Bewusstsein von Gefühlen', *Munch. phil. Ab.* (Th. Lipps zum 60 Geburtstag gewidmet). 'Über Stimmungseinfühlung', *Z. Asth.* (1911). Kulpe, 'Zur psychologie der Gefühle', *6 Psychol. Kongr. Genf.* (1909).

² For psychological discussion on feelings generally, at a superficial level, see Hoffding and Jodl; Nahlowsky, *Das Gefühlsleben*, 3rd edn. (Leipzig, 1907); Ribot: *Psychologie der Gefühle* (Paris, 1896) (in German, 1903).

1. *Phenomenologically*, according to the different modes in which they appear:

(a) Feelings that are an aspect of *conscious personality*, and define the self; these are broadly contrasted with feelings that *lend colour to object-awareness*, e.g. my own sadness in contrast to the sadness of a landscape (Geiger).

(b) Feelings that can to some extent be *grouped in opposites*; Wundt, for instance, distinguished pleasure and displeasure, tension and relaxation, excitement and calm. There are a number of such opposites: e.g. profound and shallow feelings (Lipps); feelings of shattering, deep pain on the one hand and feelings of petulance or for the comic on the other.

(c) Feelings may be *without an object* and contentless (i.e. how one feels) or they may be *directed upon some object* and classified accordingly.

2. *According to their object* (Meinong, Witasek). Here the contrast is between phantasy feelings directed on to *suppositions* and reality *feelings directed upon actual objects*. Feelings of value may be directed on the subject himself or on to someone else; they may be positive or negative (pride-submissiveness, love-hate). Any classification by content, e.g. social feelings, patriotic feelings, family or religious feelings etc., leads not so much to a classification of feelings as to a classification of the innumerable contents, to which feelings of value may be attached. Language has uncounted resources at its disposal for this end but these are better suited for concrete description than for the purpose of a general phenomenological analysis.

3. *According to source*. The classification is made in accordance with different levels of psychic life, i.e. a distinction is made between localised feeling-sensations, vital feelings involving the whole body, psychic feelings (e.g. sadness, joy), and spiritual feelings (a state of grace) (Scheler, Kurt Schneider).

4. *According to the biological purpose*, the vital significance of the feelings, e.g. pleasurable feelings express the advancement of biological purposes, displeasurable feelings their frustration.

5. *Particular feelings* directed on specific objects or partial aspects of the whole are distinguished from *all-inclusive feelings*, where the separate elements are fused into some temporary whole, which is then called *the feeling-state*. Such feeling-states are characterised in various ways; for instance, there are irritable feeling-states, states of sensibility and of diminished or increased excitability. A 'feeling of being alive' arises on the basis of organic sensations as an expression of the vital state, of drives, needs, tendencies and of the organism as a whole.

6. The old and useful classification into feeling, affect and mood is based on the difference of *intensity* and *duration* of feeling. *Feelings* are individual, unique, and radical commotions of the psyche. *Affects* are momentary and complex emotional processes of great intensity with conspicuous bodily accompaniments and sequelae. *Moods* are states of feeling or frames of mind that come about with prolonged emotion which while it lasts colours the whole psychic life.

7. *Feelings* are distinguished from *sensations*. Feelings are states of the self (sad or cheerful); sensations are elements in the perception of the environment and of one's own body (colour, pitch, temperature, organic sensations). Sensations, however, show a whole scale of differences; they range from those that are purely object-bound to subjective bodily states. Vision and hearing are purely object-bound while organic sensations, vital sensations, sensations of stance and balance all predominantly refer to subjective bodily states. Between these two poles we find sensations referable to bodily states at the same time as they are object-bound, e.g. sensations of skin,

taste, smell. Hunger, thirst, fatigue, and sexual excitation are simultaneously sensations (elements in bodily perception) as well as feelings (in the form of pleasure and displeasure). Hence we can talk of *feeling-sensations* (Stumpf). Bodily sensations as feelings are at the same time aspects of instinctual drive, as with hunger, which impels to food, fatigue, which impels to rest, and sexual sensations, which impel to contact. Thus sensation, feeling, affect and drive show themselves an integrated whole.

In classifying abnormal feeling-states we need to make a preliminary distinction as follows: (1) those affective states which *emerge in understandable fashion* from some experience, even though they appear abnormally exaggerated and heavily coloured; (2) those affective states which defeat understanding and arise endogenously *as a psychological irreducible*. Explanation can only point to sources beyond consciousness (physical events, phases, periods, etc.). This helps us to distinguish *normal* homesickness, for instance, from *excessive but understandable* homesickness (sometimes leading to violent behaviour in young girls away from home), and both of these from depression *without external cause*, which is then subjectively interpreted as homesickness.

Abnormal feeling-states of an all-embracing character are represented by a rich terminology, e.g. grief, melancholy, cheerfulness, merriment, accidie, etc. Certain typical states can also be recognised: natural cheerfulness, bubbling hypomanic merriment, the gloomy mood of depression, the euphoria of General Paralysis with its contented complacency and the silly, awkward blandness of hebephrenia. Out of all the host of trivial feeling-states our aim is to mark down only those which are the more typical and noteworthy.

(a) *Changes in bodily feeling*

In physical illness bodily feeling is bound up with all the innumerable sensations which general medicine recognises as symptoms: e.g. the fear of the cardiac patient, the suffocation of the asthmatic attack, the sleepiness of encephalitis, the general malaise of an initial infection.

Bodily feelings are basic to the feeling-state as a whole. In the psychoses and personality disorders there is often a change in feelings for which it is difficult to have empathy, particularly with schizophrenia. Self-description, however, gives us only a little information about the great variety of these vital and organic feelings.

Kurt Schneider sees a change in *vital feeling* as the core of cyclothymic depression. The misery of these vital depressions is located specifically in the limbs, forehead, chest or stomach:

A patient said: 'I always have an oppression in my stomach and neck; it feels as if it would never go away, it seems fixed; it makes me feel as if I would burst, there is so much pain in my chest.' Another patient described feelings of pressure in the chest and abdomen and said 'it is more a sadness'; another, speaking of her chest, said 'I have such a terrible misery there'. Besides this very physical sadness one will usually find other complaints of vital distress (Kurt Schneider).

(b) Changes in feelings of capacity

We always have some feeling of our capacity; this gives us confidence in ourselves without any explicit awareness of the underlying feeling. In depression, patients get a *feeling of insufficiency*, one of their most common complaints. In part these feelings are an awareness of real insufficiency and in part they are unfounded, primary feelings. Awareness of being useless for the real world, of being incompetent and incapable of action, of being unable to make a decision, of wavering, of being clumsy, of not being able to think or understand any more, all these are the burden of many abnormal states, though real inefficiency need not exist; it can, however, be present in a moderate degree. Such complaints often appear with symptoms of an objective retardation, and are experienced as subjective retardation.

(c) Apathy

This is the term given to absence of feeling. If this absence is complete, as can happen in acute psychoses, the patient is fully conscious and orientated, sees, hears, observes and remembers, but he lets everything pass him by with the same total indifference; happiness, pleasure, something positive in which he is involved, danger, sorrow, annihilation are all the same. He remains 'dead with wakeful eyes'. In this condition there is no incentive to act; apathy brings about aboulia. It seems as if that one aspect of psychic life we call object-awareness has become isolated; there is only the mere grasp of reason on the world as an object. We can compare it to a photographic plate. Reason can portray its environment but cannot appreciate it. This absence of feeling shows itself objectively in the patient not taking food, in a passive indifference to being hurt, burnt, etc. The patient would die if we did not keep him alive with feeding and nursing care. The apathy of these acute states must be distinguished from the dullness of certain abnormal personalities who are constantly at the mercy of innumerable feelings, only crude in quality.

(d) The feeling of having lost feeling

This feeling of having no feeling is a remarkable phenomenon. It appears in certain personality disorders (psychopaths), in depressives and in the initial stages of all processes. It is not exactly apathy but a distressful *feeling of not having any feeling*. Patients complain that they no longer feel gladness or pain, they no longer love their relatives, they feel indifferent to everything. Food does not gratify: if food is bad they do not notice. They feel empty, devastated, dead. All 'joie de vivre' has left them. They complain they cannot participate in things, they have no interest. A schizophrenic patient said. 'There is nothing left; I am cold as a block of ice and as stiff; I am frozen hard' (Fr. Fischer). Patients suffer very much from this subjectively felt void. But the very fear which they imagine they do not feel can be recognised objectively in their bodily symptoms. Mild cases will complain about numbness of feeling, feelings that have got damped down, feelings of estrangement.

(e) *Changes in the feeling-tone of perception*

First there is a simple *increase* in the feeling-tone:

'Thoughts that otherwise I would have felt as merely unpleasant and brushed aside now brought a distressing, almost physical feeling of fear. The smallest pang of conscience grew into a near-physical fear, felt as a pressure in the head' ('Encephalitis lethargica,' Mayer-Gross and Steiner).

The following description of an early phase in an acute psychosis shows increased feeling-tone towards normal objects:

'The covered bath made a weird impression on me . . . the keys on the attendant's key-ring with their double hooks could, I felt, be used to pry out the eyes. I waited for the heavy key-ring to fall from the attendant's belt on to my head and when it kept clattering on the ground I couldn't bear it. The cells to which I was hastily consigned every evening and where I was left to my own devices were I felt deeply insulting in their emptiness and absence of every comfort and decoration . . . most painful of all were the feelings aroused by the wild, swearing talk of the patients. I really suffered from this far more than I would have done had I been well' (Forel).

There are also *alterations* in the characteristic *feeling-tone of perceived objects*. Similar changes may occur with mere sensations and appear as abnormal *feeling-sensations*:

'The feeling of touch has become most unpleasant. When I touch wood (they have given me poisoned pencils), wool or paper, I feel a burning sensation run through all my limbs. I get the same burning feeling in front of the mirror. It "throws out something" which rinses me with an acid feeling (that is why I avoid the mirror). The best things to touch are china, metal, small silver spoons, fine linen or my own body in certain places. . . .' 'In addition the obtrusive luminosity of a group of colours (flowers at a distance) strikes my senses as devilish and poisonous. They have a painful emanation, for instance, red, brown, green or black (printer's ink, deep shadows, black flies). Lilac, on the other hand, yellow and white are all pleasant to look at' (Gruhle).

'All my senses enjoy things more. Taste is different and much more intense than before' (Rümke).

All the contents of our object-awareness, forms, figures, nature, landscape and other people, have these characteristic feeling-tones for us. We can speak of a 'physiognomy of things' which expresses their psychic essence. We only have a very summary knowledge of the changes that may take place. In one instance the patient spoke of the outer world as having grown cold and strange. 'I can see the sun shining, but I do not feel as if it is'. In other cases a positive feeling for objects is present. A patient has a great feeling of tranquillity and his view of the environment is clear and full of feeling. Everything is pregnant with meaning, solemn and wonderful. He enjoys unthinkingly the impression of a world divine and far-removed (as in light fever, in 'periodic states', under opium, etc.). Nature is marvellous; the golden age is here; the landscape might be a picture by Thoma or H. von Marées. The sun is incomparably beautiful. (All

this at the beginning of a psychosis.) Or we may find the patients feel the objects they perceive are ghastly, spookish, thrilling or horrific.

'Nature seemed infinitely more beautiful than before, warmer, grander and calmer. There was a more brilliant light in the air, the blue of the sky was deeper, the cloud-play more impressive, the contrast of light and shadow was much sharper. The landscape was all so clear, so brightly coloured and so full of depth. . .' (Rümke).

Empathic feelings towards other people must be classed as a special type among these feelings ascribed to objects. We may observe how patients either suffer from abnormally strong empathy or complain that people appear to them like automata or soul-less machines.

(f) *Unattached feelings (free-floating feeling)*

The elementary break-through of experiences, which are not understandable in their genesis, is manifested in unattached feelings. If they are to become meaningful to the subject, these feelings must first search for an object or try to create one. The feelings simply arise in the first place and remain in force though they may never find an object. For instance, unattached anxiety is very common in depressive states, so is a contentless euphoria in manic states, so is obscure erotic excitement in early puberty, so are the feelings roused at the start of a pregnancy and in the early stages of a psychosis. Driven by an almost inescapable need to give some content to such feelings, patients will often supply some such content on their own. It is a sign of critical insight if feelings are actually described as lacking in content. Some of these contentless feelings are as follows:

1. *Anxiety* is both common and painful. Whereas fear is directed towards something, anxiety is free-floating and unattached. We can differentiate a vital anxiety as a specific feeling-sensation in the heart, the anxiety of angina pectoris, or as an anxiety of suffocation (e.g. the breathlessness in decompensated circulatory conditions). But anxiety may also be a primary psychic state, all-pervasive and dominating, analogous to vital anxiety and involving existence as a whole. There is every degree from contentless, powerful anxiety that leads to a clouding of consciousness and ruthless acts of violence against oneself or others, down to a slight, anxious tension where the anxiety is experienced as alien to the self and inexplicable. Anxiety is linked with physical sensations such as pressure, suffocation, tightness. It is often localised—precordial anxiety, for instance; sometimes too in the head. A patient felt the urge to poke into it physically as he might poke a painful tooth with a toothpick. But the existential anxiety, which is a fundamental of our human life as it manifests itself in marginal situations and which is a source of Existence itself, can no longer be grasped phenomenologically.

2. Anxiety is usually linked with a strong *feeling of restlessness* but this emotional state of inward excitement can occur on its own without anxiety. Retrospectively patients will call this feeling a 'nervous excitement' or 'fever'.

In a mild degree the state may occur in the form of a feeling that one has to do something or that one has not finished something; or it may be a feeling that one has to look for something or that one has to come into the clear about something. In florid psychoses this feeling of restlessness may be heightened to tension and a sense of oppression. Patients feel they cannot stand the massive weight of impressions any longer and want only distraction and peace.

A schizophrenic patient in an initial phase described his restlessness as new and different from the usual sort in which one cannot work, has to get up often or go for a walk. He said it was more tangible, so to speak; it pervaded his whole being and swallowed it up. He ran up and down in the room; he felt he could not escape. Going for a walk was quite out of the question in this state. 'It tortures me more than anything else in the world; I can't get out of its reach; I want to tear myself away but I can't; it only gets worse; an urge comes to smash everything to bits but I can't trust myself to start with something small; everything else would follow. I would start to lash around; if I only threw a glass on the floor, everything else would come on its own; the power of stopping myself is wholly undermined; I find it so hard to hold back I wish sometimes "if only it were all over".'

3. Abnormal feelings of happiness¹ are complicated by dimly experienced meanings which do not become objectively clear to the patient. They may range from purely sensuous feelings of pleasure to mystical ecstasies of a religious character. Feelings of sublimity² occur as phases in psychasthenics and as states of ecstatic intoxication in schizophrenic patients. Patients become filled with a remarkable enthusiasm; are touched deeply by everything; find everything moving and meaningful. During convalescence from illness, in mild feverish conditions, tuberculosis, etc., soft, world-embracing, sentimental states may occur. Schizophrenic experiences are described as follows:

'I woke up one morning with the most blissful feeling that I had risen from the dead or was newly born. I felt supernatural delight, an overflowing feeling of freedom from everything earthly . . . brilliant feelings of happiness made me ask "am I the sun? Who am I?" . . . "I must be a shining child of God" . . . "Uncle A. changed into God will fetch me . . . we shall fly straight into the sun, the home of all those risen from the dead . . . in my blissful state I sang and shouted; I refused to eat and no longer needed to eat; I was waiting for Paradise and to feast on its fruits' (Gruhle).

'Light clouds lifted me . . . it was as if every moment more and more the spirit was unwound from its bonds; a nameless delight and gratitude took hold of my heart . . . an entirely new and heavenly life began in me . . . I was enormously cheerful, I looked transfigured . . . I felt extraordinarily well and delighted with myself . . . my condition at that time was to be envied . . . I had a true foretaste of heaven in myself . . . my voice became clear and bright and I was always singing . . .' (Engelken).

Another patient called his rare feelings a 'lust of the soul'. He felt it to be divine and the content of eternal bliss. Such patients enjoy an entirely self-contained state of invincible delight, though bodily sensations appear to play a larger part than usual.

¹ H. C. Rümke, *Zur Phänomenologie u. Klinik des Glücksgefühle* (Berlin, 1924).

² Janet, *Psychasthenie*, vol. I, pp. 388 ff.

A schizophrenic patient in the early phases of his illness distinguished three types of happiness: (1) 'intuitive happiness'—in which he is productive; it is for him a full-blown and continual jubilation; symbolically he sees it as a sphere out of which other spheres emerge as a single solid mass; (2) 'bliss'—which is on a different level. It is like floating; awareness of the body is faint, he stands above it; (3) while 'intuitive happiness' comes often and 'bliss' is rare, he has once had an attack of happiness on the same level as the first type but this is better expressed symbolically as an ever-rising wave, which spirals upwards while imposing masses pile up one on the other. The feeling of happiness crescendoes . . . bliss, on the other hand, is a contrasting peace. It remains quite independent and contentless. Physical happiness is there alongside the psychic happiness but the physical remains more on the surface' . . . He felt as if the wave of happiness was at once dark on the outside, bright and empty within, a mere skin. It seemed something always straining higher and higher, existing for itself alone and with no relationship to anything. It faded out quickly in the end and left a state of psychic exhaustion. The feeling of happiness was contentless but bright; the other experiences of happiness were not so fine-spun, but much more articulate. The patient felt he could not stand this state again; he said it would be unbearable because it came from within and would destroy him bodily.

The following case illustrates how feelings of happiness link up with 'delusions of reference' and become a source for such phenomena: 'It seemed as if everyone could see how happy I was and as if seeing me made others happy. I seemed something divine; older people at the station kept looking into my compartment; each did his best to catch my eye; officers, officials, families with their children all ran in front of me hoping I would look at them. That is all very fine, I said . . . but I must know who and what I am . . . am I no longer myself, am I altered? Then I cried because I always had to be moving on, yet I felt infinitely happy. Even the animals were glad when they saw me; swans stretched their wings out in honour of me . . .' (Rümke).

(g) *The growth of private worlds from unattached feelings*

These new and unfamiliar feelings press for some understanding on the part of the person who experiences them. Countless possibilities are contained in them which can be realised only when reflection, imagination and formative thought have created some kind of coherent world. There is therefore always a path which leads from these unimaginable experiences of happiness towards an attempt to render them precise. The experience of blissful feelings starts with a crystal clarity of sight though there is no real, clear content to communicate; the patients delightedly believe that they have grasped the profoundest of meanings; concepts such as timelessness, world, god and death become enormous revelations which when the state has subsided cannot be reproduced or described in any way—they were after all nothing but feelings.

Nerval gives a self-description which shows this *feeling of crystal-clear sight*, of profound penetration into the essence of things: 'It struck me I knew everything; everything was revealed to me, all the secrets of the world were mine during those spacious hours'. . . A patient wrote: 'I seemed to see everything so clearly and distinctly as if I had a new and remarkable understanding' (Gruhle). Another patient

said: 'It was as if I had some special sense like second-sight; as if I could perceive what I and others had never before been able to perceive'. (K. Schneider).

The patient of mine who described his three types of happiness while he was still critical and able to view his experiences without any delusion formation, later on developed other mystical and religious experiences from these. He sensed the attacks as 'metaphysical experiences' in so far as they contained 'a character of the infinite'. He also had certain objective experiences (vivid awarenesses, etc.) and said of them: 'I see something of infinite greatness, something that makes me shiver.' One day he said he had 'experienced God' and that this was the 'climax of his life'. He had 'obtained his meaning'. It had lasted a good hour. Emanations came from him and 'his soul expanded'. Excitement was incredibly strong. Finally there was peace and bliss with God and God poured into him. Comparing his former experiences of happiness with this he put the experiences of God alongside the happiness which seemed like an ever-rising wave, only now the crest had detached itself and become a sphere, expanding into the infinite. The experience had a 'cosmic character'. He said the symbolic significance was different from that of the earlier experiences of happiness. God was the obvious content but only as a form that could be felt. The patient said everything was quite incomparable, unimaginable, and had nothing in common with his ordinary percepts He made other formulations such as 'I come to God, not He to me. I am streaming forth . . . it seems as if I might embrace the whole world but stay outside myself as if my spirit stepped forth to embrace God'.

Feelings of absolution are often linked with these feelings of happiness, this clarity of vision and this experience of God; the patient then quickly passes from this sphere of feeling down into concrete delusional ideas. Patients feel freed from sin; they feel holy, children of God and eventually Messiahs, prophets and madonnas.

These feeling-states are found not only in the early experiences of schizophrenia. They also occur in toxic states (due to opium, mescalin, etc.) and they make a classic appearance in the brief moments before an epileptic seizure; nor can they be wholly banned from the fields of normal experience, that is, no other specific symptom seems present. We cannot class all the elaborate descriptions of mystic ecstasies as psychiatric states.

Dostoevski gave repeated descriptions of his epileptic auras: 'And I felt that heaven came down to earth and engulfed me; I experienced God as a deep and lofty truth; I felt invaded by Him. "Yes, there is a God," I shouted; after that I do not know what happened. You can have no idea of the marvellous feelings that pervade an epileptic a second before his attack. I do not know whether they last seconds or hours but believe me I would not exchange them for all the lovely things that life can give.'

'Yes, one such moment is worth a lifetime . . . in these few moments I understand the profound and wonderful saying: "there should be Time no longer" '.

'There are seconds when suddenly you feel the one eternal harmony that fills all existence. It is as if you suddenly feel the whole of nature within yourself and say: yes, this is the truth . . . it is not only love, it is more than love; the clarity of feeling and the overwhelmingness of the joy are terrifying. In these five seconds I live a lifetime and would give my whole life for them . . . development has no point since the goal is reached. . . .'

The awakening of new worlds in the schizophrenic transformation of the individual goes along with an alienation of the natural world. Patients feel they have lost contact with things. They feel distant and lonely. 'What is there in the world? I don't seem to belong to it any more' (Fr. Fischer).

§ 6. URGE, DRIVE AND WILL

Psychological preface. Here, as before, we shall deal only with the phenomena of actual experience, and not with any mechanisms outside consciousness. Such mechanisms, e.g. motor mechanisms, carry into effect the instinctual impulses and volitions which we experience and help them to outward expression; they give these experiences simple effectiveness. Volitional impulses that come into being outside consciousness are either inwardly effective (as well-defined memory images) or externally effective (as motor performances). We will deal with the latter when we come to the chapter on objective phenomena. Here we are concerned only with the direct subjective experience as such.

In regard to the experience of instinctual drive and volition¹ psychology only gives us a few elementary concepts. From an over-all picture of the phenomenology of these experiences, we can visualise them as arranged in a *progressive series*, subject to interruption by the appearance of qualitatively new elements. Thus we can distinguish the different experiences of primary, contentless, non-directional *urge*; of natural *instinctual drive* unconsciously directed towards some target; and of the *volitional act* itself which has a consciously conceived goal and is accompanied with an awareness of the necessary means and consequences.

Urges, instinctual activity, purposeful ideas compete with each other as *motivations*; distinct from these motivations which provide the material as it were, we find *decision* which comes after weighing-up, wavering and conflict. This is the personal 'I will' or 'I will not'. This *volitional awareness* is an irreducible phenomenon, found alongside the experience of *instinctual activity* and the experience of being at *variance* or *in opposition*. We speak of will or volitional acts only when there is some experience of choice and decision. When such experience is absent, the instinctual drive goes into action uninhibited by any volitional act. We then speak of *instinctual behaviour*. If in the background there lies a possible volition, we experience a sense of being 'driven' or of being 'overpowered'. Without this, simple non-volitional, biological necessity asserts itself.

Besides these phenomena of urge, instinctual activity, conflict and volition, there is the awareness of drive and will as they operate through motor discharges or psychic effects. These effects are then experienced as *willed* or as *due to a special kind of impulse*, i.e. as coming from me, belonging to me, and different from other spontaneous phenomena such as muscle cramp. A special kind of *inner volitional phenomenon* is the voluntary or involuntary *giving of attention* which increases the clarity and significance of the content.

(a) Impulsive acts

When instinctual activity takes place directly without conflict or the

¹ Lotze, *Med. Psychologie*, pp. 287–325. Th. Lipps, *Vom Fühlen, Wollen u. Denken*, 2nd edn. (Leipzig, 1907). Else Wentscher, *Der Wille* (Leipzig, 1910).

making of any decision, but still within the hidden control of personality, as it were, we use the term *instinctual act*. But if the manifestation is uninhibited, cannot be inhibited and is totally uncontrolled, we use the term *impulsive act*.¹ We speak of an abnormal impulsive act when, no matter how much empathy we exercise, the possibility of its suppression remains inconceivable. Such acts are common in the acute psychoses, in states of clouded consciousness and in states of retarded development. Instinctual acts but not pathological impulsive acts are some of the commonest acts of our everyday life.

A schizophrenic patient in the first stages of his illness reported impulsive behaviour in the following terms: 'We had had a party. On the way home I was seized by an idea out of the blue—swim across the river in your clothes. It was not so much a compulsion to be reckoned with but simply one, colossal, powerful impulse. I did not think for a minute but jumped straight in . . . only when I felt the water did I realise it was most extraordinary conduct and I climbed out again. The whole incident gave me a lot to think about. For the first time something inexplicable, something quite sporadic and alien, had happened to me' (Kronfeld).

With acute psychoses and certain transient conditions, we often find a number of unintelligible instinctual activities. Motor discharge is usually reached very quickly. A patient who seemed stuporous will jump out of bed, thrash about, bite, run against the wall; on the next day, he is accessible and knows what happened; he will say the impulse had been irresistible. Another patient suddenly hit the doctor in the chest in the middle of a quiet conversation; a little later he apologised; he said the impulse came suddenly and irresistibly with the feeling that the doctor was hostile. The simple *urge to move* (instinctual discharge through pleasure in aimless movement) and the *urge to do something* (discharge through a definite activity, handwork, etc.) are both common in acute conditions. The urge to move may appear on its own and be circumscribed, e.g. an urge to talk when otherwise perfectly still.

In encephalitis lethargica, particularly with young people in the acute stage and immediately thereafter, impulsive acts may be observed in the form of sudden aggressiveness and cruelty. Thiele² investigated these primitive urges in detail and described them as elementary, aimless and undirected tendencies to discharge which arise out of an unpleasant restlessness and tension. The urge takes shape only in its effects, according to situation and opportunity and turns into an action with a definite content. Such *urges*, like frustrated instincts, simply find an object; *instincts* always seek their object, whereas *volition* determines the wanted object.

(b) Awareness of inhibition of will

Awareness of inhibition is a characteristic disturbance, which is experienced subjectively as an inhibition of instinctual activity (complaints about

¹ See Förster and Aschaffenburg, 'Impulsive Insanity', *Z. Nervenheilk.* (1908), p. 350. Ziehen, *Mscr. Psychiatr.*, vol. 11, pp. 55, 393. Rauschke, *Charité-Ann.*, vol. 30, p. 251.

² R. Thiele, 'Zur Kenntnis der psychischen Residuärzustände nach Encephalitis epidemica', *Mscr. Psychiatr.* (1926), Beih. 36.

loss of interest, lack of desire, absence of motive, etc.), or as an inhibition of volitional drive (complaints of incompetence, inability to make a decision). Alongside this subjective inhibition we usually find objective inhibition, but not necessarily to a corresponding degree. The former can however be experienced intensively, without any objective inhibition at all.

(c) *Awareness of loss of will or access of power*

The experience of total loss of will-power is a remarkable phenomenon. With acute, florid psychoses feelings of passivity and subjection are quite characteristic. Often we cannot decide whether we have here an experience of defective volition or an awareness of an actual, objective ineffectiveness of the will. The following is an illustration:

The patient is in bed. She hears a thumping at the door. 'Something enters' and comes right up to her bed. She feels it and cannot move. It comes up her body right up to the neck like a hand. She is terrified and all the time is fully awake but she cannot cry out, raise herself up or sit up. She is utterly stricken.

It also happens to patients that without experiencing any content, and though they are *fully conscious*, *they cannot move* nor can they talk. People may think the patient is drunk and laugh at him. He may get annoyed but cannot answer back. Afterwards he remembers everything all right and shows quite clearly that all the time he was quite conscious. Such states have been in part described as *narcoleptic*. Friedmann¹ has described them thus: 'The eyes are upturned and fixed, the pupils are somewhat dilated and reacting; the power to think is arrested but consciousness is preserved. Posture is relaxed and immobile but more rarely there may be an automatic continuation of the immediately preceding activity. The patient usually awakes without any residual disturbance.' We also find reports of similar *paralysing attacks* among hysterical patients and particularly in the schizophrenic group. Complete consciousness is preserved. Suddenly—as if from a shock—the body fails to respond to the volitional impulse, either as a whole or only in a circumscribed area. The body is experienced as rigid and stiff, heavy, powerless, lifeless. The patient is usually overtaken by this condition when lying down, but sometimes when he sits or stands; it differs from a paralysis in its transitoriness.

Kloos² gives some patients' reports as follows: 'She tries hard to speak; it won't work; she can't get up from the chair, give any sign or communicate, as if she was gagged and bound; all the time she is frightened'—'She could not move mouth or limbs while praying; it was as if she were dying; she was not afraid; she thought she would wake up again; she went on praying in her mind; then it was all over. The next time, however, she felt real fear of death. On both occasions the whole body felt lifeless.'—'She felt she was tied; she could not lift her feet from the floor and had to stay just where she was (but only for a few seconds).'

¹ Friedmann, *Dtsch. Z. Nervenheilk.*, vol. 30.

² Gerhard Kloos, 'Über kataplektische Zustände bei Schizophrenen', *Nervenarzt*, vol. 9 (1936), p. 57.

Here we are not dealing with motor paralysis nor with a psychogenic disturbance but with an *elementary event* during which the *volitional drive fails to get translated into physical movement*. We do not know where the disturbance lies. Phenomenologically, when we move, the last thing we experience is the actual effort together with the image of the goal to which our movement is directed. Pikler has analysed the situation.¹ If we exercise our will on some particular bodily part in order to move it, the conscious point of attack is not on the nerves and muscles but rather on the surface of that part of the body which will be most engaged during the movement (e.g. on the surface of the fingers, when grasping). The will has no dynamic impact itself but it impinges at the point where the movement is conceived. We are in the dark as to where this actual point of impact lies and where exactly we shall find the relationship between the psychological experience and the entirely heterogeneous and complex nerve/muscle process. It is only in pathological states that we see thus dramatically demonstrated the disappearance of something we have always accepted as a matter of course. There is *no paralysis* either to account for it. A failure of motor-impulse is being experienced; there is an absence of the normal, magical effect of the will on our physical movements.

This experience of utter powerlessness or ineffectiveness may also occur in respect of *controlling our own processes of thought and imagination*, which we normally take as a matter of course. Patients feel that something has taken possession of their head; they cannot concentrate on their work; thoughts disappear just when needed; inappropriate thoughts intervene. They feel sleepy and absent-minded. In addition to an inability to work, they have no wish to work. But they can be successful with mechanical activities and will often undertake these gladly; in this they differ from patients in states of inhibition and fatigue. Such phenomena are common in the initial stages of the process; intelligent patients will themselves say their condition is different from ordinary fatigue, with which they are quite familiar.

With some acute psychoses patients experience the very opposite of what we have so far described. They get an *immense feeling of power*. It is as if they could indeed do anything. Physically they feel giants in strength; a hundred people could not master them. Their power, they feel, has a remote extension. Linked with this sometimes are certain feelings of immense responsibility; an awareness that they are to perform world-shaking deeds:

Nerval described the following: 'I had an idea that I had become enormous, and through a flood of electrical power I would throw everything near me to the ground. There was something comical in the extreme care I took to hold my powers under control, to save the life of the soldiers who had captured me. . . .'

A schizophrenic patient wrote: 'All the people I speak to believe in me wholly and do what I tell them. No one tries to lie to me; most of them have ceased to believe

¹ Julius Pikler, 'Über die Angriffspunkte des Willens am Körper', *Z. Psychol.*, vol. 110 (1929), p. 288.

in their own words. I have an indescribable influence on my surroundings. I think my look beautifies other people and I try this magic out on my nurses; the whole world depends on me for all its weal and woe. I will improve and rescue it' (Gruhle).

Other patients will be surprised to find at the beginning of their psychosis that they have an *unusual power and clarity of thought*. Thoughts flow into their mind just as they want them with a facility they have hitherto never had and with a surprising copiousness. Now they feel capable of solving every possible problem as if it were child's play. Their mental powers have been multiplied a thousandfold.

§ 7. AWARENESS OF THE SELF

Psychological preface. Self-awareness is contrasted with object-awareness. As we have had to differentiate a number of modes of object-awareness, so we have to do the same for self-awareness, since the *modes in which the self becomes aware of itself* do not present any single or simple phenomenon. Self-awareness has *four formal characteristics*: (1) the feeling of activity—an awareness of being active; (2) an awareness of unity—I am aware at any given moment that I am a unity; (3) awareness of identity—I am aware I have been the same person all the time; (4) awareness of the self as distinct from an outer world and all that is not the self. Within these four formal characteristics, self-awareness displays a range of developmental levels from a plain, bare existence to a full life with a conscious wealth of sensitive experience. In the course of such development, the self grows aware of itself as a *personality*. Abnormalities of self-awareness show themselves typically as a lack of one or other of these formal characteristics. In the end we come to abnormalities in the awareness of personality, at which we will briefly glance.

(a) *Activity of the self*

Self-awareness is present in every psychic event. In the form of 'I think' it accompanies all perceptions, ideas and thoughts, while feelings are passive, and instinctual drives are impelling states of the self. All psychic life involves the experience of a *unique and fundamental activity*. Every psychic manifestation, whether perception, bodily sensation, memory, idea, thought or feeling carries *this particular aspect of 'being mine'* of having an 'I'-quality, of 'personally belonging', of it being one's own doing. We have termed this '*personalisation*'. If these psychic manifestations occur with the awareness of their not being mine, of being alien, automatic, independent, arriving from elsewhere, we term them phenomena of *depersonalisation*.

1. *Alteration in awareness of existence.* A group of phenomena which represent defective awareness of one's own activity may be seen in what we call depersonalisation and derealisation, in the cessation of normal sensory experience of one's body, in the subjective inability to imagine and remember, in complaints of inhibited feeling and in the awareness of one's behaviour becoming automatic. This whole group of phenomena are obviously related

to each other. Here we shall quote only the descriptions of patients¹ who are aware of their existence as an *awareness of having lost the sense of self*:

Patients showing a mild degree of this phenomenon feel they are estranged from themselves; they feel they have changed, become mechanical; they will speak figuratively of a twilight state, they say they are no longer their natural selves. Amiel records the following in his diaries: 'I feel nameless, impersonal; my gaze is fixed like a corpse; my mind has become vague and general; like a nothing or the absolute; I am floating; I am as if I were not.' Patients also say: 'I am only an automaton, a machine; it is not I who senses, speaks, eats, suffers, sleeps; I exist no longer; I do not exist, I am dead; I feel I am absolutely nothing.'

A patient said: 'I am not alive, I cannot move; I have no mind, and no feelings; I have never existed, people only thought I did.' Another patient said: 'The worst thing is that I do not exist.' 'I am so non-existent I can neither wash nor drink.' It is not that she is nothing but she just does not exist; she only acts as if she did; she speaks of 'swirling'—doing something 'out of not-being'; nothing she did was out of a sense of 'I am' (Kurt Schneider).

The remarkable thing about this particular phenomenon is that the individual, though he exists, is no longer able to feel he exists. Descartes' 'cogito ergo sum' (I think therefore I am) may still be superficially cogitated but it is no longer a valid experience.

2. *Alteration in the awareness of one's own performance.* Loss of the sense of existence can also be conceived as a reduction in one's awareness of performing one's own actions, an awareness which normally accompanies every psychic event. In the natural course of our activities we do not notice how essential this experience of unified performance is. We take it for granted that when we think, it is we who think, a thought is our thought and the notions that strike us—and perhaps make us say not 'I think' but 'it occurs to me'—are still at the same time our thoughts, executed by us.

This general awareness of one's own performance can alter in a number of directions, which are quite incomprehensible, difficult to imagine and not open to empathy. With compulsive phenomena, where the patient cannot rid himself of haunting tunes, ideas or phrases, we can still find some measure of comprehension. The patient takes the distressing part of the experience as part of his own thoughts. But the thought-phenomena of schizophrenics is something quite different in that they talk about 'thoughts made by others' (passivity-thinking) and 'thought-withdrawal', using words coined by themselves, which psychopathology has had to take over. Patients think something and yet feel that someone else has thought it and in some way forced it on them. The thought arises and with it a direct awareness that it is not the patient but some external agent that thinks it. The patient does not know why he has this thought nor did he intend to have it. He does not feel master of his

¹ Janet, *Les obsessions et la psychasthenie*. 2nd edn. (Paris, 1908). Österreich, *Die Phänomenologie des Ich* (Leipzig, 1910).

own thoughts and in addition he feels in the power of some incomprehensible external force.

'Some artificial influence plays on me; the feeling suggests that somebody has attached himself to my mind and feeling, just as in a game of cards someone looking over one's shoulder may interfere in the game (a schizophrenic patient).

Just as the patients find their thoughts are '*made*' for them so they feel that these are being *withdrawn*. A thought vanishes and there arises the feeling that this has come about from outside action. A new thought then appears without context. That too is made from outside.

A patient tells us: 'When she wants to think about something—a business matter for instance—all her thoughts are suddenly withdrawn, just like a curtain. The more she tries the more painful it is—(a string seems pulling away from her head). Still she succeeds in holding on to them or regaining them.'

It is extremely difficult to imagine what the actual experience is with these 'made thoughts' (passivity thinking) and these 'thought withdrawals'. We just have to accept the account as outsiders, relying on the descriptions we are given of these otherwise easily recognisable phenomena, which are not to be confused with unusual thought-content, poorly grounded notions or compulsive phenomena.

There is still another abnormal mode in which thoughts are presented. No one speaks them to the patient nor are the thoughts 'made' nor does the patient oppose them in any way. Nevertheless the thoughts are not his own, not those which he usually thinks; they are suddenly implanted, coming like an inspiration from elsewhere:

'I have never read nor heard them; they come unasked; I don't dare to think I am the source but I am happy to know of them without thinking them. They come at any moment like a gift and I do not dare to impart them as if they were my own' (Gruhle).

Any mode of activity may acquire this sense of being 'artificially made'. Not only thinking is affected, but walking, speaking and behaving. These are all phenomena that exhibit *influences upon the will*. They are not the same as those of which people complain who suffer from personality disorders and depression and who declare it is as if they themselves were no longer acting but have become mere automata. What we are discussing here is something radically different, an *elementary* experience of *being actually influenced*. Patients feel themselves inhibited and retarded from outside; they cannot do what they want; when they want to lift something, their hand is held; some psychic power is at work. They feel as if they were pulled from behind, immobilised, made of stone. They suddenly find they cannot go on, as if they were paralysed and then suddenly it has all gone again. Their speech is suddenly arrested. They may have to make involuntary movements; they are

surprised to find their hand is led to their forehead or that they have attacked someone else. They did not intend it. This is all felt as some alien, incomprehensible power at work. A patient of *Berze* said: 'I never shouted, it was the vocal chords that shouted out of me.' 'The hands turn this way and that, I do not guide them nor can I stop them.' Here are phenomena which seem to lie outside our imagination. There is still some similarity with a volitional act, yet it seems to be an autistic, reflex movement which we have merely observed. Its performance is 'criticised' not executed by a self. The following passages from a self-description will make the matter clearer:

'The "shouting miracle" is an extraordinary occurrence; the respiratory muscles are put into motion, so that I am forced to shout out, unless I make an enormous effort at suppression, which is not always possible in view of the suddenness of the impulse, or rather I have to concentrate relentlessly on it . . . At times the shouting is so repetitive that my state gets unbearable . . . since words are shouted my will is of course not altogether uninvolved . . . It is only the inarticulate shouting which is really like a compulsion and automatic . . . my muscles are subject to certain influences which can be ascribed only to some external force. . . . The difficulties too, which get in my way when I want to play the piano, defy description—paralysis of my fingers, alteration of my gaze, misdirection of my fingers on the keys, quickening of tempo through premature movement of the finger muscles. . . .' We also find in this patient analogous experiences in the field of inner volition—'passivity thinking' (made thoughts) and 'thought-withdrawal', etc. (Schreber).

We also find that instinctual activities are experienced as 'made' in this sense, sexual drives in particular:

A schizophrenic patient describes suprasensual enjoyment with young girls with no physical contact . . . 'a pretty girl flirts in passing . . . attention is roused . . . one gets acquainted rather like a pair of lovers . . . after a little while she makes gestures towards her lap . . . she wants to arouse sexual stimulation from a distance telepathically without physical contact and bring about an ejaculation as with a real embrace'.

Another patient said: 'My character is not mine, it has been "made".'

(b) *The unity of the self*

The experience of the basic unity of the self can undergo some notable changes. Sometimes, for instance, while talking we may notice that we are talking rather like an automaton, quite correctly may be, but we can observe ourselves and listen to ourselves. Should this dissociation last any length of time, disturbances will occur in the flow of thought, but for a short time we can ourselves experience without any disturbance that 'doubling' of personality which patients describe to us in much more elaborate terms.¹ This is not the old familiar situation in which we say 'two beings live within my breast' or where reason struggles with passion. Nor must we be misled by

¹ Janet, *Les obsessions et la psychasthenie.*, 2nd edn. (Paris, 1908), pp. 319–22. Österreich, *Die Phänomenologie des Ich* (Leipzig, 1910), pp. 422–509.

patients who interpret their compulsive ideas as a doubling of personality or announce that they conclude they have a double self for one reason or another (e.g. heautoscopic hallucination). Nor is the experience in question to be confused with the so-called 'double personality' which appears objectively in alternating states of consciousness. The real experience of *being in two*, of *being doubled* occurs when both chains of psychic events so develop together that we can talk of separate personalities, each with their own peculiar experiences and specific feeling-associations, and each perfectly alien and apart from the other. The old autobiographical sketch of Father Surin¹ gives a very vivid description, if we allow for the religious language in which it is cast:

'Matters have got so far that I believe God, because of my sins, allows something unique to happen in Church (the Father was practising exorcism). The devil leaves the body of the possessed person and rushes into mine, throws me on the ground and beats me violently for some hours. I cannot really describe what goes on; the spirit unites with my own and robs me of consciousness and the freedom of my own mind. It reigns in me as another self, as if I *have two minds*, one dispossessed of the use of its body and pushed into a corner, while the other intruder ranges round unchecked. Both spirits fight within the same body and *my mind is divided*, as it were. One part is subject to this devil, the other obeys its own motives or those which God gave it. I feel at the same time a deep peace and that I am in accord with God without knowing whence comes the raving and hate of Him which I feel inside me, a raging desire to tear myself away from Him that astonishes everyone; but I also feel a great and mellow joy which cries out as the devil does; I feel damned and afraid; as if my one mind is pierced with thorns of despair, my own despair, while my other mind indulges in derision and cursing against the author of my distress. My shouts come from both sides and I cannot decide whether pleasure or fury prevails. Violent trembling seizes me on approaching the Sacrament; it seems due both to distress at its presence and to adoration of it; I cannot stop it. One mind bids me make the sign of the cross on my mouth, the other mind stops me and makes me bite my fingers furiously. During such attacks I can pray with greater ease; my body rolls on the ground and priests curse me as if I were Satan; I feel joyfully that I have become Satan, not in revolt but because of my own miserable sins'. (The Father seems to have fallen ill in due course with a schizophrenic process.)

It is rare to get a description of these remarkable experiences of a double self, where the self is really one, yet experiences itself as two and lives discretely in both sets of feeling-associations, and knows them both. The fact of this double existence cannot be denied and every formulation of the experience always carries this contradictory quality.

(c) Identity of the self

The third characteristic of self-awareness is the awareness of one's identity through the passage of time. We need only think of statements made by certain schizophrenic patients. They will speak of their previous life before the

¹ Ideler, *Versuch einer Theorie des religiösen Wahnsinns*, vol. 1, pp. 392 ff.

onset of their psychosis and say this was not their own self, but somebody else. A patient said:

'When telling my story I am aware that only part of my present self experienced all this. Up to 23rd December 1901, I cannot call myself my present self; the past self seems now like a little dwarf inside me. It is an unpleasant feeling; it upsets my feeling of existence if I describe my previous experiences in the first person. I can do it if I use an image and recall that the dwarf reigned up to that date, but since then his part has ended' (Schwab).

(d) Awareness of self as distinct from the outside world

The fourth characteristic of self-awareness is the clear sense of the self confronting an outside world. According to rather obscure utterances of schizophrenics patients seem to identify themselves with the objects of the outer world; they suffer from what others do. If someone is spinning, they say 'why are you spinning me?' or, when a carpet is beaten, say 'why are you beating me?' (Kahlbaum). A schizophrenic patient said: 'I saw a vortex whirling before me—or rather I felt myself whirling outside in a narrow space' (Fr. Fischer). During mescalin intoxication one report reads: 'I felt the dog's bark painfully touching on my body; the dog was in the bark and I was in the pain' (Mayer-Gross and Stein). During hashish intoxication: 'Just now I was a piece of apple' (Fraenkel and Joel, s. 102). In this same category we can place patients who for brief moments think they are vanishing; they are 'like a mathematical point' or they continue to live only in the objects around them. Baudelaire describes something of this sort in hashish intoxication:

'Sometimes one's personality disappears and objective reality, as with the pantheistic poets, springs up in its place, but in such abnormal fashion that the sight of external things makes you forget your own existence and soon you are flowing into them. You look at a tree bending in the wind. As a poet you see it as a perfectly natural symbol of yourself, but in a few seconds it has become really you. You ascribe to it your passion, longing and melancholy. Its sighing and waving become yours and soon you are the tree. So with the bird sailing about in the blue sky; it may first only symbolise the eternal longing to soar above human concerns but suddenly you have become the bird itself. Let us imagine you are sitting there smoking your pipe; you let your attention linger a little too long on the blue pipe-smoke . . . by some peculiar equation you feel yourself wreathing up, you will become the pipe (into which you feel yourself pressed like the tobacco) and credit yourself with the strange ability to smoke yourself.'

A schizophrenic patient said: 'The sense of self had dwindled so that it was necessary to complement it with another person—rather like the wish for stronger selves to be near and protective . . . I felt as if I were only a little piece of a person' (Schwab).

We now add a few reports from patients about similar experiences, the basis of which must be some cancellation of the distinction we normally draw between the self and the outside world. It is a frequent remark of schizo-

phrenics that *the whole world knows their thoughts*. Patients answer all questions by saying, 'Why do you ask me—you know it already':

Patients notice that other people know their thoughts as soon as they have them. Or, in a way similar to passivity-thinking and thought-withdrawal, they experience the feeling of being exposed to everybody. 'I believe I can no longer hide anything; I have experienced this over the last few years; all my thoughts have been guessed. I realise I can no longer keep my thoughts to myself.'

(e) *Awareness of one's personality*

Once the merely formal awareness of self acquires content, we can speak of awareness of personality. This, in its totality of content, provides subject-matter for the psychology of understandable connections. So far as phenomenology is concerned, the basic characteristics are as follows:

1. The individual can have *two distinctive relationships to his own experience*. Many instinctual activities are sensed by the personality as a natural expression of itself and its momentary state. They are felt to be entirely understandable in terms of the personality and experienced as its own instinctual drives. This is so for quite abnormal, sado-masochistic drives, urges to suffer, etc. There are other instinctual drives, however, which the personality experiences as alien, unnatural, not understandable, not as its own. They are felt as something imposed. The phenomenological opposites of subjectively understandable and ununderstandable drives can be contrasted with drives that are objectively understandable and ununderstandable to the observer. The two sets need not, however, tally. Perverse sexual drives which may occur at the beginning of a process (for instance, in senility) can be subjectively experienced and recognised as the patient's own, whereas objectively they may be seen as something quite new, not understandable, and due entirely to the morbid process itself. On the other hand, instinctual drives which have become an irresistible habit may be subjectively experienced as something alien, whereas objectively they are regarded as quite understandable.

2. The feeling of *change in one's own personality* is a normal experience, particularly at the time of puberty. Then many different and stormy impulses arise in the psyche, and new experiences emerge from obscure depths. There is a strong awareness—sometimes painful, sometimes delightful, sometimes crippling, sometimes lending wings—that one has become another and a new person. The awareness of patients in the early stages of their illness comes very close to this. They are conscious of something new and puzzling; they feel they are different. They feel that their awareness of their own personality has become uncertain, that there is something alien against which they have to fight. At last there comes the awareness of being wholly overpowered. Some patients will say that they think differently, feel and sense differently from what they did before. Some profound transformation has taken place. Others say that after an acute psychosis the change which they feel is something subjectively pleasurable; they are more indifferent, less excited, not so easily

'moved to their depths'; at the same time, they talk more easily, they have less reticence and are more certain in their conduct. A patient wrote:

'I was in a state of great physical weakness for several years; because of this morbid physical state, I turned gradually into a passionless, calm and reflective person. This was the opposite of what one might have expected, in view of the influences at work (telepathic effects).'

A patient complained: 'She longs for herself but cannot find herself; she has to look for the person inside her'—'Two years ago I started to wither'—'I have lost myself—I am changed and without defence' (Gruhle).

3. *Lability in awareness of the personality* is experienced in all sorts of ways in the acute, florid psychoses. The following self-description illustrates this phenomenon clearly, and the patients themselves sometimes call it '*taking part in the play*'. The example shows well the awareness of lability at the same time as this is being experienced:

'I was in a state bordering on actual delusion, yet still clearly distinguishable from it. It was a state that recurred frequently in the course of my illness, when, half-driven by inspiration, half-knowing and wanting it, I created a part for myself which I played out like an actor, declaiming it; I lived myself into it and acted according to it, without considering myself entirely identical with the character.' Among the parts played were 'the personification of a wave', 'the prancing of a fiery young horse', 'a young sister of Queen Sulamith in the noble song', 'the daughter of Alfred Eschers', 'a young French woman' or 'agriculture'—in which the hospital courtyard was the estate (Forel).

In similar psychoses patients experience themselves as Messiahs, divine personages, witches, or as historical characters. In the paranoid psychoses (in which Bonhoeffer¹ has described the lability of this personality-awareness), we can see the patient elaborate the role—say that of some world-famous inventor—and maintain it tenaciously over a long period of time. During these fantastic transformations it may happen that the patients remain aware of their previous identity; they are still the same but are now Messiahs, etc.

(f) *Multiple personalities: dissociated personality*

Such a doubling or multiplication of the self can take place that patients find themselves confronted by *entirely alien forces*, which behave as if they had a personality. They not only use devious means, with certain obvious purposes, but they have a definite character, friendly or hostile. At the most elementary level in the formation of these entities we find the so-called simultaneous hallucination of several senses. The personality which the patient visually hallucinates also talks.² Voices, visual hallucinations, delusions of influence, doubling of body-awareness, may all combine and shape themselves eventually

¹ Bonhoeffer, 'Klinische Beiträge zur Lehre von den Degenerationspsychosen', *Alt's Samml.*, vol. 7 (Halle, 1907).

² Specht, *Z. Psychopath.*, vol. 2.

into veritable *personifications*, a name aptly given to them by a patient (Staudenmaier):

Staudenmaier, Professor of Chemistry, described these personifications among his pathological experiences. He did not regard them (as the other schizophrenic patients did) as strange beings, but as '*emancipated parts of his unconscious*'. We will follow his account, which has certain affinities with that of Father Surin quoted above: 'Single hallucinations gradually emerged more definitely and returned more often. At last they formed into *personifications*; for instance, the more important visual images regularly combined with the corresponding auditory images, so that the emerging figures began to speak to me, gave me advice and criticised my actions. A characteristic defect of these personifications is that they really think they *are* what they represent or imitate and therefore they talk and act *in earnest*. For a long time I tried to elaborate them further.' Here are some examples:

A few years ago I was watching some military exercises. I chanced to see one of the Court personages at close quarters repeatedly and heard her speak. Later I had a vivid hallucination—as if I heard her speak again. At first I paid no attention to this frequently recurring voice and for a time it disappeared. At length I had the feeling more and more often and clearly that this personage was near me and the visual image, by constantly forcing itself on me along with the inner voice, became clearer too without at first becoming a true hallucination. As time went on personifications of other Court people appeared, particularly the personification of the Kaiser, then the dead Napoleon I. Gradually I was overcome by the feeling, a peculiarly exalted feeling, that I was dictator and ruler of a great nation; my chest swelled on its own, my whole posture became stiff and military—proof that the respective personification had gained considerable influence over me. For instance, I heard the inner voice speak in grandiose terms: I am the German Kaiser. After a time I grew tired; other images forced themselves on me and I relaxed. Out of all the royal personages who appeared to me, a concept of 'Majesty' gradually developed. My majesty greatly desired to be a foremost, or rather royal and ruling personage at least, and—as I became more enlightened about these personages—to see and imitate them. Majesty interests itself in military displays, cultivated living, good manners, rich food and drink, order and elegance in my home, distinguished attire, fine, erect military bearing, exercise, hunting and other sports and tries to influence my mode of life accordingly with advice, warnings, orders and threats. Majesty, however, is an enemy of children, of quaint little things, of jokes and making merry, seemingly because it knows the royal personages from their dignified appearance in public or from pictures of them. Majesty is also an enemy of comic papers and magazines with caricatures, and of water-drinking, etc. Physically I am myself somewhat too short for 'Majesty'. The personification 'child' plays a similar role to that of 'Majesty'; there is the childish voice, childish needs and pleasures; there is also the personification 'roundhead' who enjoys jokes and jolly things. All have distinctive voices and one can speak with them as if with different people, 'except that one has to remain within the special field they represent and keep everything else out. As soon as one starts with anything diametrically opposite, the whole idyll vanishes'. The clearly defined personifications were preceded in time by less well-defined and rather hazy ones. 'Sometimes devils seemed let loose. I saw devilish faces repeatedly for quite a long time all perfectly clear and sharp. Once when I was in bed I positively felt someone putting chains

round my neck; then I smelt sulphur, and an eerie inner voice said, "You are now my prisoner—I shall not let you go—I am the devil himself". Threats were often launched at me. I have really experienced it all in myself. Those tales about evil spirits which modern people present as the horror fables of the middle ages and those reports of spiritualists about poltergeists have not been dreamt up out of nothing. The personifications work without relation to the conscious personality but each one of them tries to gain complete control over it. A lengthy battle goes on with them and also between them, since some seek to help the conscious personality. I often observe quite clearly how one or two personifications will help and support each other or how they will secretly conspire to fight against me, the old man—which is the nickname they always use—and annoy me (rather like the situation when telegraphists in a number of stations in a complicated network conspire together without letting the others know). But how they fight against each other and abuse each other.' 'Because of the far-reaching and sometimes pathological influences of certain centres and personifications I could observe how vigorously they fought and how powerfully they tried to force out the feelings and ideas they found unpleasant and assert their own wishes and ideas, so as to improve their position in the organism and make it more influential.' All personifications have something one-sided about them. They are not wholes, only parts which are able to exist as dissociated parts of the unconscious side by side with the conscious personality.

These descriptions show us the *attitude* which Staudenmaier took towards these phenomena. This becomes clearer, as follows: 'Inexperienced in these things, one certainly gets the impression that a mysterious invisible and alien personality is playing a game. This "inner voice" has been acknowledged from time immemorial, has been regarded as divine or devilish.' Staudenmaier, however, felt this to be false; he did feel *possessed* in the same way as the Saints in the Middle Ages, but not by alien powers, only by split-off parts of his own unconscious. 'I considered them as entities that had still got a certain independence of existence, although they were developed for certain partial purposes and were confined once and for all to a definite place in the organism. Because of their one-sided position and purpose, they have certain separate memories and separate interests which do not necessarily coincide with those of the conscious self. With nervous people particularly they often gain an extraordinary ascendancy over the affect and over the whole mode of life of the conscious self, since they are themselves capable of such diverse affects. If they are capable of learning, they can eventually develop, as with me, into very intelligent part-existences with whom one has then to reckon seriously.' Normal people get to know of the influence of their unconscious from the obscure feelings they experience; but Staudenmaier made contact with his dissociated personalities in articulate conversation and thus experienced his unconscious more vividly than is otherwise possible. He does not believe that these dissociated entities are in principle different from what is contained in the normal unconscious. 'There are a number of intermediary stages starting from the complete and autocratic psychic unity of normal people down to a pathological splitting-up and far-reaching emancipation of individual parts of the brain.' Staudenmaier 'took as evident that the human being represented a single psychic entity. We should not forget that we have been dealing here with a state that passed directly into the pathological. Still the fact that such phenomena are possible remains of the utmost importance for any evaluation which we may make of the human psyche and its nature.'

§ 8. PHENOMENA OF SELF-REFLECTION

Psychological preface. I am not only conscious in the sense of having certain inner experiences, but I am turned back on myself—reflected back—in consciousness of self. In the course of this reflection I not only come to know myself, but I also influence myself. There is not only something happening within me, but I instigate, arouse and shape a happening within me. I can, as it were, draw reality into me as well as evoke and guide it.

Human development in the individual and in history is not only a passive transformation as with all other biological happenings, but it is an inward effort of mind and spirit working on its own, driving itself forward in the universal dialectic of opposition and transformation.

For this reason, there is no longer any such thing as unmediated psychic life. Thinking and volition beget reflection and with the reflective process begins the indirect alteration of all direct experience. Once, however, direct experience ceases to be the sole determining factor, we not only find expansion, a general unfolding, and new dimensions of experience, but also interferences of an entirely new character. For instance, to take the simplest, basic immediacies, the instincts, not only can they be assisted by reflective purpose, but they can be thoroughly confused and obliterated by it.

Interference of this sort arises when the mechanisms that realise and co-ordinate reflection with immediacy do not take their natural course, which remains obscure but maintains all that is self-evident, beneficial and unproblematical in our lives, reflect how we may.

Human psychic life can no longer be an immediate experience such as that of animals or idiots. Should it become a purely elementary process, we should have to consider it disturbed; equally so if it were nothing but pure reflection.

The fact that the immediate phenomena we experience do not remain immediate but are constantly being transformed by reflection does not obliterate for most of us their immediate character, as indeed we have tried to describe it in all its great variety. But the fact of alteration remains a basic one and while we investigate phenomena we should keep our eye carefully on the possible changes wrought by reflection. In particular it may be the source for new psychopathological phenomena which we will illustrate by three examples: *Firstly*, purposeful reflection may lead to disingenuousness; in hysterical persons it may deceive us with what appear to be real experiences. *Secondly*, it may throw instinctual activity, including the bodily functions, into confusion and, *thirdly*, it may lead to compulsive phenomena, unique psychic experiences that are possible only on the basis of reflection and volition. In all these three instances purposeful reflection is indispensable for the production of the phenomena which clearly did not intend themselves.

The immense importance of reflection when it has contents to work on will be discussed when we come to the chapter on meaningful psychic connections. All the pathological manifestations which we review here as phenomena will find a natural place there. They are but moments in a person's life and their content needs to be understood in the context of that life. Here however we are concerned only with the phenomena of experience as such, and the various types and forms. We are not dealing with their content or their meaning.

(a) Psychic life—mediated and unmediated by thought

Normal, everyday psychic life is always in some way rooted in reflection. In this it contrasts with psychotic, elementary experience. For instance, if we contrast delusion proper with an ordinary mistake, a vivid awareness with an 'as if' experience, melancholia with a neurotic depression after an unpleasant occurrence, hallucination with projected fantasy, the experience of a double self with the feeling of a 'divided self', an instinctual drive with a simple wish, or motor agitation with a meaningful motor discharge of emotion, we see a number of elementary, immediate and irreducible experiences on the one hand, and on the other something that has evolved and grown, something that is rooted in ideas and in living into these ideas with some intensity, something that is perhaps a little faint and secondary by comparison, though the momentary affect and visible passion may be striking. What is elementary and immediate cannot be influenced by psychological means, though the latter may influence anything that is mediated by thought. What is elementary is primarily without content and gains this only secondarily, but whatever has been evolved conceptually starts from content and operates in reverse. All that is understandable and has developed understandably stands contrasted with phenomena that are obscure in their causes, exist incomprehensibly and break into the psyche with an elementary force. Whatever is purely elementary in this way belongs to a morbid process.

Where the understandable development is a healthy one, there is nothing disingenuous or deceptive about it but it is the undistorted reality of psychic development following its proper course. Yet whatever is mediated through concepts may become a distorting factor. Deception, difficult to detect, can intrude subtly along hidden connections. The smooth, well-adapted existence of the animal ceases once immediacy is at an end. Animals live beyond truth and untruth, but I, the human being, experience life and cannot simply leave it at that. I believe I am myself but I develop intentions and grow disingenuous in imitation. People with pronounced hysterical endowment can reach extraordinary lengths in this respect so that their psychic life which is entirely derived and thought up, totally artificial and treacherous, can become for the time being an elementary experience, gripping and immediate. For instance, a young man suffering from schizophrenia lived with a woman hysteric who shared many of his hallucinations and anxieties. The patient said of her, 'If one gets caught up, one is nervous; once one has the actual experience, one is not at all nervous; in my case the whole thing is much quieter and clearer.'

(b) Disturbance of instinct and bodily function

So far as our bodily functions are concerned, we live successfully because we rely all the time upon the unconscious guidance of our instincts. But these in their turn are developed by exercise, and refashioned and enriched by our consciously inspired activity. The details of this process are extremely complicated and we can never wholly disentangle them. Our biological inheritance

and the acquisitions of our personal history fuse into one. But reflection, which is indispensable for the development and stability of both, may in itself create a disturbance.

Such functions as urination, walking, writing, sexual intercourse can no longer be carried out. The affected person feels he is losing contact as well as becoming ridiculous. He wants to be able to do these things but directing his attention to them only makes it worse. Fear of failure makes it worse still.

Anxious attention to health brings about hypochondriacal complaints. As the result of constant reflection on the body and its functions, subjective syndromes develop with partly objective effects. Finally, expectations and fears drive consciousness into a life which concerns itself chiefly with the body and which in the process of looking for itself, actually loses itself.

(c) Compulsive phenomena¹

1. Psychic compulsions. Experience of psychic compulsion is an ultimate phenomenon. I may feel under quite normal conditions that I am being driven, impelled or overpowered not only by outer forces and other people but by my own psychic life. We have to keep this normal phenomenon well in mind and realise that it is strangely possible for us to oppose ourselves, want to follow an instinctual drive, yet fight it, want and yet not want. Otherwise we shall not properly understand the phenomena described in psychopathology as compulsive ideas, compulsive drives, etc.

Normally the self lives freely in its perceptions, anxieties, memories and dreams. This is so whether it surrenders itself to them instinctively or whether it deliberately chooses what it will attend to, what it will make the object of its affections. Now should the self be no longer master of its choice, should it lose all influence over the selection of what shall fill its consciousness, and should the *immediate content of consciousness remain irremovable, unchosen, unwanted*, the self finds itself in conflict faced with a content which it wants to suppress but cannot. This content then acquires the character of a psychic compulsion. This is not the kind of compulsion we feel when we are suddenly distracted by something catching our attention, but it is a compulsion from within. Instead of the normal *consciousness of controlling* the sequence of events (Kurt Schneider) there arises a *consciousness of compulsion*, the person cannot free his consciousness if he would.

We do not speak of a psychic compulsion when in the course of ordinary instinctual experience our attention is drawn to one thing or another or some desire is awakened. Psychic compulsion is possible only where there is a *psychic life subject to a certain degree of volitional control*. Psychic events can become *compulsive events* only

¹ Compulsive ideas: see Friedmann, *Msch. Psychiatr.*, vol. 21. Compulsive phenomena: see Lowenfeld, *Die psychischen Zwangsscheinungen* (Wiesbaden, 1904); also Bumke, *Alt's Samml.* (Halle, 1906) (he defines and restricts the old concept created by Westphal). Kurt Schneider, *Z. Neur. (Ref.)* (1919). Critical bibliography, also 'Die psychopathische Persönlichkeiten', 5th edn. (1942), pp. 65–75. H. Binder, *Zur Psychologie der Zwangsvorgänge* (Berlin, 1936). Straus, *Msch. Psychiatr.*, vol. 98 (1938), p. 61 ff. Freiherr v. Gebstallt, 'Die Welt des Zwangskranken', *Msch. Psychiatr.*, vol. 99 (1938), pp. 10 ff.

when they contain an experience of self-activity. There is, therefore, no psychic compulsion where there is no volitional control and no choice, as with idiots and very young children.

All psychic events that contain an element of deliberation can become characterised by compulsion, and we use the prefix 'compulsive' when we wish to emphasise any one of them. Where the self tries but is unable to withdraw its attention from some hallucination, sensation or anxiety, we may speak of compulsive hallucinations, compulsive sensations, compulsive anxiety, etc. *Compulsion is co-extensive with the range of the individual's volition.* Perception retains a compulsive character only as long as I cannot divert my sense-organs or close them against the stimulus.

Compulsion as so far described refers only to the *form in which psychic events appear*. As to content, this may be meaningful and integrated with the personality; for instance, the fear of confinement which a woman experiences not for the moment only but with her whole personality as a *justifiable* anxiety. However, in so far as she may try in vain to think of something else, she experiences this anxiety as a compulsion. Yet she may realise that her fear is in fact unjustified and refuse to identify herself with it, considering it *groundless and silly*, not *her* fear. The anxiety is compulsive in character, related in content to the self, a possible anxiety but essentially alien to the self. In other cases the content of ideas is entirely *nonsensical*, the alien quality comes forward in a drastic manner (the individual cannot take a walk without having injured someone behind him in the eye, unnoticed, with his umbrella). In the strict sense of the term, compulsive thoughts, impulses etc., should be confined to anxieties or impulses which can be experienced by the individual as an incessant preoccupation, though he is convinced of the *groundlessness* of the anxiety, the *senselessness* of the impulse and the *impossibility* of the notion. Thus compulsive events, strictly speaking, are all such events, the *existence* of which is strongly resisted by the individual in the first place and the *content* of which appears to him as groundless, meaningless or relatively incomprehensible.

We can gather these compulsive phenomena into two groups if we want to get some *comprehensive picture* of them. *Firstly*: compulsive phenomena in the wider sense, where the main characteristic is the feeling of subjective compulsion and the content is indifferent (formal compulsive thinking). An image, thought, memory or question may intrude into consciousness repeatedly. One is haunted by a tune, for example, but it need not be such an isolated content only; there may be an intrusive re-orientation of one's thinking; one has to count, for example, spell names, ponder insoluble and silly problems (rumination) etc. *Secondly*: compulsive phenomena in the narrower sense, where the further characteristic of 'something alien' is added and the contents acquire strong affective tone. This group may be subdivided:

(1) *Compulsive affects*—strange, unmotivated feelings, against which the affected person struggles without success. (2) *Compulsive beliefs*—the patient is compelled to consider something true although he is convinced it is not. (3) *Compulsive urges*—senseless urges out of keeping with the personality—e.g. to kill one's own child. Where these urges tend to recur repeatedly in groups we can speak of *compulsive states*, compulsive excesses, for instance, of which compulsive cleanliness would be an example.

2. *Compulsive belief.* The characteristic of compulsive ideas is that the individual believes what is often a meaningful content yet knows the content

is false. A *struggle* ensues between conviction and knowing the opposite to be true. We must distinguish this phenomenon from ordinary doubt and from firm conviction. To give an example:

Emma A. had been through many phases of an affective disorder. Each time she recovered completely. For some weeks she had again been ill, homesick and depressed and she was in hospital. Two men were teasing her, tickling under her armpits and touching her on the head. She objected to this: 'I am not going to flirt around in the hospital'. Then the thought occurred to her that the men might have assaulted her and she might be expecting a baby. This idea, which was quite baseless, came to dominate her more and more. Here are some of her comments: 'I put the idea away sometimes but it keeps on coming back.' Her thoughts revolve round the topic. 'All day long I turn over in my mind how it all happened; they wouldn't have had the nerve.' She is certain she is having a child but immediately afterwards she says: 'I am not quite certain, there is always a bit of doubt'. She tells the story to her sister and they laugh about it. She had to go to the doctor to be examined and resisted this because the doctor might laugh at her about it, 'such a stupid idea'. The doctor found nothing. This reassured her for a day but then she ceased to believe him, perhaps he only wanted to reassure her. 'I simply don't believe people any more.' She expected to miss her periods; when menstruation started she was reassured for the time but she was not convinced. 'I try to sort it all out for myself; I sit down and think . . . it can't be true, I haven't been a bad lass and then I think again . . . and yet I tell myself, one fine day it'll turn out to be true . . .' 'I go on like this all day . . . there is always a wrangle going on inside me. It may have been like this or like that, it's always to and fro.' She was extremely restless. She was always thinking she was big with child and that everyone noticed it—'I keep on thinking it will be terrible when it comes'. Sometimes the patient laughs about all this nonsense which she thinks. Asked about her illness, she denies she is ill but says, 'I know that it has always gone away before.'

We may say in conclusion that the patient's ideas all group round one central idea which keeps recurring in her consciousness involuntarily (compulsive thinking); the validity of these ideas forces itself on the patient in the face of her conviction to the contrary (compulsive belief).

These compulsive beliefs need to be distinguished from three other phenomena, that is from delusion, from over-valued ideas and from normal doubt. In the case of *delusion* a judgment is made which is held on to with full conviction, not only with a consciousness of validity but with a sense of absolute certainty. In compulsive belief, there is no question of absolute certainty. With *over-valued ideas* belief is strong, the topic itself is the only thing that matters and the psychic life is normal and unchanged so far as the individual himself is concerned, whereas in compulsive belief he considers his belief to be morbid. In the case of *ordinary doubt* a judicious weighing of the pros and cons leads to an indecision, experienced as a psychologically unified judgment on the situation. In the case of compulsive belief, however, conviction is felt simultaneously with a knowledge of the very opposite. As an illustration, we might take the *competing visual fields* in the stereoscope (Friedmann). There is a constant contest going on between a consciousness

of validity and of non-validity. Both push this way and that, but neither can gain the upper hand. In normal doubt, there is not this experience of right and wrong, but as far as the subject himself is concerned, a single, unified act of judgment establishes the matter as undecided.

3. *Compulsive urges and behaviour.* When urges arise in us and the consequences of acting them out are of some importance, there may arise a conflict of motive. Decision is reached in two ways, either there is a feeling of self-assertion, conscious freedom or defeat, a consciousness of having to submit. This is a normal and universal phenomenon. In the latter case, however, there may be the added awareness of an alien urge which does not arise as one's own, foreign to one's nature, apparently meaningless, incomprehensible. In these circumstances if action follows, we speak of compulsive behaviour. If the urge is suppressed and does not issue in behaviour, we speak of *compulsive urge*. Often individuals who are experiencing such phenomena will comply with these urges, when they are harmless (e.g. move chairs, swear, etc.), but they will successfully resist criminal urges or those with distressful consequences, e.g. murder of a child, suicide (e.g. throwing oneself from a great height).

Compulsive urges can be partly understood as secondary compulsive behaviour emerging from other compulsive events, e.g. a man who has the compulsive belief that he has given some promise which he cannot fulfil may ask for a written certificate that he has not done so. This secondary behaviour includes many defensive acts taking place on the basis of other compulsive events, e.g. washing through fear of contamination. The behaviour develops into a ritual and is expected to serve as a defence against disaster, one magic against another; the performance grows all the more irksome because it never brings fulfilment. Performance becomes scrupulously exact, distractions must be excluded and there is an engagement of the whole mind. Every possibility of error arouses doubt as to the effectiveness of the ritual and increases the demand for further acts to make certain, and, if there is further doubt, there must be a full repetition from the start; in this way any definite result in the form of a successful completion of the whole behaviour becomes impossible. When the compulsive urges are surrendered to, there is, as in impulsive action, a vivid feeling of relief. If, however, they are resisted, severe anxiety arises or other symptoms such as motor discharges. To get rid of the anxiety, patients must once more carry out the meaningless ritual of harmless acts. Fear of suffering this anxiety is enough to arouse it, and within this vicious circle the phenomenon pursues its increasingly painful and self-aggravating course.

4. *Phobias.* Patients are beset by an irresistible and terrifying fear of perfectly natural situations and performances: for instance, fear of closed spaces or of crossing open places (agoraphobia). The phenomenon has been described as follows:

Patients suffer an enormous anxiety, real fear of death together with terror, when they want to cross an open space, find themselves in empty streets, or stand outside tall houses or in other similar circumstances. They feel oppression in the chest,

palpitations, a sense of freezing, of being hot in the head, of perspiring, of being clamped to the ground, and a paralysing weakness in the extremities and a fear of falling.¹

SECTION TWO

THE MOMENTARY WHOLE—THE STATE OF CONSCIOUSNESS

For the first time in our study of the phenomena of experience, we come to the idea of something complete, something as a whole, and we find it in a form par excellence, that is in the immediate experience of the total psychic state.

Phenomena do not originate in discrete fashion, and causes which give rise to single phenomena are rare. There is always a total state of consciousness which makes it possible for individual phenomena to arise. We have isolated phenomena by description and we have begun to arrange them in certain groups and in a certain order. This has to be done because it is only by making these clear distinctions that viewpoints on the whole are reached, which are productive, because well structured. But by themselves all these distinctions are incomplete.

When speaking of individual phenomenological data, we have temporarily pre-supposed that the total state of the psyche within which these data occur remains the same; we call this the normal state of awareness and clear consciousness. But in actuality the total state of psychic life is extremely variable and the phenomenological elements are by no means always the same but have individual permutations according to what all the other elements are and to what the total state may be. We see, therefore, that an analysis of an individual case cannot consist simply in breaking up the situation into its elements, but that there has to be constant referral to the psychic state as a whole. In psychic life, everything is connected with everything else and each element is coloured by the state and context within which it occurs. Traditionally this fundamental fact has been emphasised by distinguishing the *content* of consciousness (broadly speaking all the elements so far described have belonged to content) from the *activity of consciousness itself*. Each single element, every perception, image or feeling differs according to whether it occurs in a state of clear or clouded consciousness. The more the state of consciousness differs in its characteristics from the one we are used to, the more difficult it becomes to get adequate understanding of it as a whole as well as of the individual phenomena. Psychic life taking place in deep clouding of consciousness is generally inaccessible for phenomenological examination, or can be made accessible only with the greatest difficulty.

¹ Westphal, *Arch. Psychiatr.*, vol. 3 (1872), pp. 138, 219; vol. 7 (1877), p. 377.

It will therefore be of decisive significance in the assessment of all subjective phenomena to determine whether they are occurring in a state of clear consciousness or not. Hallucinations, pseudo-hallucinations, delusional experiences and delusions which occur in *clear consciousness* cannot be taken as part-symptoms of some transient alteration of consciousness; they have to be regarded as *symptoms of much more profound processes* within the psychic life. We can properly speak of hallucinations and delusions only when there is this clear state of consciousness.

There are many altered states of consciousness (like sleep and dream) which are quite normal and accessible to everyone; others depend on certain conditions. In trying to visualise the psychotic states we seek *comparison* with our own experiences (in dreams, while falling asleep, in states of fatigue) and some psychiatrists have collected experiences during self-induced toxic states (mescaline, hashish, etc.), so as to get first-hand experiences by means of 'model' psychoses of states that may be closely related to that of some mental patients.

Psychological preface. The term 'consciousness' denotes first of all the *actual inner awareness* of experience (as contrasted with the externality of events that are the subject of biological enquiry); secondly, it denotes a *subject-object dichotomy* (i.e. a subject intentionally directs itself to objects which it perceives, imagines or thinks), thirdly, it denotes the *knowledge of a conscious self* (self-awareness). Correspondingly *unconscious* means firstly something that is not an inner existence and does not occur as an experience; secondly, something that is not thought of as an object and has gone unregarded (it may have been perceived and therefore can be recalled later); thirdly, it is something which has not reached any knowledge of itself.

The whole of psychic life *at any given moment* is called consciousness; and contains the above three aspects. *Loss of consciousness* occurs when the inwardness of an experience vanishes and with it, therefore, goes consciousness, as happens in fainting, narcosis, deep and dreamless sleep, coma and epileptic seizures. But if some degree of inner experience is present we still speak of consciousness, even though our awareness of objects has become clouded and there is only a weak self-awareness, if it has not been obliterated. *Clear consciousness* demands that what I think is clearly before me and I know what I do and wish to do it; that what I experience is my experience, linked to a self and held together in a context of memory. Before psychic phenomena can be called conscious they must be remarked by the individual at some stage so that they can be lifted into clear consciousness.

We *imagine consciousness* as a *stage* on which individual psychic phenomena come and go or as a *medium* in which they move. As something psychic it naturally belongs to all psychic phenomena and has a number of modes. To keep our metaphor we may say for instance that the stage can shrink (narrowing of consciousness) or the medium can grow dense (clouding of consciousness), etc.

i. The field of clear consciousness within the total conscious state is termed the field of *attention*. This covers three closely connected but conceptually distinct phenomena: (i) attention as the experience of *turning oneself towards an object* may show itself as a predominantly active experience when accompanied by awareness of its own inner determinants. Or it may show itself as a predominantly passive experi-

ence when it consists rather in being drawn towards something or being fascinated by it. This creates the distinction between voluntary and involuntary attention. (2) The *degree of clarity and distinctness* of the conscious content is termed the degree of attention. This relates to the preferential selection of content. Liepmann spoke of this metaphorically as the energy of attention and Lipps conceived it as the application of psychic power to a psychic event. This clarity or distinctness of content is usually linked with the experience of turning towards something or being fascinated by it. But in pathological states there may not be this accompanying experience and these qualities therefore come and go and vacillate independently. (3) *The effects* of these two first phenomena on the *further course* of psychic life have also been included under attention. The clarity of the conscious content is chiefly responsible for rousing further associations, since such content is retained in memory with particular ease. Guiding notions, set tasks, target ideas or whatever we choose to call them, if grasped with attention in the first two senses of the word, undoubtedly have such an effect on the appearance of other ideas that appropriate and useful associations are automatically selected (determining tendencies).

It will be seen, therefore, that our momentary state of consciousness is not an even one throughout. Around the *focal point* of consciousness a *field of attention* spreads, dimming in clarity towards the periphery. There is only one point in clearest consciousness. From then on a whole series of less conscious phenomena extends in every direction. Usually these phenomena go unregarded but taken as a whole they create an *atmosphere* and contribute to the total state of consciousness, the whole mood, meaning and potentiality of the given situation. From the brightly lit centre of consciousness there is a general shadowing down to the obscure area where no clear demarcation remains between consciousness and the unconscious. Trained self-observation makes it possible to investigate the degree of consciousness (= degree of attention, the level of awareness).¹

2. The *state of consciousness as a whole*, our total psychic life at any given moment, may have different degrees of awareness from clearest consciousness through various stages of clouding to complete loss of consciousness. Consciousness may be pictured as a *wave* on its way to the unconscious. Clear consciousness is the crest, the crest becomes lower, the wave flatter, until it completely disappears. It is not however a simple matter of the one following the other. We are dealing with a changing manifold. We may find constriction of the field of awareness, diminished differentiation between subject and object and a failure to disentangle the encompassing feeling-states that are obscuring the thoughts, images and symbols.

Alterations in consciousness and disturbances of the conscious state are not uniform. They spring from a number of different causes, and may be brought about by concussion, physical illnesses that lead to psychoses, toxic states and abnormal psychic reactions. But they also can occur in healthy people, during sleep, in dreams and in hypnotic states. In the same way, altered consciousness has many modes. The one common factor is the negative one that all these alterations in consciousness represent some departure from the state of normal clarity, continuity and conscious linkage with the self. The normal state of

¹ Cp. Westphal, *Arch. Psychol.*, vol. 21. 'Über den Umfang des Bewusstseins': Wirth in Wundt's *Phil. Stud.*, vol. 20, p. 487.

consciousness, which is itself capable of very varied degrees of clarity and comprehensiveness and can be of the most heterogeneous content, remains as the focal point and round it in all directions we find that deviations, alterations, expansions and restrictions can take place.

Techniques of enquiry. There are always two ways of trying to understand patients and gain some insight into the psychic events taking place within them. We can try *conversation* and make every attempt to establish a psychic relationship between the patient and ourselves; we can endeavour to empathise with their inner experiences. Alternatively, we can ask them to *write down afterwards* what went on in their minds, and make use of these self-descriptions when they have recovered from their psychoses. The more the total psychic state has suffered alteration, the more we depend on these subsequent self-descriptions.

If the total state of mind is on the whole intact—though even so the most severe psychic disturbances may be present, such as delusion, hallucination, or change of personality, we say the patient is sensible. *Sensible* is the term we give to the state of consciousness in which intense affect is absent, the conscious contents have an average clarity and definition and the psychic life runs in orderly fashion determined by foreseen goals. An objective sign of this sensible state is orientation (the individual's present awareness of the orderly structure of his world as a whole); another sign is the ability to collect thoughts in response to questions and to remember things. This is the most suitable state of consciousness in which to reach a mutual understanding. As the total state alters, it becomes increasingly more difficult to get in touch with the patient. One condition for keeping some mental rapport with him is that we should be able to pin him down in some way, and get him to react to questions and set problems, so that we can judge from his reaction whether he has grasped them or not. Normal people can concentrate on any task which is set them, but with alteration in the total psychic state, this capacity steadily decreases. Patients may no longer respond to a question in any intelligible way, but repeated questioning may possibly elicit some reaction. One can then still pin them down on easy and neutral points, such as the place of birth, the name of a place, etc., but they may no longer respond to the more difficult questions and tasks, such as what do they think, etc. We may then be able to get them with visual situations and stimuli, but they will no longer react to verbal stimuli. To the extent to which we can pin patients down in one way or another, we can hope to embark with some degree of success on the path of direct understanding. If, however, they are deeply preoccupied with themselves, the sparse fragments of information divulged are rarely sufficient for us to arrive at any convincing view of their inner experiences.

§ I. ATTENTION AND FLUCTUATIONS IN CONSCIOUSNESS

(a) Attention

This determines the clarity of our experience. If we take the second of the above discussed concepts of attention—the clearness and precision of the psychic phenomena, the degree of consciousness, the level of awareness, we can see that, with each psychic phenomenon we discover in our patient, we need to know how much attention he gave and *at what level of awareness* the

phenomenon was experienced. Otherwise we shall not reach a full understanding. If he has nothing special to say, we may assume the experience took place in a state of clear consciousness.

Sense-deceptions may occur along with the fullest attention or with complete inattention. For instance, some sense-deceptions can take place only at a low level of attention and will disappear if full attention is directed upon them. Patients complain that 'the voices cannot be caught' or that it is a 'hellish dazzle' (Binswanger). Other sense-deceptions—particularly in subsiding psychoses—are experienced only in a state of acute attention, and disappear if the attention is directed elsewhere. 'Saying a prayer makes the voices go.' Observing an object brings the visual pseudo-hallucination to an end. The importance of the degree of attention in the case of sense-deceptions is beautifully illustrated by patients suffering from alcoholic deliria, as investigated by Bonhoeffer.¹ If the examiner keeps attention up to a moderate degree by making the patient talk and reply, few sense-deceptions occur, but if attention lapses—a tendency of the patients when left to themselves—massive illusions and scenic hallucinations reappear. However, when the examiner forcibly directs attention to visual stimuli, numerous discrete illusions appear in this field. With psychic 'passivity' phenomena, we sometimes find a noteworthy low degree of consciousness. When the patient is occupied he feels nothing of this, but if he sits around with nothing to do 'passivity' phenomena appear—attacks of giddiness, compression in the head, attacks of rage, whispers—which he can subdue only by a terrific effort of will—sometimes shaking his fists. This is why such troubled patients seek company, conversation, something to do or some other means of distraction (praying, mumbling meaningless phrases), through which they hope to free themselves from the 'influence' of the voices. Schreber experienced ideas as put into his head when he sat around doing nothing, and called them his 'non-thinking thoughts'. The following self-description illustrates the dependence of schizophrenic phenomena on attention, and on arbitrary encouragement or discouragement:

'I felt as if I were continually among criminals or devils. As soon as my strained attention wandered off from things around me, I saw and heard them, but I didn't always have the power to deflect my attention from them to other tangible objects. Every effort to do that was like rolling a millstone uphill. For instance, the attempt to listen to a friend's conversation that lasted more than a few sentences resulted in such restlessness (because these threatening figures towered over us) that I had to take my quick departure. It was extremely hard to attend to an object for any length of time. My thoughts would wander off at once to far-away places where demons would at once attack me, as if provoked. At first this shift of thought, this giving way, happened voluntarily and was sought by me, but now it happens on its own. It was a sort of weakness; I felt driven to it irresistibly. In the evening when trying to sleep I closed my eyes and would enter the vortex willy-nilly. In the daytime, however, I

¹ Bonhoeffer, *Die akuten Geisteskrankheiten der Gewohnheitstrinker* (Jena, 1901), pp. 19 ff.

managed to keep out of it. It was a feeling of being spun round until figures appeared. I had to lie in bed awake and watchful until after many hours the enemy withdrew a little. All I could do was to try not to encourage the thing by letting myself go.' At a later phase the patient reports: 'Every time I wanted to I saw these figures and was able to draw conclusions about my own state. To keep control I had to utter words for inner protection; this was to make me more aware of the new self which seemed trying to hide behind a veil. I would say "I am" (trying to feel the new self, not the old); "I am the absolute" (I meant this in relation to physical matters, I did not want to be God). "I am spirit, not flesh" . . . "I am the one in everything" . . . "I am what lasts" (as compared with the fluctuations of physical and mental life . . .) or I would use single words like "power" or "life".'

These protective words had always to be at hand. In the course of 10 years, they became a feeling. The sensations which they aroused had so to speak accumulated so that he did not have to think afresh every time but at times of particular instability they had to be used then as now, in a somewhat altered form. The patient could see the figures at any time he wanted and could study them, but he did not have to see them. (However, after specific physical disturbances they came on their own and once more became dangerous) (Schwab).

(b) *Fluctuations in consciousness*

Mild degrees of fluctuation in consciousness may be observed in *the periodic waxing or waning of attention* (Wundt). The crest of the wave of psychic life never remains at the same height from moment to moment, but changes all the time, however slightly. We may observe more noticeable changes during fatigue, and more noticeable changes still and to a pathological degree in those *periodic fluctuations of consciousness*¹ which sometimes dwindle down to a complete absence of it. We have observed a patient in whom this occurred within the course of one minute. In epileptic patients normal conscious attention, as measured by reaction to hardly perceptible stimuli, fluctuates much more than in the case of healthy persons.²

Fluctuations of consciousness must be differentiated from *petit mal* attacks, absences, etc., which lead to irregular interruptions of consciousness, accompanied by slight motor phenomena. Nor should they be confused with the *interruptions of concentration and reactivity* frequently observed in schizophrenic patients (so-called *blocking*). They suddenly cease to reply, stare in front, and do not seem to understand anything. After a time (minutes or seconds) this ceases, only to recur again a little later. Subsequently one can often find that the patients have been perfectly attentive during the time they were inaccessible and remember the occasion. These interruptions occur for *no apparent reason* as an expression of the disease process or they may be attributable to *affect-laden complexes*, which the examiner's questions have triggered off, or they may be understood as distraction by voices and other hallucinations. In the last case, we may observe that the patients have grasped only poorly what the examiner said.

¹ Stertz, *Arch. Psychiatr.*, vol. 48, p. 199. Janet, *Névroses et idées fixes*, pp. 69-108. *Psychopathie*, pp. 371-7.

² Wiersma, 'The psychology of epilepsy', *J. Ment. Sci.*, vol. 69 (1923), p. 482.

Fluctuations of consciousness down to the loss of it may be observed in personality disorders (psychopaths) and in many acute and chronic psychoses. The patients themselves complain that they lose their thoughts momentarily. 'The works have stopped.' Janet describes these as 'éclipses mentales'.

A proband describes such an experience under hashish:

'It feels as if I am always emerging from unconsciousness only to fall back into it after a time . . . meanwhile my consciousness has altered . . . instead of completely empty "absences", I now have something else like a second consciousness. This is experienced as a period of time on its own. Subjectively it is as if there are two separate sequences of experience each running its own course. The experimental situation seems unaltered; but there follows the experience of a long-drawn-out, undifferentiated existence in which I cannot keep myself separate from the experienced world. In spite of this, I experience this second state not as in a dream but in complete wakefulness. This alternating consciousness may explain my over-estimation of time, which is excessive. I feel as if hours must have elapsed since the beginning of the intoxication; the thinking process is extremely difficult and every sequence of ideas gets cut off when the next change in consciousness occurs.'¹

(c) *Clouding of consciousness*

Lowering, clouding or narrowing of consciousness occurs variously as the accompaniment and consequence of single experiences. On a long train journey we may doze and experience a low ebb of the wave-crest, an *emptiness of consciousness*, which we can interrupt at will. When there are *violent affects*, as in anxiety states and deep melancholia as well as in manic states, it becomes much more difficult to concentrate on anything external, contemplate anything, reach a judgment, or even think of anything. Answers to simple questions can only be given after a number of unsuccessful attempts and visible exertion on the part of the patient. For this reason, i.e. difficulty of concentration, the contents of delusion-like ideas go unscrutinised by the patient and there is no reality-judgment concerning possible sense-deceptions. Consciousness is completely filled by the affect, and judgment and attitude become very disturbed in an understandable way. This is even more the case in depressive states when primary inhibition of function is added. All the above states, however, deserve the name of abnormal consciousness, which may become a persisting emptiness of consciousness in the last-named instance.

(d) *Heightening of consciousness*

We may wonder whether heightening of consciousness really is a fact; do we find abnormal alertness, abnormal clarity, and other abnormal phenomena of this order? Kurt Schneider considers heightened clarity of consciousness a necessary prelude for the development of certain compulsive states. 'This exceptional clarity of consciousness is well marked in cases of encephalitis with obsessional symptoms.' Of another sort are those numerous self-descriptions

¹ Beringer, *Nervenarzt*, vol. 5, p. 341.

of a mystic retreat into contemplation, which suggest a state of overwakefulness. Different again are the unusual brilliant states of narrowed consciousness occurring as an aura in epileptic attacks and described by Weber and Jung. One patient described it as if 'thinking became absolutely clear'. The authors point to Dostoievsky's own description of his aura 'as if there was a flare-up in the brain', so that 'the sense of life and self was increased ten-fold'.

Zutt¹ describes phenomena after the taking of Pervitin: overwakefulness, vivid interest, shortening of performance, shorter reaction-time and the conquest of masses of material by apperception. At the same time he points out diminished powers of concentration, crowding of thoughts, diminution in the ability to order impressions or meditate deeply and a restless interest of an aimless character with an equally aimless drive to activity. This overwakefulness means a reduction in the precision and clarity of the external world, since the external world tends to retreat for tired and over-wakeful people. Zutt, therefore, constructs a polarity of consciousness between sleepiness and overwakefulness, so that the peak of clarity lies in the middle. The above phenomena once more show the ambiguity and enigmatic character of what we call a state of consciousness.

§ 2. SLEEP AND HYPNOSIS

(a) Dreams

Hacker² has tried to clarify dream life phenomenologically for the first time by taking notes on his dreams for a whole year. He did this immediately on waking up, noting how his dream experiences appeared to him. The specific character of dream life showed itself in three ways: (1) *Elements* which are always present in waking life are now *in abeyance*. There is no true awareness of one's personality, so that acts take place which would be foreign to the individual in his waking state without this being noticed at all in the dream. There is no awareness of the past, no awareness of self-evident relationships between things, so that the dreamer may, for instance, talk to a doctor about his leg-muscles while the latter dissects him anatomically, or he may look at his own abdominal cavity without seeing anything queer about such a situation. There are, therefore, no volitional acts, with the consciousness of 'I really will . . .', if for no other reason but that the feeling of personality is absent and there is only a momentary self-awareness. The dream may become completely rudimentary and all that is left consists of a number of psychic fragments. Thus Hacker once found that at the moment of waking a few incomprehensible words remained in the dream, which he could understand only when he woke

¹ Zutt, 'Über die polare Struktur des Bewusstseins', *Nervenarzt.*, vol. 16 (1943), p. 145.

² Hacker, 'Systematische Traumbeobachtungen mit besonderer Berücksichtigung der Gedanken', *Arch. Psychol.* (D), vol. 21. Köhler, *Arch. Psychol.* (D), vol. 23. Hoche, *Das traumende Ich* (Jena, 1927). E. Kraepelin, 'Die Sprachstörungen im Traum', *Psychol. Arb.*, vol. 5, p. 1.

up. There was not only no awareness of meaning but no awareness that they were words, and no sense of any object versus the self. It was so to speak sensory material left over which had not become fully objectified. (2) *Psychic connections vanish.* Psychic life so to speak goes into dissolution, gestalt-configurations, the linking tendencies of volition, all disintegrate. There is no representation in the present of past and future; the dream lives only in the moment, one scene follows another, and often the previous one is completely forgotten. Contradictory things are experienced without surprise consecutively or simultaneously. From such elements as are apprehended, no determining tendencies emerge, but the most heterogeneous things follow one another in a changing, haphazard flow of association. Among the general dissolution of connections the most surprising was the misapprehension of sensory objects. Hacker dreamt, for instance, that he was looking for some chemical substance for analysis; some one gave him his big toe, which seemed quite naturally a chemical substance. On waking up he could recall both the sense-experience of seeing the big toe, and the being aware that this was a chemical substance. This dissolution of connection between sensory material and awareness of appropriate meaning is a common phenomenon in dreams. (3) *Fresh elements appear.* These are the dream-images which we cannot call hallucinations, delusions or false memories. On the other hand these contents have a vividness which they would not have if they were mere images. New things arise in the form of remarkable identifications and condense and separate in an astonishing way.

Apparently Hacker never dreamt of coherent situations and events such as others have experienced in dreams with great vividness. He belonged to those who completely forget their dreams if immediately on waking they do not record the few remembered fragments which they can retain. Other people, however, can be haunted all day by dreams and remain vividly conscious of them. But in general the sensory richness, the actual experience of vividness is apt to be over-rated. This is shown by the following example in which the dreamer looks on and observes his experiences while dreaming:

A friend of mine, who had no psychological training and was not interested in psychology, sometimes thought to himself: 'it really seems that one sees things in a dream which one has never seen before. Perhaps one can learn in a dream of things which waking reality never shows. I want to look out for this in my dreams.' One day he recounted a recent dream: 'I must have slept a long time, when I realised I was dreaming without having to wake up because of this idea. I thought in my dream that I was dreaming and could wake up when I wanted to, but immediately I became conscious of the thought—No, I will go on dreaming—I want to see how this ends; I was clearly aware of the question—will I see something in my dream never seen so far in reality! I went on dreaming and seemed to take up a book to see the letters clearly; as soon as I brought the book near to my eyes the letters became blurred; I could not read anything; I took other objects to look at closely but I saw everything as one sees them ordinarily when one is in a room, with a general impression of detail. If I tried to see the details properly, they became blurred. After a while I really woke

up and looked at the clock. It was 3.0 a.m. It surprised me to find that one could dream and yet be an observer at the same time.'

(b) Falling asleep and waking

These allow for intermediary states to be experienced. Carl Schneider¹ describes the experience of falling asleep; everything grows fleeting, vague and loses its structure; thoughts, feelings, perceptions, images merge in confusion, glide away, slip about and get derailed, while at the same time we may have exotic experiences, sense deep meanings or the presence of the infinite. One's own activity merges into an accepting and a yielding until, in spite of the unity of consciousness, self-awareness completely dissolves away. During the phases of falling asleep, healthy people will often have what are, therefore, called hypnagogic hallucinations.

Certain *hallucinations at the time of waking* are very characteristically dependent on the state of consciousness. Patients have a feeling that they have been wakened by the hallucination, but once they are quite awake the hallucination has gone.

Miss M. clearly felt during the night that she was pulled suddenly by the hair at the back of the neck on the left, pulled with great force. At the same time, she saw a great flame flare up for a moment from the depths and then die down. She awoke immediately and once awake there was nothing more to be seen, but she knew this had not been a dream. It had been real and it had wakened her. It happened between sleeping and waking and it had disappeared altogether once she was completely awake. Similarly on two occasions at night when she was staying in the clinic something was done to her genital organs; certain movements were carried out quickly, as if she were having sexual intercourse. The moment she opened her eyes, she saw no one was there but she was certain it was not a dream and that it was being done by some evil force. On another occasion she saw the bedcovers lifting just when she woke up. Fehrlin reports: 'I suddenly woke up at midnight and felt myself embraced by a woman whose hair fell over my face. Quickly, she cried, you have to die . . . then it was all over.' With some patients this sort of thing repeats itself several times during the night and they are tired and unrefreshed the next day. The content of these phenomena proves to be manifold but they themselves always have this element of suddenness, something happens like lightning.

(c) Hypnosis

Hypnosis is related to sleep and is identical in character. During hypnosis a particular kind of productivity arises; pictures are seen and memories are re-lived. There is no known principle on which we can grasp this state, as to what it really is. We can delineate it only by distinguishing it. It is not an understandable psychic change but a vital event of a peculiar kind which is linked with effective suggestion. It is a primary phenomenon of somato-psychic life, manifesting itself as an alteration of the conscious state.

¹ Carl Schneider, *Psychologie der Schizophrenen*, p. 12 u.a. 'Über das Einschlaferleben vgl.', Mayer-Gross in Bumke's *Handbuch*, vol. 1, pp. 433-8.

The changes in consciousness which occur during sleep, hypnosis and certain hysterical states are in some way inter-related but they can be fully grasped only if we know in what way precisely they differ.

§ 3. PSYCHOTIC ALTERATIONS IN CONSCIOUSNESS

The alteration of consciousness in acute psychoses, in deliria and in twilight-states is certainly very different in each case. We need only to compare the reduced consciousness of organic processes with the dreamy perplexity of the acute psychoses, the confusions of deliria or the relatively well-ordered, coherent behaviour in some twilight states to get the impression that we are not dealing with one single type of disturbed consciousness. At the present time, however, we cannot formulate the differences comprehensibly. We will only describe the following types: *reduced consciousness (torpor)*, *clouded consciousness* and *altered consciousness*.

(a) By '*reduced consciousness or torpor*' we mean those states that lie between consciousness and unconsciousness; no *fresh psychic events* are being experienced, *only fewer*. Perceptions remain as dim as the memories. Very few associations appear and the act of thought can no longer be performed. All psychic events are slowed down and much more difficult. As a result patients take no part in things, are apathetic, apt to doze and show no spontaneity; when talked to, their attention is hard to rouse and cannot be sustained; they cannot concentrate and are easily tired but in pure cases appear *perfectly orientated*. There is a tendency to fall into a dreamless sleep or sink into a state of coma or sopor from which they cannot be roused.

(b) *Clouded consciousness*. *Florid events* are taking place and hallucinations, affects and partly coherent fantasy experiences are occurring to the extent that there is no longer any consistent, connected flow of psychic events. Psychic life *breaks up*, so to speak, and fragmented experiences take place disconnectedly. Only single, completely isolated acts remain and there is an entire splintering of consciousness. Contents become highly self-contradictory (there are, for instance, rapidly changing and opposing 'delusions') so that nothing can be remembered.

(c) *Altered consciousness*. The state is usually clearly demarcated from normal psychic life and *relatively coherent* so that patients possibly remain quite normal. Consciousness is restricted to certain areas only and nothing else is allowed to intrude that does not fit the inner set. Westphal gave the following description: 'There are states which may last a few minutes or hours in which consciousness is so deeply disturbed that the individual moves in a circle of ideas that appear quite detached from his normal ones. On the basis of these ideas and the feelings and wishes which are linked with them, he may carry out acts which are entirely foreign to the usual content of his thoughts and are unconnected with them. But the ability is not abolished to act coherently and to a certain extent logically.' The span of altered consciousness

is different and split off in the memory from normal consciousness. Not only hysterical twilight states but also apparently elementary phenomena such as epilepsy belong to this group.

(d) The state of consciousness *during an aura* before an epileptic seizure¹ is an uncommonly brief alteration in consciousness before it merges into unconsciousness. During it the outer world disappears; the inner experiences become overpowering, consciousness narrows and in this restricted state it can yet have a moment of high illumination. Out of initial anxiety, and with full clarity of consciousness, ecstasy may rise to a pitch of unbearable terror during which unconsciousness and the fall of the seizure begin:

There are a number of *objective symptoms* for all kinds of clouding of consciousness in psychotic states, though they may not be present in every individual case. They are: (1) *Turning away from the real world*: Patients comprehend poorly, cannot fix their attention and act without regard to the situation. (2) *Disorientation*: This is closely linked with (1). (3) *Loss of coherence*: which makes the behaviour un-understandable. (4) *Disturbance in registration and memory*: along with difficulties in reflection and subsequent *amnesia*.

§ 4. FORMS OF COMPLEX FANTASY EXPERIENCE

Alterations in the conscious state are frequently the soil for pathological experiences. At any time of day these states may appear briefly as a kind of sleep or, if of longer duration, as psychotic states which last several days or weeks. Hallucinatory experience is especially common (a differentiation between hallucination proper, pseudo-hallucination and mere awarenesses no longer becomes possible). While the patient is in this half-sleep, someone may approach his bed; he feels the actual approach, he feels the hand around his neck, feels suffocated. Or he lives among a series of vivid scenes, landscapes, crowds, mortuaries, graves. Very often the patients can feel this alteration of consciousness when it happens. They may feel it from the start, at the point where it overcomes them and also at the end, when they come round again: 'just now, as I dreamt it'. In mild cases they may be able to observe themselves in this altered state: they are peculiarly puzzled; they feel they cannot think, they have to remind themselves where they are and what they wanted to do. Hysterical people can more or less put themselves into a twilight state through an abnormal kind of day-dreaming.

These unreal contents of psychotic experience have their own context; they build up as it were a continuous world and fate for the patient. This context splits off from the world of real experience and becomes a transitory event, limited to a certain period of time (days, months or years). We will try to bring some order into these diverse and numerous experiences, and if we want to understand the peculiarities of an individual case, we shall first have to be clear about certain basic differences of a purely descriptive character:

¹ Weber and Jung, *Z. Neur.*, vol. 170, p. 211.

1. One set of experiences comes during *clouded consciousness*; the other—more rarely—may fill the psyche in states of *altered consciousness*, which do not exclude complete wakefulness. In the former, clouding is recognised in the general lowering of the mental activity, in the loosening of context and in the hazy memory which remains. Wakeful experiences on the other hand are of extreme clarity; they demonstrate a pervading connectedness of phenomena which brings the psychotic experience close to real experiences and they tend to be remembered vividly. Even incoherent experiences during wakefulness are well remembered.

2. One set of experiences occurs in *complete isolation* from the real environment. The psyche is in another world altogether and is without relationship to the real situation. The other set of experiences *intertwines* in a peculiar way with *real perceptions* and with the real environment, which is then misinterpreted and bears a different meaning as related to the particular psychotic experience.

3. In relation to the subjective attitude of patients towards their psychotic experiences, we find two contrasting extremes: Either the patient is nothing but a *spectator*. He is quite detached, passive, even indifferent. He sees everything clearly and faces the contents calmly as they emerge or pass before him as impressive visions, with complex elaborations in all the sensory fields. Alternatively, he is *actively engaged*. He stands in the mid-stream of the events; he is in the grip of powerful entities which, sometimes painfully, sometimes delightfully, toss his mind to and fro. He may be thrown from heights of bliss to depths of hell. He becomes a world-redeeming person and then the devil himself in most evil form. Whereas the first group of experiences have a pronouncedly scenic character, the latter are much more dramatic. To use Nietzsche's words, the former have more the character of dreams and dream-objects, while the latter are more like an intoxication.

4. As far as the *connectedness* of the particular content is concerned, this may vary from *completely isolated*, individual, false perceptions or awareness, etc.—hardly to be included among experiences in the sense in which we use the word—to a *continuous, progressive* occurrence, with definite circumscribed events, that denote phases and crises in the history of the psychosis. In rare, fully developed cases, we may see over long periods a sequence of phases in which the patient passes, rather like Dante, through hell, purgatory and paradise. Such connection as there is will either predominate in the concrete, rational content of the experience or in the confusion-like subjective state. Either we observe isolated experiences of fragmented situations occurring in a confused sequence or we see over a period one scene emerging organically out of another. Usually the patient seems completely submerged in the psychotic experience, in which he lives with all his senses to the full, but sometimes a particular sense, usually the visual one, seems more predominant.

5. *Contents* are either *sensorily vivid* and *complex* or in spite of the intensity of the experience they may be little more than *awarenesses* or pale images. As

to their significance, contents are either *ordinary* and simply relate to everyday experience (the patient, for instance, is concerned with his experiences at work and its possible irritations) or the contents may prove *fantastic*, such as never occur in reality. The patient stands at the crossroads of world events. He feels the world's axis at his side; tremendous cosmic movements are connected with his fate; mighty tasks await him; everything depends on him; he can do anything, even the impossible, thanks to his magnificent powers.

6. The experiences may be unified—the patients have only one reality, the psychotic one; or the experiences—particularly the fantastic ones—may occur while the patient lives in two worlds simultaneously, the real one which he can see and judge for himself and his psychotic one. He acquires a certain *double orientation* and can move among live realities more or less correctly, in spite of his cosmic experiences, but the psychotic reality is the real world for him. The actual external world has become an illusion which he can conveniently ignore to the extent that he knows: these are doctors, I am in the cells, they say I am religiously deluded. It happens that the patient in an acute psychosis is completely filled for a time with his psychotic experiences and forgets who he was, where he is, etc., but he is apt to be pulled out of this illusionary world by harsh events or certain profound impressions (admission to an institution, visits by relatives). An emphatic word may lead the patient back to reality for a moment. Then the double orientation reasserts itself; everything acquires double motivation, he himself is double or manifold. 'I have thought of an enormous number of things from many spheres altogether at once', said a patient. In typical cases the patient comes into collision with reality when he experiences supernatural processes which he expects to change something in the external world. Reality is to disappear and so on. Then occurs 'the experience of the catastrophe that fails' and this is followed by indifference which later on makes room for new contents to arise.

Differentiations such as these are very general and are mere viewpoints for analysis. We have no factually based order for the various forms of psychotic experience. Out of the immense variety that presents itself to us, we will limit ourselves to the description of a few selected types:¹

1. *Daydreaming* can be found associated with other abnormalities. A man in prison imagines himself into the situation of fabulous wealth; he builds castles and lays the foundations of cities. He fantasies to such an extent that he cannot now differentiate clearly between reality and unreality. He draws large plans on waste paper and has vivid experiences of how he would behave in his new situation; how he acts and delights people. Fantasy such as this may start from an accidental notion but be carried on subsequently with an awareness that it is full reality. The individual buys a good deal he cannot pay for, for an imaginary mistress perhaps; he lives through the part of an inspector of schools and behaves so naturally during the school visit that he is not noticed

¹ Further material on these phantasy experiences can be found in W. Mayer-Gross, *Selbstschil-derungen der Verwirrtheit* (die oneiroide Erlebnisform) (Berlin, 1924).

until some all too obvious contradiction arises and puts an end to his fantasy. (*Pseudologia phantastica.*) With hysterical patients a certain alteration of consciousness may occur in the course of such daydreaming. The patients live through imaginary situations which they experience in the form of vivid hallucinations. The fantasies occurring during febrile illnesses, as described by Hoepffner,¹ are probably closely allied to such experiences.

2. *Delirious experiences.*² These are characterised particularly during alcoholic delirium by a strong sensory vividness, a low level of consciousness and therefore a lack of coherence. Content is quite natural and possible and corresponds to accustomed reality; it is almost always tinged with anxiety and consists in persecutions, maltreatments and often unpleasant and hurtful experiences.

3. *Illusory experiences* full of blissful tranquility that come to some people during hashish and opium intoxication have a peculiar character of their own:

Baudelaire reports the following description given by a woman: After taking hashish she found herself in an exquisitely panelled and furnished room (it had a golden ceiling with a geometrical grille). The moon was shining. She said: 'At first I was surprised; I saw enormous plains stretching in front of me and all around; there were clear rivers and green landscapes reflected in the quiet waters. (You may guess the effect of the panelling—reflected in the mirrors). As I raised my eyes, I saw a setting sun, like molten metal as it cools. This was the gold of the ceiling. The grille led me to think I was in some kind of cage or in a house open on all sides, separated from all these wonderful things only by the bars of my imposing prison. At first I laughed about the deception, but the longer I looked, the stranger the enchantment, the more living it grew, in all its clear and deceptive reality. Now the image of being locked in dominated my mind, without I must confess diminishing the pleasure I derived from the spectacle surrounding me. I considered myself imprisoned in this handsome cage for thousands of years among these enchanting landscapes and wonderful horizons. I dreamt as follows: The Beauty who sleeps in the forest is making expiation. I dreamt of her liberation. Brilliant tropical birds flew over my head and as my ears picked up the ringing of the horses' bells in the street, the impressions of the two senses fused into a single idea. I ascribed the wonderful tinkling sounds to the birds and I believed they were singing through their metallic beaks. They were chatting about me and glad I was a prisoner. Monkeys were playing and satyrs capered about delightfully and all of them seemed to be amused over the prisoner lying there condemned to immobility. However, all the gods of myth gave me a friendly smile as if they wanted to encourage me to bear the "spookery" patiently. All eyes were turned into one corner as if they wanted to touch each other with their gaze . . . I must confess the pleasure which I felt in looking at all these forms and brilliant colours and considering myself the centre of some fantastic dream; this took up all my thoughts. It lasted a long time. Did it go on till morning? I do not know. . . . I suddenly saw the morning sun in the room; I felt vivid surprise, and in spite of a struggle with my memory I could not tell whether I had been asleep or whether I had survived an ecstatic sleeplessness. A moment before it had been night; now it was

¹ Hoepffner, *Z. Neur.*, vol. 4 (1911), p. 678.

² Liepmann, *Arch. Psychiatr.* (D), vol. 27. Bonhoeffer, *Msch. Psychiatr.*, vol. 1.

day . . . in that moment I had lived a long time, a very long time. My knowledge of time was in abeyance . . . so the whole night could be measured by me only in terms of the thoughts which filled it. Long as this seemed, I still felt it had all only lasted a few seconds; alternatively, it was so long it could not even find room in eternity.'

Serko's self-description during mescaline intoxication is as follows: 'Seeing masses of colours, visual hallucinations with no connection in objective space; haptic hallucinations; disturbances of time-sense, a sentimental state of bliss, an enchanting fairy-tale atmosphere, due to the colours, the hallucinations, the disturbed time-sense, and with all this, a complete clarity of judgment and a correct reality-judgment.'

4. Surpassing all the forms of experience so far enumerated are the schizophrenic psychoses,¹ the acute experiences of which offer a continuity, richness and importance of content, which overshadow the rest. We have selected two cases of such experiences, which of course by no means exhaust the matter.

(a) The common schizophrenic experience at the beginning of the process is not a very connected one, but it is full of uncanny import, vague riddles and shifting contents, as follows:

Mrs. Kolb had been having delusions of reference for some time connected with her work as a seamstress. In September she felt different: 'I feel as if I am veiled, I believe I shall soon get to know something I don't know yet.'—She falsely believed that Mr. A. was going to marry her. She constantly thought something was being done in the shop for someone whom she was not supposed to know—perhaps it was a dowry for herself; she found more and more things . . . when she came home on Sunday she thought someone had been in the room and disarranged a few things. On Monday certain things at work did not tally; she had the impression that the cutter had been giving her wrong orders . . . everyone seemed conspicuous, but she did not know why . . . she was surprised about everything . . . the fact that her brother was fetching her made her pleasurable excited . . . she thought it odd that people greeted her in such a friendly way . . . she was surprised to see so many people passing in the street. At home she had an overpowering feeling of compulsion—'you have to stand still; you must stay put; do something special'. In spite of the warning by her sister-in-law that she ought to come and eat and not talk too much, she never budged. Finally, towards evening, she was taken to hospital. She felt this was a game. When she saw the barred windows she got frightened; she got an injection because of her excitement. Lots of girls were looking through a little window in her door when she was sitting in her room in the hospital; they were winking. Someone called from the ceiling 'you rascal'. In the garden she saw white figures in the dark; she stayed up all night because she felt she had sworn right at the beginning 'My God I am not going to bed'. On Tuesday, she was reading in the Bible. All afternoon she saw people in the garden going to a funeral; she thought it was a television show with her lover (some months before she had really seen a television show). Finally she herself played in it. Sister was giving some signal to the people in the yard. So the game ended. She suddenly saw a stove in the ceiling and a flat cross. She found the light of the lamp wonderful; in the middle were three stars; she felt in heaven; she

¹ Cp. my write-up of Dr. Mendel in *Z. Neur.*, vol. 14 (1913), pp. 210–39: a case with rich symptomatology.

was wondering how she could sing, something she had never done before. She had the idea of counting the points in the window. Then she was overcome by what seemed another power; she had to count up to 12,000; she kept hearing a knocking; there was always something happening. The letters in the Bible turned blue; her faith was being tested and they were making her into a Catholic. After sunset the sun changed to blood. The following night she remained standing at the window till she was frozen; she must remain standing because of her faith which they wanted to take from her. She saw a moving hand on the street; it was a devil. As she stood there she felt a power from above on her right; at this she always looked to the left; she had an idea that the power came from the right, there was also more warmth there and from above there was pressure on her chest. This was spiritual power not physical; she felt quite closed in; she could turn neither to right nor left nor look up. Many more peculiar and puzzling things happened, until after seven days it was all over.

(b) The following case offers a much richer experience. We see vividly the *new significance* of the perceptions and thoughts; the *bliss* experienced, the feelings of power, the *magic connections*, the unusual *tension* and excitement coupled with the inability to hold an idea, and the eventual transition into *confusion*.

The patient (Engelken) had had a love relation with William X. She had slowly slid down through degrees of depression and mania into her psychosis. After she was cured of the acute phase she described the further course of her illness as follows: 'I was crying terribly; I was quite beside myself; I called for people dear to me. It seemed to me I had everything collected round me. Then everything was forgotten; a sparkling cheerfulness appeared. The whole world was turning round in my head. I got mixed up . . . the dead and the living. Everything turned round me; I used to hear the voices of dead people distinctly, sometimes William's voice. I had indescribable happiness when I thought of bringing my mother a new live William; I had lost a brother of that name but the puzzle was too much for me; it was too great a muddle—I was terribly excited; I had an incredible longing for peace—my brother came towards me, frightened, looking like a skeleton, he seemed quite unaware of the things that were filling me—I cannot describe it better than by comparing it to intoxication with champagne . . . I saw other figures—a wonderful lady—I then felt like the Maid of Orleans, as if I had to fight for my lover, had to conquer him; I was terribly tired, but I still had inhuman force. They couldn't hold me down, not three of them. I thought at the time he was fighting in a different way, he was influencing people. I didn't want to be idle. The effective circle of my mental strength was shut, so I wanted to exercise my physical powers. Afterwards I was supposed to have cried, but I cannot remember this . . . I wanted to make the world happy through sacrifice . . . to dissolve every misunderstanding . . . 1832 was prophesied as important . . . I wanted to make it important. If only everyone was pervaded by the same sort of feeling as myself, the whole world would be a paradise. I thought I was a second Messiah; I thought I had to make the world happy and important through my love. I wanted to pray for sinners, to cure the patients, to awaken the dead. I wanted to dry their tears; when this was done and not before, I wanted to be happy with what I had. I called the dead as often as I could. I felt as if I was in the vaults among mummies whom I was to awaken with my voice. The picture of the Redeemer and

his melted into one . . . so pure and mild he stood before me. Then he was the murderer of my father and like a distracted person for whom I should pray. I worked fearfully hard and my only recreation was to sing . . . every idea had first to be given order and sequence and then I was looking for a new one. My hair seemed to be the tie between us . . . I wanted to throw it at him so my inner voice would give me new thoughts for which I had to work. The smallest details had deep meaning for me. . . . The last French I did had been "Napoleon in Egypt". I seemed to experience everything I had learnt, heard or read. I thought Napoleon had returned from Egypt but not died of cancer of the stomach. I was the remarkable girl in whose eyes his name was written. My father returned with him too. He was a great admirer of him . . . and so it went on day and night until I was brought here [to the hospital]. I have made my escorts suffer terribly; they didn't want to leave me to myself and that I couldn't bear. I tore everything off to meet him unadorned. I tore my bows off, they were called butterflies, I did not want to beat my wings and declare myself a prisoner. Suddenly it was as if I were among strangers but you [to the doctor] seemed like a well-known good genius, I treated you as if you were my brother. Here I thought my fate is going to be decided . . . the people seem wonderful, the house looks like a fairy palace, but the joke went on too long . . . everything seemed cool and feelingless. I had to get to know more about this . . . I continually kept in contact with William X . . . he would give me a sign on the window or door telling me what to do and encouraging me to be patient . . . A lady from R whom I loved also spoke to me, I replied to her and I was firmly convinced she was here . . . I cannot tell everything that went on but it was a lively, active life . . . I would count it as the happiest time of my life . . . you saw what my condition was later on . . . It has remained a bit of a puzzle ever since . . . it took a good deal to tear myself away from this beautiful dream and come back to reason once more . . . The whole illness has left certain traces on my mind . . . I have to admit a certain loss of power; I might say my nerves were rather exhausted. I don't have any pleasure in mixing with people, no excitability nor any desire to do anything nor any power of reflexion. I remember my condition too vividly not to see how much is needed for me to make up.

CHAPTER II

THE OBJECTIVE PERFORMANCES OF PSYCHIC LIFE

(PERFORMANCE-PSYCHOLOGY—LEISTUNGSPSYCHOLOGIE)

(a) *Subjective and objective psychology*

Chapter one dealt with psychic experiences and we were not concerned with those perceivable objective facts which, in an individual case, give us access to the other person's psyche. We have so far seen the psyche only 'from inside' but in this chapter we shall examine it, as it were, 'from the outside'. In the previous chapter we were engaged with *subjective* psychology and we now turn to what may be termed *objective* psychology.

The external objective phenomena of psychic life may be assessed in a number of different ways. They may be assessed as *performances* (Performance-psychology) or recorded as physical accompaniments or consequences of psychic events (Somato-psychology) or they may be understood as meaningful somatic or motor expressions of the psyche (Psychology of Expression), or as the observable facts of personal existence and conduct in the world (Psychology of the Personal World) or as perceived facts of human creativity (Psychology of Creative Work). Each of these psychological studies provides us with certain appropriate methods whereby we may gain access to different fields of psychically relevant facts.

In the present chapter our concern is with psychic *performances*. For the sake of methodological clarity, we shall keep 'performance' as our guiding principle in grasping the objective material of our investigation. Performance as such arises from the application of some general category; for instance, the *correctness* of a perception (e.g. spatial perception, estimation of time, an idea), or the correctness of memory, speech or thought, etc. Or it may be the *type* of perception that is assessed (e.g. whether predominantly of shape or of colour) or the type of apperception, etc. Or a *quantitative standard* may be set—the extent of memory, the amount of work done, the amount of fatigue.

(b) *The basic neurological schema of the reflex arc and the basic psychological schema of task and performance*

The traditional schema of neurology is the concept of an organism into which *stimuli* are fed. After *inner elaboration* (excitation) it reacts to these with movements and other objectively perceivable phenomena. This physiological excitation is of infinite complexity. The concept is of reflexes superimposed on reflexes in a system of interacting functions, ranging all the way from the

patellar reflex to instinctive behaviour. The basic concept of the nervous system is that of the *reflex arc* underlying all psychic events and it contains the tripartite concept of centripetal (sensory) performance of the sense-organ, central event, and centrifugal (motor) performance to the end-organ. In the concept of the '*psychic reflex arc*' this schema is transferred into the psychic life. Thought processes are considered to belong to the central events. In the place of sensory stimulation there is a memory image, for example, and in the place of motor excitation, an image of movement. Here objective psychology has the closest contact with neurology because of the physiology of the sense-organs and of motor phenomena. Neurology teaches the complexity of the apparatus which underlies psychic life. Perception and memory depend on the intactness of this apparatus, and so does externalisation of the inner drives. The investigation of the higher levels of this apparatus takes us into the borderland between psychology and neurology, and its disorders are both neurologically and psychologically analysed in the agnosias, apraxias and aphasias. It is characteristic of such investigations into the psychic reflex arc that they always lead us to physically tangible and at the same time localisable functions as its groundwork.

In contrast to this schema of the reflex arc psychologists have long viewed living activity in quite a different light. There is a radical difference between the facts that appear when simple *stimuli* arouse somatic reactions and those which are deemed to be performances that fulfil certain '*tasks*'. In the latter case the object of investigation is no longer a physically tangible occurrence but a performance in an environment, a meaningful act, a reaction not to stimuli but to a situation. In such investigations we no longer introduce simple stimuli but set certain tasks, e.g. the recognition of briefly exposed objects, the memorising of syllables, adding up, etc.; we no longer register mere movements but evaluate performance according to duration, correctness and incorrectness. Task¹ and performance are the basic concepts, and the experiment of setting a task is the basic experiment of objective psychology.

The reflex apparatus and the apparatus of performance represent two different methodological viewpoints. Of neither can we say that they are life itself. On the contrary they are both artificially isolated, whether in the one case we think of the *mechanism* of an automatic event or in the other of a *performance as a whole*. In life they are both inseparable.

The *psychological point of view* of task and performance has therefore repercussions on the *neurological investigations*. It has been recognised that reflexes are artificial, isolated events of the experimental situation and that reactions in their normal context in real life cannot be explained in terms of reflexes. It is true there are reflexes, but only those people who are carried away by the concept of reflex activity will try to comprehend real life reactions

¹ Re the concept and significance of the set task see Watt, *Arch. Psychol.* (D), vol. 4, pp. 289 ff. Ach, *Über die Willenstätigkeit u. das Denken* (1905). Külpe, *Göttinger gelehrte Anzeigen* (1907), pp. 595 ff.

in these terms. As life adapts itself, as it acts purposefully for its own preservation and extension, as it unwittingly trains itself, learns, and takes on shape and form and as it keeps itself in constant movement, so must we conceive it, as if it were motivated by meaning, in terms of what has been called the teleological principle or the function of 'Gestalt' or 'integrative action' (Sherrington). The muscle movements are not a summation of reflexes but the meaningful behaviour of a live organism in an environment or a situation. 'Our psycho-physical performances (as opposed to physiological functions) should not be represented as part of the schema of neurophysiological excitation but within a schema of relationships between an organic subject and its environment. Every act carried out is an adaptive performance of my body to my environment . . . for example, sensory stimuli on the vestibular organ act in such a way that orientation to a given situation is possible . . . so that coherence in behaviour is maintained' (v. Weizsäcker). The same author wrote as follows: 'When we analyse going up and down hills, the real performances occur in a continuous cycle of connectedness between organism and environment—environment and organism, but not in the way that we can put the two together as two parts of one whole, because the organism itself always determines what part of the environment will act on it and so with the environment, it determines what part of the organism will be excited. Every stimulus has already been selected and is thus not just given but fashioned. Every excitation is already an alteration of set and once more not just given but fashioned. We may term this cyclic interaction a Gestalt-circle' (Gestaltkreis).¹

On the other hand the neurophysiological viewpoint of the reflex arc has repercussions on the psychology of performance. The basic concepts of neurology are *translated into psychopathological theory* and they offer a model and sometimes a very apt analogy. We will illustrate with some of the *basic concepts* of neurophysiology:

(1) *Fatigue*: reduction of function by constant exercise in time is something which may be observed in an analogous way from the highest levels of psychic life down to the lowest level of function of the nervous system. (2). *Practice*: is conceived to be a factor in the mnemonic formation of the nervous system in general. Functions released by stimuli produce after-effects which facilitate the function and permit it to take place in response to other stimuli or in response to partial or weak stimuli. (3). *Excitation and suppression*: are the opposite poles in all nervous function. (4). *Inhibition*: is the name given to the weakening or suppressing effect on reflexes produced by the higher centres or other simultaneous stimuli. If we omit these other stimuli or exclude the higher centres, the reflex will immediately appear in full strength. *Facilitation* is the term used when no reaction appears following either of two stimuli but will do so only when both stimuli act together or within a short interval of each other. Each single stimulus is too weak but several similar weak stimuli summate in their effect. 5. *Shock*: is the term used when there is cessation of nervous function brought on by injury of all kinds (including very strong stimuli)

¹ *Nervenarzt.*, vol. 4, p. 529. v. Weizsäcker *Der Gestaltkreis* (Leipzig, 1940).

without destruction. After some time the ability to function returns spontaneously to the parts which have been affected by the shock.

All these neurophysiological concepts have found application in psychology, but so far with undoubted justification only the concepts of fatigue and practice, excitation and inhibition. The psychic factor is already important for reflexes; for instance, Pavlov's dogs. These were fed after a bell had been sounded and later on produced gastric juices in response to the bell alone (no food present). It is impossible to discern how far we are using mere analogies and how far the phenomena are identical. Are we to conceive the effect of upbringing as an inhibition or facilitation of reflexes; or are we to regard the increasing complexity of psychic performances such as memory or speech—in which complex performances clearly presuppose simple ones—as levels of integration in the morphology of the nervous system or as linked with the physiology of reflexes (their integrative action)? Are we to think of a depression as being brought about by the summation of all the little stimuli rising from a painful situation or are we to explain as shock¹ the violent emotional upheavals that are followed by complete flattening of all emotions.

This consideration of the nervous system helps us to draw a necessary distinction when we are enquiring into psychic life and trying to find causal explanations. The distinction lies between *phenomena* (which are experienced or visible as a performance) and *functions* (which are not themselves visible but manifest in the phenomena). Functions are not mere theoretical additions but actual facts of the performances and experiences. As such they are not in consciousness. The effect of a volitional act on the organs of movement, the effect of attention on the sequences of thought and of the act of thought itself on the play of language cannot be comprehended simply in terms of awareness. Complex functions take place when the simplest direct experiences and performances appear. The reverse is also true: simple functions, 'basic functions', are the condition for a far-reaching range of phenomena.

(c) *The antagonism between the two basic schemata*

The clearer our analysis is, the more our knowledge improves and the more we comprehend events as mechanically constructed by the elements of our analysis. We see reality, however, more distinctly, the more concretely we can perceive its complex unities, groupings and configurations. Both tendencies have their own specific point. Each fails should it try to be the sole foundation of our knowledge or aim at finding the complete answer. We analyse but in fact are never able to know the whole apart from its elements;

¹ A. Pick has done much work to make psychological phenomena comprehensible through analogy with the nervous system. He has collected a wealth of minute observations and has reported his views and methods in *Die neurologische Forschungsrichtung in der Psychopathologie* (Berlin, Karger, 1921). His numerous writings, highly detailed, are scattered all over and contain valuable things which are unfortunately embedded in a highly circumstantial presentation. It would be desirable to try to get at what is of real value by bringing some order into this work.

we get involved in endless complexities and the whole always remains more than the sum of its parts. We scrutinise things as wholes and, by the clearest representation of them, we see them more concretely, but in this manner we do not learn anything of their origin or function. Analysis therefore finally tends towards the grasping of original complex wholes from which the movement of the parts is derived while the perception of complex wholes tends finally towards analysis in order to comprehend them. The interaction of these two tendencies is founded in the nature of all living things which as we study it becomes capable of infinite exploration under these two aspects. This interaction calls for clear distinctions and clear relationships and does not allow for any confused mingling in which the one tendency substitutes for the other. Let us take a physiological example:

Integration of the reflexes. Reflexes exist in isolation only in the physiological schema, not in the nervous system in reality. Through mutual inhibition and facilitation the reflexes even in the lower levels of the spinal cord are integrated to a functional tissue within which they act in consonance, superimposed or antagonistically. They build themselves up into a hierarchy of functions which plays together as a whole. Sherrington demonstrated how complicated even peripheral reflexes, such as the patellar reflex, are in their relationships. Changes in posture of the leg or even that of the other leg exert an influence. Sherrington termed this manifold interaction of the reflexes 'integration'; the action may be inhibiting, facilitating or regulating and exists right up into the highest levels of the nervous system.¹ This integrative action of the nervous system makes reflex responses to stimuli appear extremely variable. Co-ordination of reflexes may be disturbed and illness may bring about a reduction in the hierarchy of functions.

With this kind of presentation there is a constant interweaving of the mechanism of mutual influence and modification of all the reflexes with the independent, original source of the whole complex pattern. For a moment it seems as if the whole might be comprehended from its parts yet, without the support of the entirely opposite viewpoint of a whole in its own right, such an explanation could only lead us into endless and astronomical complications. Such investigations make us feel that there is a primary independent source of all the complex unities and that this needs some method for its formulation. As a mechanism reflexes are parts of the totality of reflexes; from the point of view of a complex unity, they are members and the membership cannot be comprehended simply through the fact of being a part.

There are some noteworthy facts that dramatically demonstrate the existence of complex unities:

Good performance may be maintained in 'complicated' life situations and certain tests can demonstrate this experimentally, although isolated, artificial laboratory tests show serious defects of elementary functions of perception (for instance, in cerebral injury). A patient suffering from agnosia (psychic or 'soul' blindness) who cannot recognise shapes during a test may still be able to move quite correctly according to

¹ C. S. Sherrington, *The Integrative Action of the Nervous System* (Cambridge, 1906).

the situation, in his flat or in the street. There are people with encephalitis who cannot go forward but can go backward and even dance (E. Straus) or someone suffering from the rigidity of Parkinsonism may suddenly show a good performance during some ball-game, with a graceful pattern of movement (L. Binswanger). The defects are there in a hidden way and will show themselves up as failure in certain tests, but the ability of the whole is more than the sum of the individual performances.

Some exact experiment in biological research may often make us feel that we have grasped life in its original wholeness and that we have at last penetrated it through and through and yet in the end we find it is still only a widening of mechanistic insight, a widening which in comparison with the preceding simplicities may be truly magnificent but which is yet no penetration of life itself, only of its apparatus. Thus we have the 'co-ordinating factors' of Spemann or the genes of genetics. In the end we have comprehended only elements and the problem of the whole appears again in new form. The elements however may be complex unities themselves compared with other elements while at the same time they are also elements in a mechanistic style of thinking. This mutual interplay is a characteristic of all that we know in biology and psychology. We can keep things clear only if we know exactly what we are doing.

We should make ourselves conscious of the antagonism of these two tendencies and not forget them in our investigations. Only so can we protect ourselves from contradictory and futile polemics, which follow current fashion and play off one method against the other. There is a dislike for complex unities, for anything 'gestalt-like', since they defy reason, and we prefer to leave the arts and the poets to deal with matters unscientific. On the other hand there is also a dislike of elements and mechanisms and a desire to do away with these remote and artificial abstractions. One party despises interpretations derived from the whole, the other any interpretation of the whole from its parts. With many people today holistic and gestalt theories have the upper hand; there is a certain fear of still using such concepts as belonged to the old, mechanistic psychology of reflexes and association. It all seems so dull and retrograde. Yet in fact we still abide by these constructions and use them unwittingly. The old tendency to make them absolutes was false just as is the present tendency to make a fresh absolute. Neither way is wrong in itself, but we have to move in both paths deliberately, otherwise we shall not reach the real margins of our understanding nor the ultimate possibilities they imply.

(d) *Association-, Act- and Gestalt-psychology*

The antagonism between mechanism and integrating unity, between automatic happening and creative shaping, between analysis into elements and discernment of things as a whole, has dominated biological and therefore neuro-physiological thinking and turns up again within the sphere of psychological study. There is a vast psychological literature which discusses the various schemata of apprehension, by means of which we interpret psychic events in

the form of psychic performances. The schools of thought which have developed one after the other (as the psychology of association, of intentional thought, or as gestalt-psychology) and which have all attacked each other, can in fact be brought together. We can make use of all of them, each one within its own limitations, as a means of describing phenomena and posing new questions for analysis. None of these psychologies can claim to explain everything or provide an all-embracing theory of psychic life as it really is. They fall down entirely as an explanation of the psyche, but show their value nonetheless if one employs them for a clear presentation of the relevant psychic facts. They cohere, they can be combined and do not have to contradict each other.

1. *Basic concepts.* The flow of psychic life is thought to be an *association of elements*, which group into complexes and as time proceeds call each other up into consciousness. These elements are called '*ideas*'. Our perception of the external world provides the content for these inner images. The psyche can turn to the external world through perceptions or it can surrender itself to an inner sequence of ideas. The ideas or images—the elements of this psychic flow—are built up into units by the *act* which intends an object in them. In these acts we apperceive certain constantly forming, structured units (*Gestalten*—configurations of perceived objects) and we experience intra-psychically similar structures among our own psychic events.

2. *The automatic mechanism of association.* We may investigate the flow of psychic life from two aspects. On the one hand we can understand how drives give rise to motive, how motives give rise to decision and deed; and we can understand how thought and thought-content arise from the purposeful consciousness of the person who is thinking. On the other hand we may try to give some objective explanation of how one element of consciousness 'follows' another automatically; how a mere sequence of psychic events rolls along mechanically. This automatic happening is the basis for the rest of psychic life, which it makes possible, and we can study it in isolation. Objective explanation of the existence and sequence of psychic elements can proceed either by referring to *concrete physical events*—the mechanism of perception, neurological localisation—or by the use of psychological concepts such as those which combine into a theory of *association mechanisms*.

We conceive the psyche as if it were broken down into innumerable elements, which move through consciousness one after the other as in a chain, and leave behind them certain extra-conscious dispositions, through which they may again become conscious. All psychic events appear either through external stimuli or through the actualisation or revitalisation of those dispositions that have been acquired through previous stimuli. The dispositions are thought to be linked among themselves. They never appear by themselves (independently arising images) but almost always through a stimulation of these linkages. The latter are of two kinds: primary, the same in all of us (association by similarity, or associations of a general character in virtue of some objective context), or they are acquired and dependent on specific antecedent experiences, they are individually different (association by experience or according to the particular subjective context). Thus a psychic event may appear by associations of similarity, e.g. I see a red colour and I think of another colour, or by

associations of experience, e.g. I perceive a smell and think of the house in Rome where I experienced a similar smell and feelings are aroused in me similar to those I felt then. The extra-conscious association-links which theoretically are considered to be causal remain by definition always unconscious; moreover, when a new image emerges we are by no means always conscious of the connecting link of objective similarity or of chance subjective experience. We have feelings and thoughts the origins of which we cannot discover even by thinking hard about them. Sometimes we are successful when some time has elapsed, as, in the example, we may explain the appearance of certain feelings by that earlier experience and the present olfactory sensation. Thus it is with most explanations of psychic phenomena in the case of patients. *We* find the associations. The patients are not aware and do not need to be (for instance, in the speech of aphasic patients and the flow of images during a flight of ideas, etc.).

This rather crude picture of *elements* and *association-links* will have to suffice. We try to explain what appears new in the flow of ideas by the principle of association but it is not only new things that are constantly appearing. Ideas that have been aroused tend to stay and after brief intervals will return by themselves. *Perseveration* is the term given to this tendency of psychic elements to linger on. From what has been said it will be clear that not only ideas but feelings, thoughts, aims and modes of reaction 'perseverate' as well.

3. *Constellations and determining tendencies.* This flow of ideas holds momentarily immense possibilities for the association-process. But only few of these possibilities come to pass. How does the *selection* of them take place? It is certainly not brought about simply by the latest idea but by the whole complex of antecedent experiences, through the influence of ideas which are far removed from the centre of consciousness, and of which we are only dimly aware, and even through ideas which are too weakly stimulated outside consciousness to reach it. The term 'constellation' is given to all these very complex conditions that determine the eventual direction of the associations. The various individual conditioning factors are said 'to constellate'. Besides this constellation of associations we find another quite different factor which is responsible for the selection of certain associations out of all the infinite number possible. Certain aims (master-ideas)—the awareness that the flow of ideas is to lead to a certain goal and satisfy the requirements of a particular task—bring about a preference for the *relevant* ideas if the individual has the necessary association-links. We can demonstrate this effect experimentally. The extra-conscious causal factors that are linked with this target-awareness are called the *determining tendencies* (Ach.). We have to make a threefold distinction: (1) the awareness of the target, (2) the selection of suitable ideas—as can be shown objectively, (3) the determining tendencies which provide the theoretical explanation for this selection of ideas as demonstrated and which are thought to be linked with the target-awareness. Determining tendencies do not originate only from a rational awareness of the target. They arise from all kinds of ideas, from aesthetic images of some complex unity, from moments of mood etc.

4. *The chain of associations and the link by Act.* We are now acquainted with that objective explanation of the psychic flow of ideas which is based on the principles of modes of association (similarity or experience), the constellation of ideas and determining tendencies. Elements are linked by association and are called up in clusters or constellations under the influence of determining tendencies. To make any meaning-

ful use of these explanatory principles we need to know what are the elements that are being called up and between which links exist and are being created. When we begin to think of examples we immediately find that there are a number of extremely diverse elements: sensations as such, percepts and ideas, ideas as such, ideas and thoughts, ideas and feelings, feelings and entire thought-complexes etc. In psychic life everything can be associated with everything else. One might be inclined to the opinion, as many psychologists are, that all psychic life could be reduced in the last resort to a number of simple elements, sensations and simple feelings. All more complex functions are then built up from associative links. All associations at this level would be traced in the last resort to the links between the primary elements. This is a mistake due to the confusion of two quite different connections, the *associative link* and the *intentional link*. We must be clear about the difference because otherwise we cannot apply the concept of association correctly. With idiots and parrots we can establish an association between words and the perception of objects; on seeing the object, the word is said, without knowing that the two are linked by any meaningful association. Here the associative link causes one element to be aroused by the appearance of the other (i.e. perception and word). But if an individual grasps that a word means an object, we have here the experience of an intentional link. Word and object form a new unit now for him, whereas when mere associative links are in operation the context of the connection is present only to the observer, not to the individual who associates (in whose consciousness one element is following the other automatically). Speaking quite generally, we may say that innumerable psychic elements are grouped within one intentional act and are grasped as one comprehensive whole, and this, in contrast to the individual elements, gives rise to something new. One thought builds on another, on ideas and perceptions, and these all become unified for the subject eventually in his thought. This experience of unity seen from the point of view of association-psychology is again another element. Everything which is grasped in one *intentional act* and experienced as a whole is *an element*.

We are now approaching the answer to the question what an element means for association-psychology. We can design a visual schema to give us a proper view of the matter (*see accompanying diagram, Fig. 1*). The elements lie in horizontal layers, one on top of the other, in such a way that several elements of the lower layers can meet again at a higher level by means of the intentional Act; for instance, at the bottom there are elements of sensation, at the higher level, thoughts of relationship.

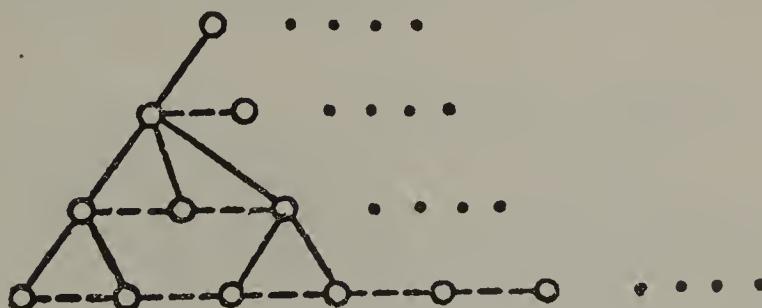


FIG. I

- Element
- ^ Intentional link by Act
- - - Association link

In the diagram, the intentional links have been drawn from above down; the association links are presented horizontally. Every intentional act in the higher layer is an element which associates, and at the highest levels most complicated intentional Acts are being associated together.

Schema

Association link

1. Associations occur mechanically in sequence and stand side by side.
2. Associations occur unconsciously; an association-link is not an object of experience for the individual associating.
3. The lower the level of intentional acts, the more frequent are the association-links, as observed, occurring in speech and conduct.

Intentional link

Intentional links build up one on another to higher wholes, which are again experienced as units.¹

Intentional links occur consciously; the link is an object for the individual who experiences it.

The higher the level of intentional acts, the more conspicuous to the observer are the meaningful connections of conscious psychic life.

5. *Elements and configurations (Gestalten).* The unity of anything that has been comprehended by an intentional act and which has been carried out as a whole by means of its movement has been termed a configuration (*Gestalt*). We do not perceive sensations but all our perceptions, images and thought-contents appear to us as configurations. We do not carry out muscle contractions but a configuration of movements. The simple act of unitary object-perception would be impossible if the miraculous interweaving of all that has preceded it in our psychic life did not supply the influence which brings order into the scatter of individual facts. Sensations in the course of perception become members of a whole, muscle contractions become governed by ideo-motor schemata. We talk of word-pictures or movement-patterns in order to differentiate these configurations from sensations and contractions. The psychological study of perception and movement has examined these configurations in some detail, particularly with reference to disturbances in this field in the form of agnosias and apraxias. The function of configuration is, so to speak, the architectonic association of sensory and motor elements to make a meaningful unit of the perceived object and in the movement pattern; to make a meaningful unity also of sensory and motor patterns in general, wherever there is perception and motor activity, understanding of speech or the act of speech. According to this conception, configurations become the elements of every psychic event.

The concept of elements in psychic life never denotes 'ultimate' units but only units as they are seen to function according to some particular point of view. We shall, therefore, work with different units as elements according to the point of view we have for the moment adopted, so that what is an exceedingly complex construction from one point of view will become a single element for another.

(e) *The hierarchy of complex unities*

Beyond the reflexes, which only appear as isolated units under experimental conditions, lies the first complex unity—performance. Performance is the

¹ Beringer, *Spannweite des intentionalen Bogens*.

completion of a task which has meaning only as a whole. But every individual performance is once again a particular.

Beyond the *individual performance* lies the *total performance*. This complex unity influences the single performances of every individual. It may correct or modify them. Only the performance that is in harmony with the total performance will obtain full realisation. The total performance can be conceived from several points of view: as the *psychophysical ground* for the performance of basic functions; as the present state of the individual within *the flow of his psychic life*, or as that persisting capacity for performance, which we call *intelligence*.

However, this total performance is not the final thing. As a whole it is a tool for understandable personality. Although the personality itself lives in it, it always still remains a tool. If we talk of tasks to be performed, we may ask what tasks? for what end are they posed and by whom? The psychological study of performance presupposes the existence of meaningful tasks; but we have to turn to sources in human beings themselves when it comes to whether the tasks are grasped and assented to, whether the performance is seen as a means, and why these means are used. Hence the psychological study of performance never grasps the human being as a whole but only the *apparatus* which lies at his disposal. The psychophysical apparatus in all its developed thought-performances provides the basic structure for intelligible personality. One could construct the theoretical borderline case where the personality as a potentiality remains intact although there is every kind of disturbance in the performances of the psycho-physical apparatus and there is no further possibility of self-expression.

If we look at the contents objectively realised by human beings through the medium of task and performance, we see that mere performance is something extremely limited yet necessary. The machinery must function if the human nature which it serves is to reach realisation. The aspect of performance links the psyche most closely with the neurological apparatus. From this point right up to thinking proper there is a hierarchy of connected function, providing the tools with which man works.

(f) *Experimental work in psychopathology*¹

The psychological study of performance is also the main field for experimental psychopathology. At this point we can appropriately include some remarks on psychological experiment:

i. *The set task.* The basic structure of every experiment consists in the

¹ On experimental psychology see Kraepelin, 'Der psychologische Versuch in der Psychiatrie', *Psychol. Arb.*, vol. 1 (1896). Sommer, *Lehrbuch der psychopathologischen Untersuchungsmethoden* (1809).—For a survey, see Gregor, *Leitfaden der experimentellen psychopathologie* (Berlin, 1910). More recently Ernst Schneider, *Psychodiagnostisches Praktikum* (Leipzig, 1936). Papers in *Z. Neur.*, vol. 161, pp. 444, 511. Über Psychotechnik u. Eignungsprüfungen; Münsterberg, *Grundzüge der Psychotechnik*; F. Giese, *Handbuch der psychotechnischen Eignungsprüfungen* (Halle, 1925). W. Poppelreuter, 'Psycho. Begutachtung der Erwerbsbeschränkten in Abderhalden', *Handbuch der biol. Arbeitsmethoden*, Abt. 6.

setting of tasks and the observing of performance, reaction and the general mode of behaviour. Set tasks are of the following kind:

1. Recognising an object which is exposed for a very short time (use of the tachistoscope): *test of apperception*. 2. saying the first word that comes to mind in response to a stimulus-word;—*test of association*: 3. taking in and retaining certain test material—*test of attention, test of learning*: 4. looking at a picture and then giving a spontaneous description of it, followed by an examination on individual points, or reading a story instead: *test of powers of reproduction*: 5. adding up, making measurable movements. The performance is calculated and the many determining factors are investigated: *test of working capacity*.

Example. Test of associations. Association experiments¹ are often used because of the technical ease with which they can be arranged. Stimulus words are called out and the instruction given to react as quickly as possible with a single word, the first that occurs to one. Or the task is set to surrender oneself to ideas as they come and speak them out without thinking. The extremely simple procedure of the association test has shown itself to be fruitful, not so much through its exactness as in what it reveals objectively to the observer.

In association tests we observe: 1. *the length of time* of the individual reaction (measured with a stop-watch). 2. the correct or incorrect *reproduction* of the individual association when the test is over. 3. the number of associations falling into certain *categories* e.g. clang-associations, associated content etc. The classification of associations is made according to a number of schemata the value of which can only be assessed according to their particular purpose. 4. reactions with associations which are *qualitatively different*; e.g. egocentric reactions, whole sentence completions, definitions, verbal similarities, marked emotional colouring etc. The test reveals the *wealth* of associations at the disposal of an individual, though the conclusions gained by the test are not very reliable; the emotionally toned *complexes* that dominate the patient's life (shown by increased reaction-time, poor powers of reproduction, marked accompanying phenomena—a convincing but unreliable clue); *odd types of ideational processes*, e.g. flight of ideas, catatonic incoherence. These will occur spontaneously during the test as in conversation.

2. *The manifold nature of experimental observations.* Experiments abound in great variety. They range from simple aids to examination to complicated and costly techniques, from a simple recording of performance to the endless possibilities of accidental observations, from the sole observation of the experimenter to self-observation of the proband.

(aa) *Aids to examination.* There are some very simple experiments, such as having pictures described, or observing false perceptions that arise when there is pressure on the eyeball, having a story retold, having inkblots described (Rorschach) etc. Here we are not dealing so much with actual experiments as with technical aids to examination, which have proved to be valuable techniques for complementing the ordinary interview.² Rather more complex are

¹ Aschaffenburg, *Psychologische Arbeiten von Kraepelin*, vols. 1, 2, 4. Jung, *J. Psychiatr.* vols. 3, 4, 5. Isserlin, *Mscr. Psychiatr.*, vol. 22, pp. 419, 509. *Münch. med. Wschr.*, vol. 2 (1907).

² Such technical tests exist in great numbers, especially intelligence tests; for the examination of inaccessible patients see Liepmann, 'Kleine Hilfsmittel', etc., *Dtsch. med. Wschr.*, vol. 2 (1905).

the techniques for examining aphasias, apraxias, and agnosias. There are a series of carefully graded tasks in a number of situations, to bring out clearly and objectively the actual performance and the failures, which are kept circumscribed in relation to specific factors. (This has been subtly developed by Head.)

(*bb*) *Precise measurements.* The results are characterised by being in the precise form of figures and measurements. There are experiments with a series of tasks, learning experiments, experiments with the tachistoscope. In these there is always a quantitative assessment; experimental conditions are systematically varied and correlations between factors are established.

(*cc*) *Techniques for presenting the phenomena.* An attempt is made to write down everything the patient says during the experiment; behaviour is described, and performance recorded, the way the patient writes, how he moves. Here belong also the mechanical recordings of movement for 'objective' presentation, speech-recording and the use of film and gramophone.

(*dd*) *Self-observation under experimental conditions.* The purely objective tests ask for co-operation, accessibility and understanding of the task on the part of the patient or subject, but they need no particular psychological ability on his part nor any self-observation. Tests that require self-observation call for individuals who have this latter ability and who are able to carry out self-observations in an unbiased way. The results of such experiments belong as much to the study of objective performance as to phenomenology, e.g. in the explanation of failures in performance noted by phenomenological observation.¹ These experiments simply create suitable conditions under which through the patient's self-observation it is possible to become aware of certain psychic phenomena of a particular nature. Patients are asked what they experience when carrying out the tests. An effort is made to relate these phenomenological reports to the failures in performance, so that they may be interpreted psychologically; this applies especially to disturbances of perception and movement.

(*ee*) *Observations made during the experiment, but not as part of it.* Testing in psychopathology derives much of its value from the observations made during the actual tests. These are not like the experiments made in the natural sciences during which one simply registers and measures. The patient is placed in conditions under which he tends to disclose himself more quickly and more clearly than he will do in ordinary interview. The unexpected observations are especially stimulating for the examiner. Moreover, they are essential for the correct interpretation of the measurements obtained. It is only through observation that we can detect schizophrenic thought-blocking, whether affective pauses prolong the test, and whether the behaviour is due to laziness or stolidity. Purely mechanical test-results are useless here.

¹ The school of Külpe (Bühler, Messer, Selz) has developed this kind of test. Cf. *Arch. Psychol.* (D). For criticism see E. Müller, *Zur Analyse der Gedächtnistätigkeit* (Leipzig, 1911), pp. 61 ff. Wundt, 'Über Ausfragexperimente', *Psy. Stud.*, vol. 3 (1907).

(ff) *The aim of experimental testing.* This is to measure *individual performance, basic function, intelligence, personality or constitution*. Whatever the test many functions must be intact for performance to be possible. We can only test certain psychic functions if the other functions are intact. This is why, for example, association experiments, reproduction experiments, tests of working capacity are equally applicable to the investigation of single functions as to the characterisation of the total personality, whether it be in its constitutional features (psychic tempo, sensory type, etc.) or as an individual form of personal expression.

(gg) Several tests attempt to *penetrate the unconscious*, and illuminate hidden aspects of the life-history, i.e. association-tests and the Rorschach.

3. *The value of experiments.* Experimental psychology is not equally valued by everyone. Some think it sterile and empty; others see it as the only scientific method we have. To a balanced observer it must appear irreplaceable as an experimental method in its own field, but we cannot concede it the right to consider itself as the only method. The main thing is to formulate our problems clearly and this needs an all-round psychological education. We should certainly try experiment where questions can be suitably answered in this way; otherwise we should look out for other methods, such as simple observation and the study of the patient's life-history and the use of cases, statistical methods, and methods of sociology.

Experiment creates objective facts which convince. Other methods do not do this as easily nor as quickly nor as obviously. Many psychic phenomena only become apparent when their relation to the patient is shown in this objective way. The distance created by the experimental situation may reveal quietly and impersonally what had been hidden during actual interview.

Furthermore the experiments of normal psychology as of sense-physiology have important results. They make us keenly aware how even the simplest phenomenological process contains extremely complex factors, not only in its somatic genesis but in the function and correlation of the phenomena brought out by the experiment but not yet explicable in somatic terms. Psychopathological experiments also confirm this. We always need to distinguish what the experiment really shows from the theoretical explanations we give of what is happening. Where no direct link with a physiological-somatic base appears possible, we would still like to find a psycho-physical apparatus functioning. This is achieved when the conceptual schemata of neurology become translated into psychology and concepts are formed such as those in the above-discussed schools of Association-, Act- and Gestalt-psychology.

SECTION ONE

INDIVIDUAL PERFORMANCES

Performances are classified according to the form in which they materialise. Everything that can be observed objectively, tested, investigated and called

a performance of some kind will fall naturally into one of the groups which we are about to discuss. These are perception, apperception and orientation, memory, movement, speech and thought. Our concern is with particular failures of performance which can be directly observed. Description of these will always give us the performance-profile of an individual. First, however, we must make an inventory of the separate types of performance.

§ I. PERCEPTION

Not all the stimuli that impinge on sensory nerve-endings reach consciousness. There are many centripetal nerves which elicit complex reflex responses without anything becoming conscious. The whole process remains automatic. As surgeons have found, the stomach and intestines are almost entirely devoid of sensation and yet within their numerous nerves reflex mechanisms of a most complicated kind occur. Maintenance of equilibrium, the performance of many movements (individual muscle contractions as well as complex synergies) happen without our awareness but we cannot draw any sharp dividing line between purely physical mechanisms and psychically conditioned events. Mere reflexes, as for instance breathing, can become conscious and conscious events can become automatic (for instance, the movements learned in riding a bicycle).

When we come to perception it is obvious that disturbances in the nervous system will affect perception in so far as the latter is based on the former. Thus, for example, we get anaesthesia, paresthesia, disturbances caused by morbid processes in the visual apparatus (hemianopsia, disturbance of visual perception through lesions in the choroidea etc.) and all the other anomalies described in neurology. These disturbances are subdivided physiologically according to their predominantly peripheral or central nature. The higher the level of nervous integration in which they are situated, the nearer we come to psychic events. It is true there seems no end to it, an infinite progression. Every new neurophysiological discovery, instead of setting foot within the psyche, simply enters a yet higher level of the neuro-mechanisms that underlie psychic life. However, when describing psychopathological disturbances in perception, we usually include the neurophysiological anomalies that affect the highest levels. *Sensory disturbances belong here, a few of the false perceptions and above all the agnosias.*

(a) We find *simple sense-deficiency*—congenital deafness, colour-blindness, anosmia—where sometimes no physical cause for the deficiency is known. We can find full descriptions in the textbooks of neurology, ophthalmology and otology of the manifold perceptual disturbances arising from local diseases of the sense-organs and of the nerve tracts up to the projection-area of the cerebral cortex.

(b) With the majority of *hallucinations* we do not know what causes or conditions their appearance. With some hallucinations, however, we do know some if not all the contributing causes (cp. pp. 377–89). Hallucinations follow diseases of sense-organs and certain localised conditions of the sensory cortex (peculiar elementary light and sound phenomena). We have also observed

vertigo in diseases of the vestibular apparatus and hemianoptic hallucinations in particular with localised lesions in the occipital lobe. With other hallucinations we have noticed a certain dependence on external stimuli; in organs which are so disposed and can hallucinate almost spontaneously, it is possible to bring hallucination about by any kind of stimulus. With delirious and other patients visions can be elicited by pressure on the closed eye, as we all know. But all these effects are far too crude for us to penetrate to the extra-conscious mechanisms that underlie the hallucinations.

(c) *Agnosias*.¹ This is the term given to disturbances of recognition while sense-perception is intact. After a head-injury, the patient may be able to see the room and its furniture but cannot recognise the objects as furniture; she is perplexed, does not know what objects they are and of course does not know that they are *her* furniture.

She can therefore perceive but cannot make out the meaning of her perceptions. In agnosia, perceptions take place, with sensations present in the act itself, but what is then perceived is not perceived as a definite object, nor can it be recognised. Reproduction, which links up previous experiences and makes recognition possible in all perceptions, is absent here. Goldstein and Gelb have to some extent clarified what is actually present in consciousness in such cases. They have given us a description of a patient of theirs with a gunshot wound in the head:²

The patient has coloured and colourless blotches in a certain part of his visual field. He can see whether a certain blotch is higher or lower, to the right or left of another one, whether it is narrow or wide, large or small, short or long, nearer or further, but that is all, because the various blotches together create a confused impression and there is not, as with normal people, any impression of a specific, well-characterised whole. The patient could not recognise any shapes, neither straight nor crooked ones. When, however, he followed the shape with his hand, he could recognise it. Nor could he see movements properly. He reported: 'When I saw the train coming, I saw it about 5 metres away.' After that, usually, he saw nothing until it was suddenly standing in front of him. A moving train which 'he clearly recognised' he did not see moving; he concluded it was moving only from the noise; when he wanted to go for a walk with his sister-in-law, she went in front of him, and he followed her at a distance of 20 metres; he then thought his sister-in-law had stopped and was standing still and was 'very surprised that he did not overtake her'. The distance did not get any shorter . . . What he saw was only a 'now-here', 'now-there'; he never had the impression of movement as a normal person has it, that is, as something specifically different from individual, static position. In the tactile field, however, the patient had distinct perception of movement.

¹ Wilbrand, *Die Seelenblindheit* (1887). Lissauer, *Arch. Psychiatr.* (D), vol. 21, pp. 222 ff. Müller, *Arch. Psychiatr.* (D), vol. 24, pp. 856 ff. Liepmann, *Neur. Zbl.*, vol. 27 (1910), p. 609. Külpe, *Z. Pathopsychol.*, vol. 1, pp. 224 ff.

² Goldstein and Gelb, 'Zur psychologie des optischen Wahrnehmungs und Erkennungsvorgangs', *Z. Neur.*, vol. 41 (1918), p. 1. Fruitful translation of Gestaltpsychology into psychopathology is continued in *Z. Psychol.*, vols. 83, 84, 86 (1919-20), and in the continuous series of 'Psychological analyses of brain-pathology cases'.

Visual agnosia ('soul'- or psychic-blindness) occurs with the destruction of both occipital lobes. Actual facts do not support a relationship between these specific disorders of performance and any fine, localised cerebral lesions. Visual agnosias, auditory agnosias and tactile agnosias (stereoagnosias) are differentiated according to the sense-areas.

(d) Some of these perceptual anomalies which so far have only been treated phenomenologically can be recognised by objective tests and measurements, and can be explained as defective performances; for instance, some disturbances of the *time sense*. We have to distinguish between disturbances in the perception of time, which we can test, and disturbances in the experience of time (which so far we have only studied phenomenologically). So with *perception of space*, in a few cases it is possible to link this up with testable alterations in performance; for instance, a reduction of the visual field,¹ explicable in terms of a fatigue-phenomenon or a disturbance of attention and increased distractibility.

§ 2. APPERCEPTION AND ORIENTATION

Agnosias are disturbances of recognition, that is they are properly disturbances of apperception, but because they are confined to particular sense-areas, we have grouped them with disturbances of the perception mechanism. If we now discuss disturbances of apperception² in the narrower sense, we cannot make a very sharp distinction. What we mean now is a disturbance in all the senses at the same time, in so far as they are related to the psychic life as a whole. We can, therefore, differentiate disturbances of this sort from those agnosias which, similarly to disturbances in the sense-organs, occur as more peripheral anomalies in a normal person and attack only one of the mechanisms underlying psychic life. Whereas phenomenologically perception and apperception form a single whole, an objective analysis of the performance can differentiate the *mechanism of perception*, as the process whereby nervous mechanisms can lead to awareness of objective content, and *apperception*, as the process which brings about the absorption of such content into the body of our experience.

Apperception can be *slowed down*, or *remain in abeyance* in the face of difficult objects or lead to *false results*. These facts can be crudely observed in any interview, through reading a sample of short stories to the patient, or showing him a number of pictures.³ The time required for apperception can, however, be measured in much finer detail, and so in cases of false apperception can the dependence on the constellation of the preceding inner associations. For this we can use experiments with the tachistoscope, an apparatus which exposes pictures, letters, words for very brief measurable periods. Investigations

¹ Klien, *Arch. Psychiatr.* (D), vol. 42, p. 359. Rehm, *Z. Neur.*, vol. 55, p. 154.

² Heilbronner, *Mschr. Psychiatr.*, vol. 17, pp. 441 ff. Kronfeld, *Arch. Psychol.* (D), vol. 22, p. 543. (Summaries), Gregor, *4 Vorlesung*.

³ Heilbronner, *Mschr. Psychiatr.* (D), vol. 17, p. 105.

such as these lead to a tentative classification of disturbances of apperception into three groups, according to the source of the disturbance:

1. *Level of intelligence.* Apperception fails with the more difficult objects because of the persisting defective state. There is no body of knowledge with which the perception can be linked.

2. Apperception can be affected owing to disturbances in *registration* (e.g. in senility, in Korsakow-syndrome). Everything that comes into consciousness is immediately forgotten. Before anything more complex can be apperceived, however, what has been perceived must also have been retained. In this case this is already forgotten when the next part of what is to be apperceived appears.

3. Apperception depends upon the *state of consciousness* and on changes in the *mode of psychic activity*. In states of clouded consciousness there is an indistinct, often illusory, apperception, sometimes clear in detail but never clear as a whole. In manic states apperception is most changeable, following the flitting interest and the marked distractibility through chance constellations of ideas which may lead to falsifications. In depressive states apperception is inhibited and does not reach its goal though efforts are made, sometimes intensively. With the use of the tachistoscope and by exposing a series of letters, we can count the omissions and mistakes in apperception and measure reliability and distractibility objectively.

Orientation is a highly complex apperceptive performance. We can easily verify it in respect to the environment in the current real situation or else in respect to one's own person. We distinguish orientation in space and orientation in time, orientation in relation to the self and orientation in relation to others. Orientation in one direction may be intact when there is disturbance in others. For instance there is the characteristic symptom of delirium tremens, complete disorientation in place, time and environment but correct orientation in relation to one's own person. Disorientation, however, is not a particularly pathognomonic symptom. It can come about in very different ways and its significance therefore may vary greatly. It is only the last, easily detectable, objective failure in performance in a chain of manifold acts of apperception. The following schema covers the different *modes of disorientation*:

1. *Amnestic.* Where there is a severe degree of disturbance in registration, there is a disturbance of apperception as a result of immediately forgetting what has just been experienced. Senile patients, for instance, think they are twenty years old. Women take their maiden name again, write the wrong year, think they are at school or at home when they are in the clinic, think the doctor, whom they never recognise, is a teacher, some official or the mayor etc.

2. *Delusion-like.* The patients are fully conscious but have delusions and therefore conclude, for example, that the date is three days out although they know everyone else finds the date different. They may conclude they are in prison, though everyone else considers the place is a hospital etc. *Double orientation* as it is called is connected with this. The patients are correctly and incorrectly orientated at the same time. They know, for instance, where they are, what time it is and that they are having a mental illness. At the same time this is only an appearance, the golden age has arrived and time no longer matters.

3. *Apathy.* The patients do not know where they are, what time it is, because they do not think of it,

but they are not wrongly orientated. 4. *Clouding of consciousness.* The patients only grasp details. Apperception of the real environment is replaced by the changing experiences of the disturbed consciousness, which cause a wealth of fantastic disorientations, analogous to dreams.

Disturbances in orientation occur in acute psychoses and many chronic states. They are easily recognisable and important for the assessment of the case. In each case it is necessary to make sure about all four dimensions of orientation. The finding that the patient is orientated or in which direction this is so will influence the whole of the further examination.

The disturbances of apperception have been differentiated and investigated according to their content—the failure to recognise people, for instance.¹ This phenomenon is an objective disorder of performance but it may be of very different kinds and origins.

Failure to recognise persons occurs where there is alteration of consciousness (deliria), where there is confabulation in amnestic syndromes, fooling about in manic states, altered perception (illusion), acute psychosis, or delusional perception in schizophrenia. The mode of experience is as heterogeneous as the cause.

§ 3. MEMORY²

Psychological preface. A threefold distinction is necessary.

(1) *Registration.* The ability to add new material to the store of memory. We then differentiate into learning ability (repeated presentation of material) and registration in the narrower sense (single presentation of material). (2) *Retention.* The big reservoir of lasting depositions, which can enter consciousness on appropriate occasions. (3) *Recall.* The ability to bring into consciousness particular remembered material at a particular moment under particular circumstances. Registration and powers of recall are actual functions; memory itself is a possession of lasting depositions. We can find pathological disturbances in any one of these three fields. They can all be described as 'disturbances of memory' but in fact they are each different in character. Normally, memory may be faulty with constant limitations and fluctuations as regards fidelity (reliability), duration, readiness and serviceability. Extensive psychological experiment has established certain laws which are of interest; there are laws of *memorising* (e.g. the dependence on attention, interest, whether one learns the whole or part, impairment by simultaneous evocation of other associations, generative inhibition). There are also laws of recall or *reproduction* (impairment by other simultaneous psychic processes, inhibition by associations which try to enter consciousness at the same time; effectual inhibition). We have to realise that there is

¹ Werner Scheid, 'Über Personenverkennung', *Z. Neur.*, vol. 157 (1936), p. 1.

² Ribot, *Das Gedächtnis und seine Störungen* (D), (1882). The following summarise the great experiments of Ebbinghaus and G. E. Müller: Offner, *Das Gedächtnis* (Berlin, 1909). G. E. Müller, 'Zur Analyse der Gedächtnistätigkeit und des Vorstellungsablaufs', *Erg.-Bd.d.Z.Psychol.*, vol. 3 (1911 ff).

As regards psychopathology see Ranschburg, *Das kranke Gedächtnis* (Leipzig, 1911). K. Schneider, 'Die Störungen des Gedächtnisses', *Bumke's Handbuch der Geisteskrankheiten*, vol. 1 (1928), p. 508.

no such thing as memory in the form of a general ability to remember, but that memory consists in a number of *special memory factors*. We can sometimes find, for instance, an otherwise feeble-minded person possessing an outstanding memory for time.

So far in this discussion of memory we have had in mind a mechanism, a machine which we can work well or badly. Memory, however, is also subject to *meaningful connection with affect*, significance, the desire to forget. Nietzsche once said: 'Memory declares that I did this; I could not have done this, says my pride; and memory loses the day.' It is one thing to deal with memory in respect of *things learned* (knowledge); it is quite another to deal with memories in respect of *personal experience* (recollection) and the latter may differ greatly in relation to the personality. Memories may be fresh, effective, significant, not at all remote, or may have become objective, a matter of history, a sort of knowledge, at one remove from the present personality. A number of these meaningful connections have been investigated experimentally: e.g. the relationship between the pleasantness or unpleasantness of an experience and retaining it correctly or forgetting it.¹ Pleasant experiences are retained better than unpleasant ones and the latter better than indifferent ones. It is an old saying that pain is soon forgotten. Memory is optimistic in that we tend to remember the pleasant parts most of all. Memories of severe pain after operation, during confinement or of violent affects soon fade. We only know finally that what we suffered at the time was very powerful, painful and unusual, but we do not keep any real memory of the experience itself. Are unpleasant experiences not so well memorised from the start or do we only recall them with greater difficulty? Or is it that we think of them less frequently and so forget them more quickly? We have to distinguish the forgetting of obligations, of unpleasant tasks, of embarrassing scenes, by simply not thinking of them, and that unintentional repression of unpleasant things, which may lead to an actual splitting off of the content (with impossibility of recall).

In discussing memory disturbances we must distinguish between those which result from abnormal states of awareness (Amnesias) and those which occur in normal states.

(a) *Amnesias*

These are disturbances of memory which last over a *definite and limited time*, when nothing or only little (partial amnesia) can be remembered; the term also covers *experiences* not so well defined as to time. The following different situations should be noted: (1) there may be no disturbance of memory at all. There is a state of deeply disturbed consciousness in which *nothing could be apperceived* and therefore nothing could be registered. Nothing has come into the memory and nothing can therefore be recalled. (2) Apperception may have been possible for a while but registration was seriously disturbed so *nothing was retained*. (3) Transitory registration may have been possible during an abnormal state, but the memory depositions have been destroyed by an organic process. The clearest example of this is what happens with *retrograde amnesia*,

¹ Peters, 'Gefühl und Erinnerung', *Psychol. Arb.*, vol. 6 (1911), p. 197. Peters and Nemecek, *Fschr. Psychol.* vol. 2 (1914), p. 226.

after head injury, when everything experienced during the last hours or days before the injury is totally extinguished. (4) There may only be disturbance of the power to *recall (reproduce)*. The memory contains the whole content but cannot evoke it. Under hypnosis, however, successful recall occurs. Such amnesias have been investigated by Janet.¹ His patients were unable to remember certain experiences (systematic amnesia), or some particular period of their lives (localised amnesia) or their life as a whole (generalised amnesia). If we observe such behaviour in our own patients we shall see that memory does play a conspicuous part. They do not behave as if they had really lost the memory depositions. They do not appear subjectively disturbed by the amnesia. Their attitude towards it is one of indifference and is full of contradictions. Finally the amnesia may lift, spontaneously, periodically or with the help of hypnosis.

Several of these four types of amnesia may appear in one case, but usually one or other predominates. Particularly characteristic is the way in which something belonging to the amnestic period tends to be *preserved*. An amnesia is very rarely complete and this or that particular can be *evoked*. We find two types of spontaneous memory:² (1) *Summary recollection*: the recollection of the essential points in a vague, undetailed way. (2) The recollection of a *mass of detail*, of small, unimportant points which stand unconnected, alongside each other. Sometimes the memory consists of these detailed small irrelevancies, but neither the relationships in time nor in context ever become clear. The above two types correspond to what can be evoked by stimulation or by the use of certain props to the memory: e.g. (1) by appropriate means, and most strikingly of all by hypnosis, we find we can evoke a whole systematic context, a whole complex, a whole set of experiences; (2) we can also sometimes evoke a large number of particulars, by arousing detailed images via the most diverse associative paths. The proper time order and the context can only be evoked with the utmost difficulty or not at all. Speaking categorically, we might say that the former method is appropriate for hysterical amnesias and amnesia after powerful affects, while the latter is more applicable for amnesias in epileptic and organic states, disturbances of consciousness etc.

The fact is worth noting that even *organically* caused amnesias can sometimes be lifted with the use of *hypnosis*. This has happened repeatedly in the case of epileptic amnesias³, and also with a person who had had a retrograde amnesia due to hanging and who was revived.⁴

(b) Disturbances of recall (*reproduction*), retention and registration

Besides the more circumscribed amnesias we commonly deal with

¹ Janet, *Der Geisteszustand der Hysterischen* (Vienna, 1894), pp. 65 ff.

² Heilbronner, *Mschr. Psychiatr.*, vol. 17, p. 450.

³ Ricklin, 'Hebung epileptischer Amnesien durch Hypnose' (Diss., Zürich, 1903), *J. Psychiatr.*, vol. 1, p. 200. v. Muralt, *Z. Hypnotism usw.*, vol. 10 (1900), p. 86. H. Ruffin, *Dtsch. Z. Nervenheilk.*, vol. 107 (1929), p. 271.

⁴ Schilder, *Med. Klin.*, vol. 1923, p. 604.

disturbances of memory in the simple form of an exaggeration of everyday forgetting, of ordinary poverty of registration, etc. Here too we make the usual subdivision into the ability to recall (reproduction), the reservoir of memory-depositions (retention) and the ability to grasp (registration).

1. *Disturbances of recall (reproduction).* Hebephrenics sometimes give a deceptive impression of poor memory when they talk past the point or suffer from thought-blocking; melancholics do the same when retarded and pre-occupied with their own distress, and so do manics who show flight of ideas and lack of concentration.¹ In all such cases recall may perhaps be transiently diminished but the memory is there and after the disturbance has passed will appear unaltered. The patients have only been temporarily unreflective. We also find these disturbances in recall among psychasthenics. They know everything quite well, but the moment they want to use what they know nothing comes to them—e.g. during an examination. As to the hysterical inability to recall, we mentioned this among the amnesias. It is always related to a number of complexes and is not so much a question of momentary lapse of memory as the dissociation or splitting-off of some definite, circumscribed memory-complex.

2. *Disturbances of memory proper (retention).* Our memory capacity is increased or fortified by our powers of registration, but at the same time it tends to disintegrate continually. As time goes on, the memories that have been laid down fade from us and we forget. In old age particularly and in organic processes, memory may undergo excessive disintegration. Beginning with more recent events, the patient finds himself robbed of the memory of his own past and his vocabulary suffers as well. Concrete terms disappear first, abstract terms and conjunctions etc. are preserved longer. Generalities and broad categories linger on, whereas everything that is directly observed and individual vanishes. Of personal memories, the most recently acquired disappear first, the more remote ones are engulfed more slowly. The memories of childhood and youth are retained the longest and sometimes are particularly vivid.

3. *Disturbances of Registration.* Patients no longer register though their previous memories are at their disposal. These disturbances have been investigated experimentally. In particular there is the test in which pairs of words are learned—be they nonsensical or meaningful—and the assessment of such performance has proved fruitful. A quantitative assessment of the memory disturbance becomes possible.

G. E. Störring² observed the case of an isolated, *total loss of registration* with no other disturbances than those consequent on this disastrous loss. The

¹ J. Schultz, 'Über psychologische Leistungsprüfungen an nervösen Kriegsteilnehmern', *Z. Neur.*, vol. 68, p. 326—of relevance to the failure of grasp and recall in depressions and neurasthenia.

² G. E. Störring, 'Über den ersten reinen Fall eines Menschen mit völligem isolierten Verlust der Merkfähigkeit', *Arch. Psychol. (D)*, vol. 81 (1931), p. 257. For an earlier report on the same case see Grünthal and Störring, *Mscr. Psychiatr.*, vols. 74 and 77.

case has been excellently described and it is unique as well as uncommonly instructive:

A 24-year-old locksmith sustained gas-poisoning on May 31st, 1926. In 1930 he was examined. Memories dating from before May 31st were preserved. From then on nothing new had been added. Every impression vanished after two seconds. Any long question was forgotten by the time the questioner had reached the end of his sentence. Only brief questions could be answered. Yesterday for the patient was for ever May 30th, 1926; whatever seemed to contradict this, puzzled him for the moment but the contradiction was immediately forgotten. After his accident his fiancée married him. He did not know this had happened and therefore when asked 'are you married?' would say 'no, but I want to marry soon'. He said the last word of the sentence hesitatingly; he no longer knew why he was actually saying it. Looking through the window at the winter landscape, he could call the time of year 'winter', but if he covered his eyes he would say it was 'summer'—'it was so warm'. The next moment, looking at the fire he would say 'it is winter, because there is a fire'. During the usual examination of the skin with the use of painful stimuli, pinprick etc., each prick was immediately forgotten, though unpleasant sensation persisted. Thus he offered his hand unsuspectingly again and again but the unpleasant feeling summated until finally a sudden elementary fear and flight reaction ensued.

In so far as the whole experience of his former life was at his disposal, he apperceived correctly, recognised things correctly, judged correctly everything at the moment of apperception. He recognised people whom he had known before 1926. Those he met later, his doctors, for instance, struck him every time as strange, new people, in spite of his frequent meetings with them. He was not dull or 'dopey' but wide awake and attentive. He was fully there, observing, enjoying himself, spontaneous in movement and talk. His emotional life had remained the same; his personality, his reactions, values, likes and dislikes had not changed. Compared with the previous period there was a stronger intensity of feeling (his wife said he felt more deeply than before). Every situation was held isolated in his mind without incorporating past or future and every experience was sudden and therefore sharper. His feelings were less complicated than before, conditioned by the immediate past. He lived entirely in the present but not in time. Central feelings closely linked with his personality were more to the fore than peripheral, indifferent ones. His personality was strongly felt by those around him and he was found to be very likeable . . . He had been a tranquil man but his actions were now abrupt and hasty. He became outwardly restless before beginning; the feeling-drives had to reach an adequate intensity by summation before they suddenly triggered off. The patient was unaware of his memory disturbance and did not notice it. If he had noticed it, he would have forgotten it immediately but he did not even notice it, because every impression vanished by the time he wanted to reflect on it. Instead he became puzzled and restless in certain situations, not because he realised his forgetfulness but because he had a feeling that he intended to do something, while he no longer knew what he was to do or wanted to do, unless he was told again and again from second to second. The constant perplexity became set in his facial expression. Störring compared this situation with a wax tablet suddenly turned to stone; the old impressions were still readable but no more new impressions could be made.

The failure of memory-performance often affects registration and recall

at the same time as it extinguishes the already existing depositions. The picture will get clearer if we describe the memory-performance as a whole and how particular behaviour is affected. W. Scheid¹, for example, gives us an excellent description of memory-defect in an alcoholic-Korsakow. Innumerable islands of memory appear, a random scatter of defects and an equally random scatter of successful efforts at registration. We may also note a complete loss of memory after some severely upsetting experience, though memory for small details may be retained. In every memory-performance the situation and the individual attitude are always important.

(c) *Falsifications of memory*

So far we have described memory-lapses in respect of general knowledge and personal experience. We now come to a fundamentally different order of phenomena, which we have termed falsification of memory. This occurs universally and in healthy persons as well as the sick. Investigations into powers of reproduction or of giving evidence² have brought to light the surprising extent of these falsifications. These experiments, which, like most experiments, involve some kind of 'task', give a cross-section of the person's mental life and show many phenomena more clearly than the ordinary clinic examination can do, and can demonstrate it quantitatively.³

Falsification of memory plays a considerable part in mental illness.⁴ We find boastful tales in paralytic patients, random spun-out fantasies in certain paranoid dementes, who bring them forward as memories and tell them to others as such; we find falsifications of memory analogous to hallucinations (p. 64). With some conditions we feel we can well understand how patients after some serious disturbances in registration with simultaneous loss of old memories try to fill in the gaps with anything that springs to mind (confabulation). They still retain their intelligence, think and judge. They comprehend the situation but they cannot come to any proper conclusion as they lack the vital associations. They unwittingly invent what seems to fit the moment and although they may have been in bed a week, they will say they were in the market this morning or have been working in the kitchen etc.

W. Scheid observed real memories in the patient who was suffering from an alcoholic-Korsakow syndrome. (They arose in distorted fashion as in confabulation.) He experienced them, however, as if they were dream-memories, yet he doubted whether it was a dream or real after all: 'Did I dream that?'—Scheid describes the actual *experience of remembering*. Normally we remember the past as having happened at a certain time continuous with other

¹ W. Scheid, 'Zur Pathopsychologie des Korsakow-syndroms', *Z. Neur.*, vol. 51 (1934), p. 346.

² Rodenwald, 'Über Soldatenaussagen', *Beitr. Psychol. Aussage 2*. Baerwald, *Z. Ungew. Psychol.*, vol. 2. W. Stern, *Beitr. Psychol. Aussage 1*. Stöhr, *Psychologie der Aussage* (Berlin, 1911).

³ Roemer, *Klin. psych. u. nerv. Krankh.*, vol. 3. Eppelbaum, *Allg. Z. Psychiatr.*, vol. 68, p. 763.

⁴ Kraepelin, 'Über Erinnerungsfälschungen', *Arch. Psychiatr. (D)*, vol. 17 (1886), p. 830; vol. 18 (1887), pp. 199, 395.

events, and as preceding and following definite points in time. Some confabulations may possibly be experienced as memories of this sort, but generally they have much less degree of certainty; they are memories without any real background and lack temporal or causal connection with memory as a whole. It is true we can remember something without placing it in time and without a context, but then we are not sure whether it might not have been a dream, unless we can link it up with some other memories. So with the Korsakow patient. The lack of connections made him feel that his real memories had only been dreams.

§ 4. MOTOR ACTIVITY

From the point of view of the '*psychic reflex arc*' all psychic events merge at last into motor phenomena, which assist the final inner elaboration of stimuli into the external world. From the point of view of *inner meaning*, subjective awareness of Will translates itself into movement. This volitional act is associated with an extra-conscious motor mechanism, on which the act depends for its effectiveness.

We can, therefore, examine the many, often grotesque, movements of mental patients from two points of view. Either we try to acquaint ourselves with the disturbances of the motor mechanism itself, which can sometimes show disturbances independently of any psychic anomaly and this is the approach adopted by neurology. Or we try to get to know the abnormal psychic life and the patient's *volitional awareness*, which these conspicuous movements exhibit. In so far as we know the meaningful connections, the movements become behaviour we can understand, for instance, the delight in activity shown by manic patients in their exuberance, or the increased urge to move shown by patients who are desperately anxious. Somewhere between the *neurological* phenomena, seen as disturbances of the motor-apparatus, and the *psychological* phenomena, seen as sequelae of psychic abnormality with the motor-apparatus intact, lie the *psychotic motor-phenomena*, which we register without being able to comprehend them satisfactorily one way or the other. Neurological phenomena are termed disturbances of *motility*; the psychotic phenomena are termed disturbances of *motor activity*. Psychological phenomena are not conceived to be primary motor phenomena but are to be seen as actions and modes of expression which have to be understood.

(a) *Neurological disturbances of motility*

Motility and its regulation depend on three systems: the pyramidal system (if diseased, there is simple paralysis); the extrapyramidal system of the basal ganglia and brain stem (if diseased, there are changes in tonus, expressive movement, gesture and co-ordination — for instance, a disappearance of the automatic pendulum arm-movement when walking, choreic and athetotic movements); the spinal cord and cerebellar system (if diseased, there is ataxia,

a disturbance in motor-co-ordination due to impairment of sensory factors). In psychopathology we must be familiar with these disturbances of motility so that we are not tempted to understand them psychologically. For instance, automatic movements such as forced laughter in bulbar paralysis are in no way expressions of psychic factors but the results of localised irritation in the brain.

(b) Apraxias

Neurology climbs up from level to level in the nervous system as if it must come closer and closer to the centre of volitional awareness, the psyche itself. The apraxias are the disturbances at the highest level yet described.¹ Apraxia consists in the patient's inability to make the right movement in relation to his target-image, although his psychic life is intact and his motor-ability from cortex to periphery is undisturbed, that is, there is no ataxia or paralysis. He wants, for instance, to light a match; instead of doing this, he puts a matchbox behind his ear. The pattern of movement which would co-ordinate this gesture is not available to him. Liepmann localised this disturbance in the brain and has even observed it to occur unilaterally. The patient could carry out movements successfully with one arm but was apractic with the other.

The neurological disturbances in these apraxias have something in common with psychotic movements and normal activity. We can only recognise them as pure disturbances of the motor-mechanism when they occur in an otherwise *healthy individual* and when we can localise them anatomically in the brain. It is very likely that a whole series of extra-conscious functions are superimposed one on the other between these mechanisms of apraxia and the conscious volitional impulse. Our knowledge here has grown from below upwards but at present once we are beyond the boundary of the motor apraxias we find ourselves floundering about in an entirely unknown country.

(c) Psychotic disturbances of motor activity

If for the moment we leave aside purely neurological motor-phenomena in mental patients, as well as other phenomena which seem to be expressive of psychic events and can be understood as normally motivated, we are still left with a large number of surprising phenomena which at present we can only register and describe and interpret hypothetically.² Wernicke distinguished *akinetic* and *hyperkinetic* disturbances of motor activity, and added the *parakineti*c disturbances as a contrast, meaning by this unsuccessful, inept activity.

i. *Description: Akinetic states.* (a) *Muscle tonus.* The jaws are firmly pressed together, the hands are clenched, the eyes tightly shut, the head kept rigidly just above the pillow. When one tries to move a limb, one meets with

¹ Liepmann, *Die Störungen des Handelns bei Gehirnkranken. Das Krankheitsbild der Apraxie. Drei Aufsätze aus dem Apraxiegebiet* (Sämtlich, Karger, Berlin).

² Kleist, *Untersuchungen zur Kenntnis der psychomotorischen Bewegungsstörungen bei Geisteskrankheiten* (Leipzig, 1908-9). Homburger, 'Motorik', in Bumke's *Handbuch der Geisteskrankheiten*, vol. 9, pp. 211-64.

resistance. Tensions such as these are basic for the term *catastonia*. However, at present catatonic symptoms denote rather more than these tensions alone, and include all the incomprehensible motor phenomena which we shall now proceed to describe. (b) *Flexibilitas cerea*. There is a slight, easily surmountable tension; the limbs can be put into various postures, like wax, and they will remain like this. This phenomenon is termed *catalepsy*. There is apparently a transition from this point to a meaningful phenomenon; patients will retain postures of an accidental nature or into which they have been put. They do not resist these movements, but permit them co-operatively. (c) *Limp immobility*. The patients lie immobile as in the previous descriptions; we can move all their limbs, sometimes with surprising ease. Afterwards they will flop down following the law of gravity. (d) *Bizarre, statuesque postures*. Kahlbaum compared some patients with Egyptian statues. They remain totally inexpressive, as if turned to stone; one will pose himself on the window sill, another stand rigid in a corner etc.

Hyperkinetic states. In states of motor-excitement, we speak of the pressure of movement. However, we usually know nothing about this 'pressure' and we would do better to resort to the more neutral expression 'motor-excitement'. Old writers would speak of 'furor' (Bewegungstollheit). Movements of this sort appear manifold, aimless and there seems to be no happy or anxious affect accompanying them or any other appropriate psychic change. If our immobile patients sometimes give the impression of Egyptian statues, these patients seem like soulless machines. When one investigates individual cases one gets the repeated impression that sometimes we are dealing with neuronal phenomena and sometimes with meaningful actions. At other times both seem to apply in that neuronal activity seems supplemented by expressive movements (Wernicke: complementary movements). But no general statement can be made of any validity. For the present we can only content ourselves with description of the movements we observe, and their different types.

Externally many of these movements remind us of *athetotic*, *choreic* or *involuntary movements* as we find them in patients with lesions of the cerebellum and cerebellar tracts. Patients make peculiar writhing movements of the body, roll around, stretch their backs, distort the fingers in bizarre fashion, fling their limbs about. Other movements give more the impression that they are *reactions to bodily sensations*. While the patients are writhing and contorting themselves, they put their hands suddenly on one side of their abdomen, press their hands on their genitals, pick their noses, open their mouth wide and grope in it, shut their eyes tight, lean over or hang on to something, as if they wanted to avoid falling over. Other movements again give more the impression of being *expressive*. All kinds of grimacing belong here, those grotesque gestures which have been long regarded as characteristics of madness, the faces of rapture and terror, or silly, childish facetiousness. Patients run their head against the wall, gesticulate, assume animal postures, or an ecclesiastical air; most of these movements are quickly interrupted and fresh ones take their place; or again certain movements are endlessly repeated over weeks and months. Dancing, hopping about, tripping around, affected little skips and jumps, gymnastics,

innumerable rhythmic movements, can all be included here. A further group of movements might be subsumed under the category of *stereotypies linked in some way with sensory impressions*. The patients touch everything; turn things this way and that; outline contours with their fingers; imitate movements seen (echopraxia) or repeat everything they hear (echolalia) parrot-fashion. They say the names of all the objects they see. All these movements have in common that they are done uninterruptedly, in stereotyped repetition. Finally there is a group of movements which is characterised by complexity and *similarity to purposeful acts*. A patient jumps up and knocks someone's hat off. Another carries out a military drill. A third suddenly shouts out swear-words. We talk here of *impulsive acts*. They are extremely conspicuous when the patient has been immobile for days. He suddenly carries out such an act, only to relapse into complete immobility immediately afterwards.

We can occasionally make the observation for all the disorders of movement so far described that they are apparently *restricted to certain areas*. Patients may talk incessantly and senselessly but may otherwise be quite quiet in their movements or, inversely, there are other patients who are entirely mute when carrying out their peculiar movements. Increased muscle tonus is often localised to specific groups of muscles, for instance, eyelids and jaws are firmly shut while the arms can be moved quite easily.

One other observation is worth mentioning. In the akinetic states there is a great difference between *spontaneous* movements and those *made on request* (Wernicke: self-initiated and responsive movements). The otherwise immobile patient sees to his own toilet, will swallow his food, feed himself. When these spontaneous movements are present, the patient does not respond to any request at all. During testing, when one tries to get the patient to carry out some movement by request or perform a 'task', the patient may begin a movement and one has the impression that he has understood and has formed an appropriate target but the movement does not proceed. It is suddenly interrupted by another movement, or is simply suspended, or is replaced by widespread tension, or by some entirely contrary movement (negativism), or after prolonged hesitation, with much muscle tension and jerking, some small attempt is made at the requested movement and it is finally carried out perfectly correctly. We can observe all this if we simply ask the patient to raise his hand. During such tests, the patient seems to exert himself greatly, he flushes, perspiration breaks out; his eyes are turned on the examiner with a peculiar suddenness and with an inscrutable expression. In catatonic patients one can often see a last-minute reaction (Kleist). One has been at the bedside a long time. The moment one walks away, patients will say something; as soon as one turns back nothing further can be elicited. It is therefore an old practice with catatonic patients to keep one's ears open just as one walks away, so that one may at least catch the solitary piece of information that emerges. The patient who never speaks may write down the answer to some question, or an immobile patient may say he cannot move. But we get no more than an impression in these cases that we are dealing with mechanical motor-dis-

turbances like motor apraxia, and manifestations of this sort are rare among all the many phenomena which still puzzle us and which for the time being we simply call 'motor' phenomena.

The original more circumscribed concept of '*catatonic*' has been substantially enlarged to include all these incomprehensible phenomena of movement. The latter are very common in the large group of schizophrenic processes. The same phenomena are apparently found in low-grade idiots, as described by Plaskuda.¹ In the case of idiots, the commonest finding is a rhythmic movement to and fro of the trunk, torsion movements of the head, grimacing, clicking of the tongue, rattling movements of the lower jaw, whirling the arms, tapping, plucking, twiddling the legs, rhythmical jumping up and down, running in circles. Catalepsies with clouding of consciousness have been observed in physically sick children.²

2. Interpretation. We have already emphasised sufficiently that interpretation of all these phenomena is not yet possible. Wernicke's *neurological interpretations* as given in his teaching on the motility psychoses were applied by Kleist in the new teaching on apraxia, but despite excellent descriptive work he was not very successful. In some catatonic disturbances of motility it is possible, indeed probable, that neurological disturbances may constitute one factor. Here there would be nothing psychic but rather the disturbance of a mechanism with which volition is then confronted, but it could be linked with a disturbance in the psyche and in volition. There are anomalies of movement in genuine neurological diseases of the subcortical ganglia (corpus striatum) which are linked with certain psychic anomalies (lack of initiative) and comparison has been made with catatonia. But it is precisely the psychological differences that are conspicuous. Comparison can only be fruitful through a better description of what may be neurological, so that this can be used as a contrast for the clearer comprehension of catatonic psychic disturbance.³ Disturbances of movement in post-encephalitics are externally very similar to catatonia and are very remarkable:

We find rigidity of muscles, lack of spontaneous movement. The clinical picture initially looks like a catatonic state: 'lying on the back with head bent forward; the head not touching the pillow. Lengthy retention of passively received postures whether uncomfortable or not; fixation of the final posture after action or the freezing of a movement in the middle of an action; when a spoon is taken to the mouth, the hand stops halfway, or the arms are kept rigid during walking. 'The inner state, however, is quite different from catatonia. Patients see their disturbance objectively;

¹ Plaskuda, *Z. Neur.*, vol. 19, p. 597.

² Schneider, *Z. Neur.*, vol. 22 (1914), p. 486, reviews the literature and discusses the onset of catatonic symptoms.

³ Fränkel, 'Über die psychiatrische Bedeutung der Erkrankungen der subkortikalen Ganglien und ihrer Beziehungen zur Katatonie', *Z. Neur.*, vol. 70, p. 312. O. Foerster, 'Zur Analyse und Pathophysiologie der striären Bewegungstörungen', *Z. Neur.*, vol. 73, p. 1. The latter work instructs us on the purely neurological nature of these disturbances of motility due to lesions of the subcortical ganglia and how different they are from the genuine catatonic disturbances known to psychiatry.

though spontaneous movement is extremely difficult for them, they can carry out the same movements by request from someone else. Hence the patients try out psychological devices on themselves; they work themselves up, make themselves furious, or enthusiastic, to keep the movements up. Once their attention is distracted the tonus increases and movement becomes more difficult. The increase in muscle tonus is very disturbing when they want to fall asleep. When attention is directed towards the intended movement by someone else's will, relaxation and easing takes place. Reiterative phenomena are frequent; rhythmic distention of the cheeks, clicking of the fingers, rhythmical protruding and withdrawing of the tongue. The patients experience this inability to stop as a compulsion. The patients remain aware and thinking is orderly. They are orientated and not psychotic; there is no negativism, resistance or contrariness.

Severe cases of encephalitis are described in phrases very reminiscent of catatonia. 'Physically these people are almost completely blocked'—'Expression is immobile, they have staring looks'—'silent, speechless people, motionless as statues'. Many attacks of fury are reported, sudden apparently unmotivated shouting, crying without apparent cause, even spontaneous attempts to strangle someone near-by, especially in young encephalitics (Dorer).

Further descriptions deal with the interweaving of intended movements and those which are neuronally determined. Movements which patients will make after encephalitis epidemica seem to bring the limbs into positions which one sees in choreic or athetotic types of movement or in torsion spasms.¹

Psychological interpretation has been offered by Kraepelin. The observations of restricted and interrupted movements, of last-minute responses, negativism, are particularly suggestive of possible understanding on the basis of the psychic mechanisms of idea and counter-idea, effort and counter-effort; with patients it seems as if every idea not only evokes a 'counter-idea', every effort a counter-effort, but the one actually encourages the other and lets it assert itself. The patient who wants to raise his hand, does not want to, for that very reason. Kraepelin called this state of affairs '*blocking*'. Many of the disturbances of movement described were then explained in terms of such '*blocking of volition*'. He interpreted other movements as an expression of the *alteration in personality*. Every person exhibits his nature through his movements and the sick person shows his nature in his manneristic and bizarre movements, in a '*loss of grace*'. Wernicke interpreted yet other movements as the sudden appearance of '*autochthonous*' target-images, psychologically unmotivated, and he supposed an *impulse to realise them*. Others he interpreted as automatic innervations, complemented by psychologically motivated movements (*Complementary movements*). Thus a jerk of the arm is complemented by some groping movement. Patients' self-descriptions sometimes give us insight into their own experience of these disorders of movement. We see that even the most surprising movements may have a psychologically understandable motivation, which of course does not exclude their having an organic basic as well:

¹ Rothfeld, *Z. Neur.*, vol. 114, p. 281.

A patient in an acute psychosis in which she was almost inaccessible kept tearing up her underwear and making countless incomprehensible movements. After the acute phase had disappeared, the patient wrote this about herself (Gruhle). 'I was in a dream-like state and had the idea that "if you are not ashamed to tear up your underclothes in the presence of a man, all people will get to Paradise. The man will make you his Heavenly Bride and you will be Queen of Heaven." That then was the *motive* for *tearing up my underwear*. Another idea I had was that as a divine being I must not wear any clothes, just as I must not eat anything.' Movements which might cause the onlooker some frightening moments meant for the patient harmless amusement (i.e. jumping around). 'As to my desire to fall, this had a variety of reasons. Sometimes I obeyed voices: "Fall down, Claudia" (her Christian name). At other times the world would only be saved by my fall, because I would fall to my death by *falling* forward vertically on to my face. I never had the courage to do this and always landed on my knees or on my seat' . . . 'I forgot to explain my *tip-toeing*. I had lost weight and had a wonderful feeling of being light as a spirit, so that floating along on tiptoe gave me great pleasure.'

§ 5. SPEECH

Psychological Preface. From the viewpoint of the 'psychic reflex arc' language is only a particularly well-developed part of the total reflex arc. Understanding of language is a part of perception and apperception, speech a part of the motor phenomena. This viewpoint clarifies only a few aspects of language, not language itself.

Speaking should be differentiated from *uttering noises that are audible*. The latter may be involuntary expressions but as such are not speech. They are cries, interjections, whistles, etc., but not words, sentences. There is no intention to communicate. Speech only exists if meaning attaches itself to articulate words. Objective speech is a system of symbols, sanctioned by traditional usage, and used as a tool by anyone who grows up within the system.

We should also differentiate speaking from *expressive movements*. These are involuntary manifestations of the psychic self through gesture, voice and posture. Speaking, on the other hand, is a willed communication of an objective content, whether by gesture-language or voiced speech. If I speak, I have something to communicate to a listener which he will understand.

We also have to separate *speech* and *speaking*. Speech, as language, is an objective symbolic structure in which the individual who belongs to that language-group partakes to a greater or lesser extent. Speaking is *an accomplishment of the psychic reality of the individual*. Our concern here is with speaking as a psychological occurrence and not, as later, with language or speech as cultural products.

Speaking and *understanding* are closely linked. They take place in group intercourse. They occur as a communication of meaning and it is the meaning as such, not the language or the words, which is in the field of attention for both the speaker and the understanding recipient.

Man, when *isolated*, uses speech in order to make himself understand his own thoughts and wishes. Although speaking and thinking are not identical, every thought nevertheless develops in conjunction with speech. In the manual handling of objects and during the actual execution of meaningful work, our thinking is speechless, but in the objects themselves we find symbols and signs of an activity analogous to speech.

No thoughts can exist without roots in something concrete; abstract ideas are linked with symbols, the concrete meaning of which is not immediately present although it is with these that we think. The symbol is then a concrete minimum.

Abnormalities of *verbal production* whether spoken or written may be due to two quite different reasons. The verbal production may be abnormal because although *the speech apparatus is normal something abnormal is being expressed*. We see in the verbal products elementary disturbances of thinking, feeling and awareness which make use of normal language and turn its content and character into expressive phenomena. In spite of the intact speech we can recognise in the verbal product the striking manifestation of underlying psychic disturbance. In the second place, the verbal production may be *abnormal* because the *mechanism of the speech apparatus itself has changed*. Only when this is so should we speak of speech-disorders. These are not meaningful changes, because they are extra-conscious events. But we can psychologically understand and try to interpret all abnormal verbal products that are secondary to abnormal psychic life; their content and expressive character have some meaning for us. Apart from these neurologically and psychologically explicable products of speech we find, thirdly, certain inexplicable ones the analysis of which helps us to learn what are the *speech disorders proper*.

We differentiate disorders of *articulation* from *aphasias* and *speech-disorders in psychosis*:

(a) *Disorders of articulation*

Speaking is a co-ordinated process of muscle movement. Disturbances in this field are termed disorders of articulation, in contrast to disturbances of the central speech-process that precedes the muscle movement. Disorders of articulation are *neurologically* conceived and are possible *without any psychic disturbance*. The actual word is malformed owing to the paralysis of individual muscles or some disturbance of innervation. It therefore comes out distorted (where disorders of articulation are not immediately observable, the patient can be tested by being asked to repeat difficult word-combinations—(e.g. Royal Irish Artillery, the swimming swan etc.) We find, for instance, syllables are bungled; speech is slurred; there is dysarthria; lalling in paralytics, scanning in multiple sclerotics. In addition there is *stuttering* which belongs to this group although it arises from quite different causes and may be psychologically conditioned. We use the term 'stuttering' for those clonic movements of the speech-muscles whereby consonants and vowels at the beginning of a word fall prey to constant repetition instead of becoming incorporated into the spoken word.¹ Corresponding to these disorders of articulation on the motor side are certain sensory disorders; for instance the failure of a deaf person to understand. Those who are *deaf and dumb* for congenital reasons or through early acquired deafness need to be differentiated from those who are *dumb but*

¹ Hoepfner, 'Vom gegenwärtigen Stande der Stotternforschung', *Z. Psychother.*, vol. 4 (1912), p. 55. Gutzmann, *Die dysarthrischen Sprachstörungen* (1911). E. Fröschels, *Z. Neur.*, vol. 33 (1916), p. 317. E. Fröschels, *Lehrbuch der Sprachheilkunde* (Leipzig and Vienna, 1931, 3rd edn.). (This not only deals with stammering but with aphasia.)

can hear; these are feeble-minded persons who do not speak though they can hear and there is no speech disorder.

(b) *Aphasias*

We find patients who no longer speak (cases of apoplexy, brain injury, cerebral tumour). In the old days they were often thought to be demented but one can see they would like to speak when one addresses them. They try to speak and torture themselves in trying to do so. Their whole demeanour shows their personality is still there. Other patients will speak but cannot understand. It was a great discovery to find that in these cases one was dealing with a speech disorder, a circumscribed disorder of the apparatus, not of the personality or the intelligence (though such disorders hardly ever appear without some change in the total state). Another great discovery was that in right-handed persons symptoms of this sort were due to destruction of the left lower frontal convolution or of the temporal area. These speech disorders are incredibly and most confusingly varied. Attempts have been made to reduce them to some order by endeavouring to erect a large-scale basic psychology of language (Wernicke). Speech was broken down into speaking and understanding, repeated speech and spontaneous speech, naming, reading, writing etc. Each of these elements were then ascribed a definite place on the left frontal cortex, so that these psychological structures became physically embedded in the brain-structures. From this emerged the 'classical teaching on aphasia'.

The aphasias are similar to agnosia and apraxia but related to speech. Patients hear but do not understand what is said (*sensory aphasia*). We may differentiate here between understanding the sound-pattern and understanding its meaning. Other patients can move all their speech muscles and can use them for purposes other than speech but cannot pronounce words (*motor aphasia*). Here too we should differentiate between inability to pronounce from inability to find the words (*amnestic aphasia*). In the first case the patient cannot repeat words, in the latter he can. Sensory aphasia depends predominantly on destruction in the temporal lobes; motor aphasia on destruction in the posterior part of the third frontal convolution. In both cases this is on the left side with right-handed persons.¹

We need to differentiate the psychic processes which occur in *speaking* and *understanding*. On the side of understanding we need to distinguish: (1) merely hearing a noise, such as a cough, or some inarticulate sound; (2) hearing a *word-pattern* without understanding it, e.g. a foreign language which we do not understand. So also with written material, which we may be able to read but need not understand. Or a word-series, which we can learn by repeating but it remains meaningless to us; (3) understanding the meaning of words and sentences.

The following *schema devised by Liepmann* (slightly modified) gives us a tentative survey of the different aphasias:

He analyses the aphasias and differentiates components that are *psychic phenomena*

¹ The best exposition is that of Liepmann in Curschmann's *Lehrbuch der Neurologie*. Von Monakow surveys the literature in the *Ergebnisse der Physiologie*. A new, critical and excellent exposition of the subject is given by Thiele in Bumke's *Handbuch der Geisteskrankheiten* (1928, vol. 2).

(shown in the diagram as blank circles) and *psychic connections* (shown as dotted or interrupted lines), from the *non-psychic* components that are linked to *anatomical* cortical areas (shown in the diagram as solid circles) and the *anatomical fibre tracts* (shown by lines). Making use of this diagram we may conceive the connections (left ascending, sensory; right descending, motor) as interrupted, or the circles as either destroyed or cut off. In this way we can construct possible types of aphasia in great variety. Thus (see Fig. 2):

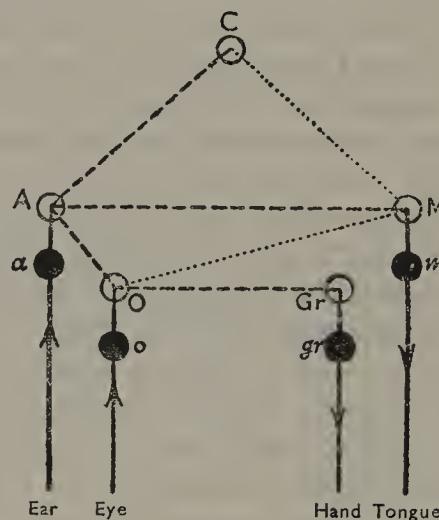


FIG. 2

1. *Anatomical components:*

- a. acoustic projection area of the cortex.
- m. motor " " " " "
- o. optic " " " " "
- gr. graphic part of the motor projection area of the cortex (innervating the hand).

2. *Psychological components:*

- A. acoustic component (word sound-pattern—Wortsinnverständnis).
- M. motor-speech components.
- O. optic components.
- Gr. graphic-motor components.
- C. meaning of words ('conceptual' components).

The test performance (sometimes called functioning) of aphasic patients becomes comprehensible only if the following paths are intact:

Spontaneous speech: $\text{C} \xrightarrow{\text{A}} \text{M} \xrightarrow{\text{m}} \text{Tongue}$.

Spontaneous writing: $\text{C} \xrightarrow{\text{M}} \text{O} \xrightarrow{\text{Gr}} \text{Hand}$.

Speech-comprehension: $\text{Ear} \xrightarrow{\text{A}} \text{C}$

Reading-comprehension: $\text{Eye} \xrightarrow{\text{O}} \text{C} \quad \text{A} \xrightarrow{\text{C}}$
 M

Repeating: Ear—A—M—Tongue.

Copying: Eye—O—Gr—Hand.



Writing to dictation: Ear—A—O—Gr—Hand.

Reading aloud: Eye—O—A—M—Tongue.

From gr and m downwards destruction is responsible not for aphasic but articulatory disturbances (dysarthria, anarthria). Destruction from a to o upwards is responsible for deafness, tone-deafness, partial deafness and so with weak vision, blindness.

The following types can be elicited from the manifold and individually varying aphasias:

Pure motor aphasia: M is destroyed or isolated. Understanding of speech is preserved, so are reading and writing. But spontaneous speech is destroyed and the power to repeat and read aloud. This is a rare type and we more commonly get 'complete motor aphasia'. Through the involvement of M through O—M in all functions which require the pathway O—C, reading and writing are also disturbed, whereas copying (without M) is preserved. Such patients tend to be taciturn; at other times they are explosive; they try to speak but quickly break off.

Pure sensory aphasia: A is destroyed or isolated. Spontaneous speech is preserved, but comprehension of speech and powers of repetition etc. are destroyed. This form is rather rare; *complete sensory aphasia* is more common. Normally, spontaneous speech requires the pathway via A, hence the present disturbance of it, not in the form of word-dumbness as in the motor aphasias but as paraphasia. *Paraphasia* consists in a distortion of words so great that we can no longer recognise any meaning from the series of syllables heard. This is because the word-sound-pattern (A) cannot be aroused in the usual way while the simultaneous free-floating sound-patterns (Mehringer and Mayer) which occur associatively lead to a number of distortions, switchings, reversals, anticipations etc. These patients are paraphasically talkative with neologisms. If they lose control, they appear manic. They are surprised and dismayed to find that no one understands them.

Transcortical aphasias: With these we have the pathway: Ear—A—M—Tongue preserved; powers of repetition of what has been heard are therefore preserved. With *transcortical motor aphasia* the pathway C—M is blocked. The patients cannot find words, the concepts of which they possess, but yet they recognise and pronounce the word when the name is given to them. In mild degrees we term this condition *amnestic aphasia*. With *transcortical sensory aphasia* patients can repeat everything, but the meaning of the words escapes them.

Important *objections* have been raised against the total picture as presented by this classical theory of aphasia. The psychology used is exclusively that of association-psychology, which is hardly adequate and according to which discrete elements are only linked into units by virtue of association. The nature of speech, however, cannot be understood in terms of such a psychology, since the essence of speech is awareness of meaning. The unity of verbal meaning is shattered by a division into sensory, optic, acoustic, kinaesthetic

and motor elements. Speech takes place at a fundamentally higher level of functioning in the form of impulse to movement and reception of sensations. This accounts for the fact that the clinical picture presented by aphasia cannot be classified into acoustic and motor speech-disturbances, as alexia, agraphia etc. There are a few cases it is true which with the help of the diagram may be very satisfactorily described. Most cases, however, would have to be forced within the framework. The theoretical schema is a deductive one and the individual clinical pictures are so constructed. The fruitfulness of the construction has shown itself up to a certain point—as happens in the natural sciences—but then we come to a halt. The discrepancy between clinical cases and what is presupposed grows noticeable. The construction here—in contrast to the theories of natural science—is of limited heuristic value and has utterly exhausted itself. Initially a small clearing has been made in the phenomenological confusion and there is some intelligible description of phenomena not properly understood in their nature. There can be no further elaboration or fruitful application and it is necessary to discard the theory as a whole and in principle to make room for a new and better comprehension growing out of other premisses.

The new approach has its origins in Wernicke himself, who formulated the term 'verbal concept' to express the basic function within which his sensory and motor elements were inseparably linked into unity. These unitary 'images of speech' were later seen as functions of a cortical speech area without any specific localisation of the motor, sensory and other elements.

Head¹ went furthest of all. He discarded the whole schema. Classification of speech disorders into disorders of speech, reading, writing, and understanding, hardly corresponds to the clinical facts. There are no basic psychic functions which are localised and correspond to these performances. Head himself started by improving the methods of examination, and in many decades of experience he enlarged and enriched these into an imposing and intelligible schema of investigation. His new interpretation of the findings avoids any dogmatic theory. He takes the disturbances of symbolic formulation or of any behaviour in which verbal or other symbols play a part in mediating intention into execution. Even though one cannot break language up into elementary functions (sensory, motor, etc.) we cannot really do without some typical syndromes which will present us with a meaningful picture. Head therefore develops four groups of aphasias: verbal, syntactic, nominal and semantic. He limited himself to this field, and remained closer to reality than the classic theory. Yet he pays for this by not giving us the impression of any simple or radical comprehension of the whole. He does not sketch psychological theories in the brain-space but presents clinical syndromes without theory. The question has to be left open whether these are just clinical pictures or whether behind them lies some really relevant function, waiting to be discovered. Head helps us to come closer to the reality of language and its disturbances than we have ever done before. He is not obsessed with untried psychological presuppositions or brain-mythology. We have yet to see what

¹ Head, *Aphasia and kindred disorders of speech* (Cambridge, 1926). Last, *Nervenarzt*, vol. 3 (1930), p. 222.

meaning his particular categories have, and how far they will help us towards firm, realistic and meaningful concepts. Head's success can only be judged by specialists with large numbers of cases at their disposal. The cases reported in the literature are insufficient. No one has yet succeeded in giving so seductive and lucid a picture as the old classical theory—deceptive though that lucidity seems to be.

It is of general psychopathological interest to find that in the examination of some aphasias we come across great fluctuations in performance within very brief spaces of time:¹

Performance decreases as the patient grows tired with the examination. Sometimes a low ebb is reached and then after a brief interval this is overcome. The fluctuations may be related to the concentrated attention which the patients give to the tasks. As is the case with all impairment of function, speech in this case can only reach performance if there is a high level of attention. We should also expect aphasic patients to be considerably disturbed by affects, such as embarrassment, surprise etc. A situation which makes clear demands can interest and stimulate them and they can have remarkable success. Quite apart from this we cannot rule out the possibility of occasional spontaneous 'fluctuations in brain-function' (see above, p. 142).

(c) *Speech disorders in psychoses*²

These disorders include certain verbal performances which at present cannot be explained in terms of neurological mechanisms; nor can they be simply understood as a form of expression or as the communication of abnormal psychic contents. We have to deal with a territory of interest to both sides. For the moment we only need to record the actual psychotic speech phenomena. They form a group of 'objective' symptoms on their own:

1. *Mutism and pressure of talk.* From the purely formal point of view, content apart, these phenomena correspond to immobility and excitement in the motor field. *Mutism* may be intelligible as a deliberate silence, or as an expression of psychic inhibition, or as the effect of some hysterical mechanism, but in many cases none of these interpretations seem to apply and we have to accept the phenomenon as incomprehensible for the time being.

Motor excitement in the speech apparatus, which we term *pressure of talk*, gives rise to most varied phenomena. Irrespective of their affective state, patients keep on talking about all sorts of senseless things without bothering really to communicate. They keep on all day long, uninterruptedly, and for several days or weeks the talk runs on; sometimes they speak quietly and the voice never rises above an indistinct murmur; sometimes they perform incredibly by shouting until they become hoarse, though this does not impede them. Some seem to address themselves, and talk themselves into it; others talk quite mechanically. There is frequently a tendency to rhythmical emphasis.

In most cases we do not know what is the subjective experience during

¹ Stertz, *Mscr. Psychiatr.*, vol. 32, p. 363.

² Heilbronner, 'Sprachstörungen bei funktionellen Psychosen mit Ausschluss aphasischer Störungen', *Zbl. Nervenheilk.*, vol. 1906, pp. 472 ff. Liebmann and Edel, *Die Sprache der Geisteskranken* (Halle, 1903)—a shorthand record of verbal productions.

these motor-speech discharges. *Self-descriptions*, however, do tell us of two different types of experience: (1) There is the experience of a real pressure of talk, like an instinctual drive; it is of varying degree; some patients can suppress it altogether; others have to give in and feel it an unpleasant and morbid experience. Other patients give way without any inhibition. (2) Others experience what seems to them spontaneous activity of the speech-apparatus; and look on the performance as a spectator. For instance, the case described on p. 124 will give us an example. Here is another described by Kandinsky:

Dolinin suddenly felt his tongue starting to pronounce loudly and very fast a number of things that should not have been said; this was not only involuntarily but definitely against his will. At first the patient was startled and worried by this unusual event. It is hardly pleasant to feel some concrete, wound-up automatism inside oneself. When he began to realise what his tongue was saying, he became horrified; he found himself admitting to guilt as a political criminal, ascribing to himself plans he had never had. Yet he had no power to curb the utterances of his suddenly automatised tongue.

These are apparently clear-cut cases and there is a whole series of such phenomena ranging in clarity down to cases where the phenomena are the same but there is no such dichotomy between the self and the actual flow of talk.

2. *Where does this pressure of talk get its content from?*¹ (1) *The speech-apparatus itself* may function on its own with a stream of repetitive phrases senselessly reproduced, Bible-quotations, verses, numbers, months of the year, tunes, meaningless phrases in grammatical form, agrammatical constructions, clang-associations, word-compounds, inarticulate sounds. (2) There may be *perseveration*, which we now know to be a deficiency symptom, a 'getting entangled or stuck'. We can see this happen with aphasic patients in certain situations which we can predict. Pressure of talk which draws its material from perseverating content is bound to 'get stuck' in the end. In this case we speak of *verbigeration* (Kahlbaum). The patient is apparently talking and making a conversation but repeats separate words, fragments of words and phrases, meaningless phrases, in a monotonous tone; nothing significant is ever said nor does there seem any relation to the patient's experience. Kandinsky remarked that patients often feel vividly the compulsive character of this impulse to verbigerate, analogous to the states of shouting, mentioned above, and the automatic speaking of Dolinin.

One of his patients used the phrases 'involuntary speech', 'parleying with myself' or 'my self-parleys'. Even when he wanted to ask for something, he had to express himself in this particular form: 'selbstparlage, selbstparliere, excuse me . . . selbstparlage, selbstparliere, excuse me . . . selbstparlage . . . excuse me a Papiros . . . must not smoke oneself . . . I want to smoke myself . . . but by selbstparlage . . . selbstparlieren . . . I selbstparliere to you . . . give me a smoke . . .'

¹ Heilbronner, 'Sprachstörungen bei funktionellen Psychosen mit Ausschluss aphasischer Störungen', *Zbl. Nervenhk.*, vol. 1906, pp. 472 ff.

We must distinguish between these apparently *automatic* verbigerations and those which are affectively toned and in particular due to *anxiety*. In states of gross anxiety patients repeat the same matters over and over again in a puzzled way 'God, God, what a disaster . . . God, God, what a disaster . . .' and so on. (3) If unproductive patients look around for material for their pressure of talk they can obtain this from external *sense stimuli*, if they do not get it from automatisms of the speech-apparatus or from perseveration. Acoustic impressions are simply repeated (*echolalia*), a senseless name given to every object. (4) We should distinguish *flight of ideas* from all three previous sources, because of its sheer *productivity*. The pressure of talk that flows from this is marked by rich content and extremely varied associations, sometimes by its wit and apt turns of phrase. Flight of ideas and distractibility both need pressure of talk if they are to manifest themselves objectively; otherwise they will remain purely subjective feelings (an inner flight of ideas, an inner distractibility). Conversely, flight of ideas is by no means a condition for pressure of talk. The latter is often simultaneously present with an inhibition of talk, and in patients suffering from dementia, pressure of thought without any flight of ideas is particularly common. (5) The term 'confused speech' covers many different modes of speech. The form may seem coherent and yet no meaning may be communicated or understandable,¹ as the sentences, or interrupted fragments of them, are being uttered. Some of these constructions certainly have no meaning for the patients themselves; others are only unintelligible for the observer. The following extract from the letter of a catatonic patient suffering from this confusion of speech shows a relatively high degree of intelligibility:

For analogous and natural reasons I am disclosing to you the fact that I have passed various examinations, which rest upon fresh advances of the time and relate to all the natural rights to freedom. Self-help is always the best and cheapest. We know what national pride is, and I know the honour concerned, and what knowledge is, is my secret. Respect for my cause, which is related to the above. 'Eye and hand for the Fatherland' . . . My affairs must be taken roundly. With this I would inform you that I am already known here as the first public prosecutor . . . (Otto).

With confused speech we can compare *incoherent* productions, which no longer show any sentence-formation. Although the content can be understood, the following letter of a catatonic patient to his wife well illustrates this phenomenon:

In the house there, is he lying at home ill? yet . . . [untranslatable] 'anspruchlos, ideresenlos von dem was gekommen? doch was to geslagen an den? Ich. der Muller. Nachts unruig gewesen. Stimmen horen traurige. Ja Schwager da in F. Wir bilden eine kurze underdung von der Achmrika. Frau Kinder sesund. ja nun alen da. wie geth. gut mir auch sehr gut. das freuet mich.'

¹ Otto, *Ein seltener Fall von Verwirrtheit* (Diss., München, 1889). He gives a detailed description of an exceptional case of confused speech.

3. *Disturbance of conversational speech.* Description so far has been concerned with phenomena exhibited by the patient on his own. Another picture arises if we look at the *play of question and answer* in the conversational situation between examiner and patient. This is the occasion for the symptom '*talking past the point*' (*Vorbeireden*). With aphasic speech disturbances (particularly with the sensory aphasias) patients spontaneously utter garbled sounds with an awareness on their part that they mean something (*Paraphasia*). Here however the *paralogia* has intelligible content and is manifestly related to the question and answer, but although the intellectual competence may be there, answers are incorrect and there is no proper solution of the tasks set. The patient performs all the multiplications, for instance, except that he adds one digit more: $3 \times 3 = 10$, $6 \times 7 = 43$, and so on. How many legs has a cow—5, etc.¹ There seems no single psychological interpretation for this phenomenon. It arises as a symptom of '*pseudodementia*' in hysterical states, when illness fulfils the patient's wish (in prison, for example) or it appears as a form of negativism or an expression of the silly joking of hebephrenia.

4. *Psychological interpretation.* Attempts are made to explain psychotic speech psychologically, particularly the phenomenon of confused speech. *The principle of association* is invoked with recourse to sensory and ideational material, the one stemming from the apprehension of sensory stimuli, the other from the actualising of memory-dispositions.² The problem is whether all the verbal constructions can be explained in terms of association; or do 'freshly arising' structures occur? Elements link through similarity (e.g. clang-associations), through being experienced, through their related content etc., and perseveration adds itself to the initial elements. Syllables, words, bits of sentences, an intended 'meaning', etc., all function as 'elements' in this respect. Contamination is one of the concepts specially belonging to association-psychology and is used for the classification of abnormal speech-structures. This denotes the fusing of one word-element from two other such elements (e.g. sur-stonished, for surprised and astonished). In the same way, words and syllables suffer permutation, some are tacked on as affixes, others as suffixes.

§ 6. THOUGHT AND JUDGMENT

Thought is contained in all our performances from the act of perception to speech itself. Judgment is said to be disturbed only when perception, orientation, memory, movement and speech are otherwise in order or when we can distinguish between specific disturbances in these and what has occasioned the false judgment.

¹ Julius Hey, *Das Gansersche Symptom* (Berlin, 1904). Ganser, *Arch. Psychiatr.* (D), vols. 30–8. Raecke, *Allg. Z. Psychiatr.*, vol. 58. Henneberg, *Allg. Z. Psychiatr.*, vol. 61. Pick, *Mschr. Psychiatr.*, vol. 42, p. 197 (*Vorbeidenken*—*Vorbeireden*).

² Kraepelin, 'Über Sprachstörungen in Traume', *Psychol. Arb.*, vol. 5. Pfersdorff, *Zbl Neurol.*, vol. 1908, *Z. Neur.*, vol. 3 (1910), etc. Mehringer and Meyer, *Versprechen und Verlesen* (Stuttgart, 1895).

The performance of judgment is measured against objective truth. Where the judgments of an individual deviate from what is generally held as valid and he holds obstinately to their content although it interferes with adaptation, the question arises whether among other things there is a morbid cause affecting the judgments themselves. There is a difficulty here because the same characteristics might apply to the judgments of exceptional people who creatively open new ways of thought. If, therefore, a disorder is suspected merely because the judgment runs counter to current beliefs, this clearly will not suffice and we have to try and assess the situation in some other context before we can decide that a disorder of judgment is really there. Judgments that deviate from generally held opinions provide us with objective, if superficial phenomena, disregarding for the moment whether they may be false or true. The problem is what characteristics must judgments have for us to say that they are examples of disordered performance. We have to distinguish *disorders of intelligence* and *thought-disorders* from *delusion*. We shall deal with the first two in the next section and will discuss the latter here.

Delusion presents us with one of those great riddles which can be solved only if we define our facts clearly. If incorrigible wrong judgments are termed 'delusion', who will there be without delusion, since we are all capable of having convictions and it is a universal human characteristic to hold on to our own mistaken judgments? Nor can the prolific illusions of entire peoples and persons be given the title of 'delusion', since this would mean treating a basic human characteristic as if it were an illness. We should rather address ourselves to the problem of what it is that occasions the incorrigibility and causes us to recognise certain modes of wrong judgment as delusion.

As a psychopathological concept, delusion can be considered in four ways: as a psychological performance, in its actual phenomenology, with an understanding of how it comes about and with an understanding of it as a meaningful whole.

(a) As a *psychological performance*, it is delusion only where intelligence is undisturbed and there is no disturbance in the immediate state of consciousness either, so as to occasion the wrong judgment. The patient's thinking-apparatus and power of judgment are in order but there is a factor in his thinking which affords him unshakeable evidence when other people, even other patients, can see the mistake. Since thinking is in order in delusion and even used ingeniously to serve it, we can hardly speak of delusion as a thought-disturbance. To consider it from the point of view of psychological performance may be the first step, but it leaves us simply with the negative result that delusion is not really a disturbance of performance. It springs rather from some deeper source, which is manifested in the delusional judgment but has none of the characteristics of a judgment in itself.

The following is an example of the elaborating thought-performance which takes place in delusion: a schizophrenic patient (a factory-hand, who later became a policeman) experiences typical 'passivity' phenomena; there are movements of his limbs

and he hears voices. He thinks of remote hypnosis and telepathy. He suspects and reports someone to the police. He arranges for a private detective to make enquiries and finally convinces himself that his suspicions are unfounded. He writes: 'Since no one can have been influencing me and I am sure I am not suffering from any false-perception, I have to ask who can it be? The way in which I am plagued and tortured and the hidden meaning in all these conversations and bodily movements suggest that there is some malicious supernatural being at work. He influences and plagues me continually and hopes to destroy me. Are my experiences of the same order as those of mental patients or are they unique? For humanity's sake I feel I should state my conviction that if they are of the same order, then the doctor must be wrong in thinking that the voices which patients hear are hallucinations. Whatever it is in my own case, whether it is the same experience as that of a mental patient or something exceptional, the conclusion is in either case that life goes on after death' (Wilder-muth).

(b) *Phenomenologically*, we observe in delusion an experience that is radically alien to the healthy person, something basic and primary, which comes before thought, although it becomes clear to itself only in thought. This primary experience, moreover, is not limited to a single experience which breaks through into consciousness simply as one phenomenon among others, otherwise the patient could criticise and master it. The primary event has to be related to some radical change of personality since, otherwise, the insurmountable character of the delusion and its essentially distinctive incorrigibility would be quite incomprehensible.

(c) We may well *understand from the context* how a delusional belief liberates an individual from something unbearable, seems to deliver him from reality and lends a peculiar satisfaction which may well be the ground for why it is so tenaciously held. But should we also try to make the actual formation of the delusion, as well as its content, understandable, any diagnosis of delusion becomes impossible, for what we have grasped in this case is ordinary human error, not delusion proper. Philosophy is always trying to reach that state of mind where all mistakes can stand corrected, and to exercise that unprejudiced, large and perceptive affection for the world, that openness of reason, which can tolerate what is real and true and, when no decisive answer is possible, can endure doubt, and which always remains ready to communicate and prevent the rigidity of fixed opinion. But we are still far from that ideal state and are tied to the interests of our existence and to all that makes it bearable; here is the root of all our common mistakes to which, in their exaggerated form, we give the term 'delusion-like' mistake, although we are not really dealing here with delusion proper.

(d) *Delusion proper* shows itself as a whole primarily in the fact that it creates a new world for the deluded person. It expresses itself through its style but a living being is revealed as well. Delusion draws its content from the world which it shapes so pervasively for the patient, and, as it grows more elaborate, it becomes a cultural creation.

In whatever way we consider delusion we are presented with the *external* fact that delusion is a *defective performance* when measured up against objective truth—provided we have this measure. As a defective performance in this sense, we can consider it from the point of view of *content*: delusional ideas may be either of a *personal* relevance or of an impersonal, *objective* nature. In the former case they will concern the individual himself; they are the delusions of spite, persecution, inferiority, sin, poverty, etc; in the latter case, the delusional ideas are of more general interest; they may be revelations, delusions of invention, theses in defence of theories (e.g. the identity of Bacon and Shakespeare), so-called fixed ideas, objective enough in their content but completely monopolising the individual. Patients behave as if the whole meaning of their life rested on this one idea and superficially they in no way differ in this from great creative personalities who expend themselves on their own ends, but the difference lies in the extreme narrowness of idea and the atmosphere of slavish confinement. Both types of delusional content are linked together in that the objective content tends to become an extremely personal affair, e.g.: defence of justice becomes for the querulant the defence of his own particular rights. Any classification of delusional content would have to include all the interests that life can offer and all the contents of our minds. It seems as if everything in our human world can be remoulded into delusion-like forms, which (as distinct from delusion proper) may pass over into 'normality' at any point, so that as the mind pursues its course, these delusion-like creations pursue their own, a sort of parody of it, as it were. In psychopathology therefore we must be careful not to put all incorrigible mistakes under the heading of delusion proper. But when faced with actual delusional worlds, we need to think afresh about the meaning of truth, so that in any given case our assessment of reality can be justified.

Delusion is a word that is *commonly used for a number of quite different phenomena*. It is, however, a mistaken judgment, and a judgment by externals only, that allows the same term 'delusion' to be applied to such completely different phenomena as the so-called 'delusions' of *primitive peoples* and the 'delusions' of *demented persons* (paralytics) and of *paranoics*. Primitive peoples have a psychic life that is differentiated to only a slight degree. We characterise this in relation to their beliefs, and we say that they have not yet learnt to distinguish perception and fantasy as arising from different sources. A number of diverse logical processes all possess for them the same evidential quality; for instance, they will conclude by analogy, on the basis of purely external criteria. With the demented, paralytic patient, psychic life has disintegrated in ways characteristic for the organic, cerebral disorders and these cannot be compared with the undifferentiated state of primitive man. In paralytic changes every image obtains reality, every idea seems correct without regard to wish or purpose, often without effect and consequence. Every content appears real. This gives rise to unrestricted delusions of grandeur which shift constantly and can even change into their opposite. In the case of *paranoics*, we are again dealing with something quite different. The individual shows a high degree of differentiation, sharp powers of criticism and an ability to think, but none of this interferes with his belief in the content of his

delusional ideas. He has had certain experiences and for him they carry as much, if not more, weight than anyone else's. He integrates these experiences with others and he builds up his delusional system quite seriously and with deep involvement and holds unshakeably to it. Contrary ideas do occur to him, but he brushes them aside disparagingly. He does not lack power to differentiate the discrete sources of knowledge but he insists on his own source, whether supernatural or material.

SECTION TWO

THE TOTAL PERFORMANCE

Disturbance in each individual performance affects the individual's total state. The effect may be quite catastrophic, although the disturbance need be limited to only one function as we have described. It may be a disturbance of registration, a severe aphasia, a motor disturbance etc. The individual's total state is changed but this can be fully grasped in terms of the demonstrable, separate disturbance. Inversely, each individual performance may change in quality and meaning through its dependence on *the sum-total of the performances*. If we consider this, each individual performance then becomes the symptom of a total event, which we cannot directly perceive. We no longer simply register a series of defective performances but the defects are formed into a group. This is done in various ways, depending on how we ourselves regard the total event. We may see this either as the *psycho-physiological basis* of the individual performance manifesting itself in the defects as a whole, or as the actual *mode of psychic being* which prevails at the time, or as the individual's permanent capacity for performance, which we call the *intelligence*. All these several totalities are phenomena that occur in states of clear consciousness and when there is no clouding or alteration of awareness.¹

If individual performances are not the products of an isolated apparatus but already parts of a *total apparatus of performance*, this latter itself is not an independent closed unit either, but an instrument of the individual whose mind shapes the instrument it uses, while in its turn it remains dependent on the instruments given and their potentialities for its realisation. All mental performances have this in common that they can be measured against a norm of 'common awareness'.² This confines them to one area of human existence, which is clearly enough defined, but never exhibits the whole human person, the man as *such*.

§ I. THE PSYCHOPHYSICAL BASIS FOR PERFORMANCE

We have no insight into the basic function of vital, psychic life. Our urge to premature comprehension has often driven us to conceive some such whole,

¹ K. F. Scheid, 'Die Psychologie des erworbenes Schwachsinns (1919-1932)', *Zbl. Neur.*, vol. 67, p. 1.

² Cp. my lectures: *Vernunft u. Existenz* (Groningen, 1935), pp. 31 ff.

but without success. We still ask questions, however, and it appears that we can dimly discern some all-embracing foundation for our biological existence. Areas of questioning are as follows: *defective performance in brain disorders*, the facts that emerge from the establishment of a *work-curve*, and *individual variations* within the countless types of performance. In all these cases research is constantly directed to what may lie at the root of these manifold appearances and what may be considered the vital, foundation occurrence.

(a) Basic psychophysical functions

Investigations of defective performance following organic brain lesions have shown that—even if the lesion is localised in the brain—the disturbances of performance are often characterised by more than one, single defective performance. This tempts us to look for some comprehensive psychophysical basic function which manifests itself not only in one single type of performance but in indirect fashion in a whole number of defective performances. We would like to see what is common to them all, on what does this great variety of disturbances rest, what pervades them all. It is a comprehensive whole since we find it appearing in many phenomena and it is also something elementary, a basic function, one basic function among others.

Basic functions, however, cannot be directly demonstrated as can single defects of performance. Our method is to try and penetrate into the context of the disturbance by first using the *self-descriptions* of patients, brought out systematically by talking to them, and then by observing the paths of the still intact performances. If one knows where and how the patient experiences his difficulties, the disturbance lays itself open to us, even though objectively the performance is still intact. Objective observation and patients' self-descriptions together help us to get to know the *paths* and detours of their performance and we can compare it with the normal. In this way we can get to the central, essential point of the disturbance. We then compare the manifold performances of the patient, and hope that if there is something common to them all, we shall find it. Research of this type—followed by Gelb and Goldstein, Hochheimer, Benary, and so on—brings results. We will quote as an example a famous case of psychic blindness (soul-blindness) using the actual report of the authors:¹

At 23 years of age the patient was wounded at the back of the head by splinters from a mine. He could no longer recognise shapes and movements in space (cp. p. 170 the descriptions of the same patient). Close examination showed that, even after performance had improved, the defects as a whole could not be wholly understood in terms of the visual agnosia.

One could talk freely with the patient and not notice anything conspicuous. He

¹ W. Hochheimer, 'Analyse eines "Seelenblindens"', from *Psychol. Forsch.*, vol. 16 (1932), p. 1. On the same case Gelb and Goldstein, *Psychologische Analyse hirnpathologischer Fälle* (Leipzig, 1920), vol. 1. Benary, *Psychol. Forsch.*, vol. 2 (1922), p. 209. Goldstein, *Msch. Psychiatr.* (1923), vol. 54.

had a letter read to him which he had written himself a short time ago to the doctor. He listened but did not recognise his own letter. The letter was then shown to him and he did not recognise his own handwriting, except when he read the signature. . . . 'Well, that is my signature!' . . . 'I would never have recognised it!' . . . Throughout long conversations with the patient, behaviour was quite inconspicuous, until some task came up, like the recognition of the letter, and the behaviour changed. The defect in performance was startling, and the man who usually talked cheerfully and unruffled became taciturn and tense.

In one investigation there were a number of listeners sitting around. After one hour the patient was asked: 'Do you see the others over there?' Reply: 'Now, yes!' The patient's attention is limited strictly to what it is directed to; no two elements exist for him simultaneously in his environment. To the question 'How did you get on in the winter?' he replies: 'I can't say that right now, I can only say what takes place now.' Past and future are not accessible to him and he cannot imagine them. He does not imagine at all and it is the same with everything that is not immediately present to him. 'I can name something but not imagine it.'

What is a frog? . . . 'Frog . . . a frog? . . . what is a frog . . . frog . . . quak, quak, it jumps!' . . . What is its colour? 'Frog . . . frog . . . a tree-frog . . . oh, colour . . . tree—green . . . the tree-frog is green. Well!' The patient is not able to invoke mental images himself in contrast to images emerging involuntarily. In place of inner representation he uses talking towards it to invoke his reply.

Tell us something! . . . 'I can't manage that, someone has to say what do you know of that and that . . .' When greeting: Any news? . . . 'What for instance?' or if you ask 'What happened last time?' . . . 'When, where . . . oh a lot of things, I don't know' . . . Can you remember anything we have done here? 'There was so much' . . . 'for instance?' This 'for instance?' was a favourite stereotype response of the patient. There was no point in directing him to indefinite matters; he could only be aware of something concrete; he could not answer general questions.

The conversation was about stealing: 'At any rate nobody stole from me' . . . The investigator recounted the theft of a watch from someone at the railway-station. When he says 'railway-station' the patient starts and interrupts. . . . 'Yes, railway-station, stolen at the station, that's right'. 'Something was stolen from me there . . . my big trunk.' Memory traces are not at his disposal, he always needs a stimulus-word. Unless a word fits like a latchkey, the past experience remains inaccessible. The patient does not know that he knows and he cannot dispose of what he has.

The patient depends on things cropping up within him spontaneously. He only manages with what occurs to him unwittingly; he cannot will things to appear and cannot spontaneously turn his attention to the contents of his own mind. Instead he has to be helped out by the spoken word and what accompanies it. The ego-impulse is supplanted by a word that rouses impulse and this replaces the acts of self-recall.

The patient's speech is therefore like an automatically released gramophone record. There is nothing there but mere words: memory images have given place to verbal memory.

Questions only rouse him to performance when he speaks them himself. The words then either start off an automatic progress to the target or bring the patient into some vivid concrete situation in which further things occur to him. Action becomes acting with the help of arbitrary words. However, not only words stimulate the patient, but also *perceptually concrete things*, e.g. a magnet put before him. He does

not speak spontaneously; his speech consists only of replies to definite questions directly concerned with some object, or of responses to an object directly laid before him.

This patient knows of his disturbance. He is not just at its mercy and he *finds ways* of substitute performance. He recites Schiller's 'Glocke'; he is asked the meaning of it and whether he can imagine the content of the poem. He replies: 'But that's just it . . . I can't take part in my thinking . . . when I want to tell something, it just comes into my brain . . . it happens haphazardly . . . the words come just like that . . . but if one is asked the meaning . . . that is the difficulty.' The meaning? . . . 'No, it flows off; it's all right, one grasps it . . . then it is gone . . .' He tells us of his dependence on various 'props' . . . 'a word or a few words to help me hang on . . .'

We are struck by his intelligence in spite of this exceptional and primary disturbance; he is very clever in formulating and surprises us with the promptness and crispness of his phrases.

We record here only a fraction of the findings. The sum of them should lead us to the common factor. The basis of the disturbance is still obscure but the investigators had the compelling impression that it was something unitary. They *tried to formulate the basic disturbance*, using concepts which have unavoidably a more restricted meaning than they carry nowadays:

1. The patient *cannot 'visualise'*. Something is lacking which is equally necessary for recognition and for evoking previous perceptions in his imagination. It has as much to do with the structure of perception as with the recovery of memories. The patient with visual agnosia, it is true, appears to have the obvious disturbance in one sense-area only, but underlying this is some general factor. He was asked if he could imagine some music; he said 'No; with opera for instance, I am only in it again when the music has started.' If the patient is to live in it the situation must always be a concrete one.

2. The patient *cannot perform by apperceiving* a number of things *simultaneously*; he can only proceed by taking them in successively, in particular by talking himself into them. He fails when it is necessary to constellate a situation simultaneously as a structured whole, but he achieves fair, even good, results when all that is needed is to deal successively with the material. We may conclude from this that there is a basic function which appears when there are 'simultaneous configurations' (*Simultangestalten*); that is, the function of 'simultaneously beholding a totality of processes'.

The taking-in of a situation plays a predominant role in visual activity so any disturbance there becomes dramatically obvious. However, the unifying character of the structural organisation of sight is but one instance of *the unity of simultaneous structures in space*, or even in the spacelessness of our minds. Everywhere this unification is of the same character and it leads us to suppose it as the basic function which manifests itself in perception, imagination and thought. The concept of what is visual in this context should not be overstretched.

3. The patient can perform only *what he can represent to himself through his*

own movements. Hence the constant movement he makes when he is listening, comprehending, thinking and hence the talking which becomes his means of solving a task. There is a 're-organisation of the total performance'. He succeeds if the target can be reached by means of talking or moving about, but, when this is not possible, his failure is complete. What seems *objectively* the same performance is actually the performance of a radically different function, *the path* to the performance is different. In healthy people there are a number of paths to performance, with sick people these are limited. In this case, the only means at our patient's disposal was movement. His high level of intelligence is shown by his resourcefulness in finding substitute performances. At the same time one thinks one can descry a basic function which strikes our notice only when people are ill: *the close connectedness of all psychic life with motility*, with actual movement and with images of movement (Ribot, Kleist); we could compare here the central importance of movement in the cosmology of many philosophers (Aristotle, for example, or in more modern times the system of A. Tredelenburg).

4. The inability to visualise, the inability to hold simultaneous configurations, and the restriction to continuous movement are three formulations which all must converge on the same basic function. The general disturbance created, when this function is upset, is termed '*reduction to the concrete*'. Patients cannot inwardly comprehend what is possible, what is abstract or merely thought, nor can they use these generalisations in order to reach some performance-target. Hence they find a detour for the performance by making a connection with something concrete, actual objects, real situations, spoken words and formulae. They tend to avoid life-situations which they cannot meet adequately; they try to preserve an automatic conduct and in spite of profound defects they may get on reasonably well provided they are intelligent.

In the above-described cases (so-called agnosia) there has been a disturbance of a basic function; many other basic functions may of course be disturbed. The following are some examples of this:

1. In the *aphasic* patient the central disturbance is that of speech. In the above-described case of psychic blindness speech had proved to be the last effective aid towards performance.

2. There are possible defects at a vital level where the instinctual regulation of hunger, thirst, satisfaction and all the rest of the bodily rhythms is indispensably linked with the whole course of our consciousness. W. Scheid remarks in connection with his Korsakow case: 'such vital regulation obviously plays an important part in the time-orientation, by subdividing the day'.¹

3. Disturbances in *conation* (see p. 485)² form another different group.

4. *Perseveration*³ or 'getting stuck' is a phenomenon we observe in organic defect states, aphasias, dementias. This is perhaps a pointer to yet another basic function.

¹ Cp. Börger-Prinz and Kaila, *Z. Neur.*, vol. 24 (1930), p. 553.

² Cp. A. Hauptmann, 'Der Mangel an Antrieb', *Arch. Psychiatr.* (D), vol. 66 (1922).

³ Heilbronner, *Mschrr. Psychiatr.*, vol. 17, pp. 429 ff., vol. 18, pp. 293 ff. Brodmann, *J. Psychiatr.*, vol. 3, p. 25. Roenan, *Z. Neur.*, vol. 162, p. 51.

Constellations of ideas remain long after the normal span of appropriateness. This shows particularly in the set tasks, when there is inappropriate reaction. For instance, a word continues to stick and is given as answer repeatedly when quite out of context; or the word 'swan' may be a correct response to the picture shown but will then be said for all the others; or again, it can happen that after the first time a clock is never read again correctly but the patient gets lost in details though the actual ability to tell the time is unimpaired. Such *leit-motifs* will dominate all reactions for days on end. In many cases perseveration is a secondary phenomenon and when psychic life is defective it takes the place of the correct performance. Heilbronner found that perseveration increased as set tasks grew harder. In other cases we can understand the perseveration in terms of interest, emotional complexes etc. Yet in other cases it appears to be an *independent phenomenon*. Certain contents almost persecute the person and dominate him in such a way that it is difficult to dismiss the idea of spontaneous excitation (e.g. during fatigue).

5. The ruinous *disorder of thought* appearing in *Huntington's Chorea*¹ points to another basic function. With choreic patients, although the motor apparatus can function normally, it becomes impossible for them to hold on to what they intend, nor can they keep to their goal, conscious or unconscious. Just as their movements deviate, derail, and spontaneously occur so it is with their thought processes, which get side-tracked, derailed, interrupted by other thoughts and generally confused. 'It has simply vanished!'—'I think of something else, nothing at all to do with it'; 'I knew it was different, I have just messed it up' . . . 'I make so many slips of the tongue, I speak so much nonsense, don't I?'—things that have nothing to do with it, is that not so?' . . . 'Now I've jumped again . . .' In brief, all performances requiring controlled motor-behaviour, e.g. body-movements, speech, thought, etc., are disturbed by involuntary impulses interfering with them. Impulses never reach their goal, they are always breaking off and renewing, but many break off for good. At the same time choreic patients in the beginning do not show any loss of intelligence level nor any inability to think—it is only at the end that dementia sets in. It is the steering that has failed; they do not find the things they look for, nor can they keep steadily to what they think and wish.

6. Zucker² applied the method of functional analysis to schizophrenics. He gave performance tests and linked these with the patients' self-descriptions. He investigated the modes of their imagination (by asking them to imagine things or stories; by comparing the two different experiences of having spontaneous hallucinations and of imagining somewhat similar contents; by observing the relationship between hallucinations and the deliberate reconstruction of them in the imagination, etc.). He found the imaginary creations were not very successful, became more difficult to produce, arrived more slowly, alternated between clarity and indistinctness and tended to break off and vanish. He thought one could detect here various degrees of disturbance of function, leading to the experience of thought-withdrawal, and from that to the breaking off of thoughts on the one hand and talking past the point and incoherence on the other.

¹ Hochheimer, 'Zur Psychologie des Choretikers', *J. Psychiatr.*, vol. 47 (1936), p. 49.
 'Kritische zur medizinischen Psychologie dargestellt an Chorea', *Literatur. F schr. Neur.*, vol. 8 (1936), p. 455.

² Konrad Zucker, 'Funktionsanalyse in der Schizophrenie', *Arch. Psychiat. (D)*, vol. 110 (1939), p. 465.

In all these investigations we find the presupposition of a threefold differentiation: 1. phenomena that can be experienced (Phenomenology); 2. certain well-defined performances (study of psychological performance); 3. basic functions. All these three categories are inter-related in such a way that the two first spring from the third, the basic function, which can be recognised as such only by means of the particular performances and experiences. Performance itself is clarified by the experience.

In the search for basic functions a tendency grows of simply not accepting mere concrete failures of performance as such; e.g. disturbance of registration is no longer just this but a disturbance in set or flexibility of set, which results in a disturbance of reproduction that looks like a defect in registration.¹ This method however becomes questionable once we begin to make explanations with the help of hypothetical basic functions. The analysis of performance then becomes a theoretical practice. We do not reach any clearer comprehension of grouped performances so that we apprehend the structure of our facts more clearly, but well-known facts are simply used to stimulate our interest in thinking out what may underlie them. The method loses all its fruitfulness if we merely stay satisfied with *a most general concept of basic function*, as, for instance, *gestalt-formation*. Disturbance of gestalt is always there, a concept general to all performance, as general as the concept of intelligence and valid thinking. Description of the gestalt-changes in the psychic structure is always a good method, but deductions from gestalt-formation as a basic function are meaningless, because far too general. The broad formulation of a disturbance in *the mental attitude that objectifies and predicates seems to be absolutely correct but unfruitful in its application*. *The investigator then only goes on saying the same thing once more.*

The search for basic functions must be distinguished from (1) the examination of *particular, concrete defects in performance and their consequences*, e.g. disturbances in registration. We should not stretch the general rule too far, that all disturbances of performance are disturbances of the whole. Precisely by contrast to this the search for specific disturbances and consequences remains alive. (2) Speculative analysis of *some vitally important basic event, glimpsed in its metaphysical setting* and seen as the source of understandable psychic experience and behaviour (v. Gebssattel, Straus, cp. pp. 453 ff.). In the case of the basic functions under discussion, we observe the path followed by the performance and, combining analysis of performance with phenomenology, we investigate methodically until the basic function itself becomes self-evident in the separate phenomena.

We cannot doubt the importance of this approach for research. It is the only method which offers insight into the way performances are related to each other. It involves the use of phenomenology for the analysis of performance, an analysis of performance itself according to the path it takes, the proper fathoming of the re-organisation and the comprehension of defects in the context of intact performance or of what may be left of the total functioning. This stands out all the more strikingly in virtue of the defects themselves. The investigators concerned have extravagant

¹ Grünthal *Mschr. Psychiatr.*, vol. 35 (1923).

hopes and tend to look down on all that has gone before. It is a mistake, they think, to presuppose isolated performances and handle them like building-bricks. Defects are only crude findings; a host of failures may be noted but tell us nothing. Measurement of defects may be the beginning of some rough orientation but, if nothing more is done, there will be no understanding of the altered psychic structure of the individual. To ascertain the actual performance that has become difficult or impossible for the patient is only the first step. It is much more interesting to find out what the patient experiences as difficult. Only the analysis of experience by self-description will reveal the essential nature of defective performance. Progress in psychology is blocked by the use of such generalised terms as intelligence, attention, memory. Disturbances of intelligence (dementia), attention and memory as terms do not disclose the unique basic disturbance nor the basic mode of behaviour.

Now there is a good deal of exaggeration in all this. Investigation on these lines has not brought the findings one might reasonably expect, on which a *theory* could be constructed that would make 'crude' descriptions and attempts at classification superfluous. These interesting studies show a peculiar lack. In spite of much subtlety and skill investigation has on the whole got lost in the sand. Much has been seen in passing, but no really conclusive result has been achieved. A genuine beginning has been made, a method established and the techniques of enquiry once gained can never be lost. But so far the investigatory work has got a certain pointlessness and there is a lack of any clear, concentrated effort to end this. In research of this type decisiveness is in abeyance and vacillation is taken as satisfactory in the guise of caution, but it may just as well reflect the many possible interpretations of the individual results.

Furthermore, for the time being the whole approach is limited to defective performance in cases of organic brain lesions. Here it has been of great significance in helping us to see that circumscribed brain lesions rarely lead to equally circumscribed psychic failures; at most a number of performances are more or less affected. We cannot yet see clearly to what extent we may find basic psychological functions, over and above the organic functions disclosed by the cerebral disorders so far defined.

(b) Work-performance

Performance turns into 'work' when it is carried out as a steady effort for a practical purpose, absorbs the person as a whole, depends on his getting tired and refreshed, and is generally subject to quantitative measurement. The *psychophysical organism* with all its powers engages in a great complexity of work-performance and thereby manifests certain of its *basic qualities*.

Work-performance may be objectively observed, quantitatively assessed and the effect of varying conditions noted. In this way we are beginning to uncover the factors responsible for the essentially mechanical element in work-performance.¹

¹ The experimental basis was laid by the work of Kraepelin and his school. Kraepelin, 'Die Arbeitskurve', in Wundt's *Philosophische Studien*, vol. 19 (1902), p. 459. A critical exposition as to the importance of the findings for assessment of work-performance in life-situations. Max

The kind of work asked for in experimental investigation is nearly always the addition of single digits. We seem to know very little about the differences due to differences in occupation, e.g. work that is predominantly mental in contrast to work that is predominantly physical.

In our analysis of work-performance we should differentiate clearly between *subjective* phenomena, such as feelings of weariness and pleasure in the work, from *objective* phenomena, such as fatigue and suitability for the work. Objective work-performance is well illustrated by the *work-curve*, in which the abscissa show the time and the ordinates the quantity of the work unit. From this we can observe certain components such as the *fatigue-curve*, which at first goes down and then, after intervals of recreation, mounts again quickly; we can also read another important curve, the *practice-curve*, which at first rises quickly, later more slowly and then, after intervals, falls off.¹ In addition there is the *incentive-curve*, which shows a rise at the beginning which can be interpreted as the initial effort of will; we also find peaks at the end as well as at the beginning of the performance. Then there is the habituation-curve which shows reaction to distracting stimuli. At first it rises steeply but then flattens out and remains fairly level.² Fatigue and practice seem the most important components.

*Fatigue*³ is contrasted with recuperation, and these are aspects of the psycho-physical apparatus of fatiguability and recuperability. In the latter case the period for recovery is of very varying duration. It will depend on whether we are dealing with simple fatigue, explained by the effect of certain toxins, or with exhaustion, explained by the using up of substance. We also distinguish between muscle-fatigue and nerve-fatigue. It is an open question whether there is such a thing as general fatigue or only partial fatigue for certain work-performances. Kraepelin believes there is only general fatigue.

*Practice*⁴ is the increase in ease, speed and evenness of performance by repetition. This is achieved partly through a *mechanisation* of psychic performances which at first are more deliberate but gradually become more reflex-like and mechanical. This means that we must assume there are changes in the physiological mechanism that effect practice. Capacity to become practised in this way and to make use of such practice varies with different people. Kraepelin therefore differentiated between what he called practice-ability and trainability. Whereas fatigue is a fleeting and transitory phenomenon, training-practice always leaves lasting residual effects.

The dispositions which have been enumerated as fatiguability, recuperability, practice-ability, trainability, distractibility, habituation and responsive-

Weber, 'Zur psychophysik der industriellen Arbeit', *Arch. Sozialw. u. Sozialpol.*, vols. 27-9. Kraepelin reports on further trials in 'Arbeitspsychologische Untersuchungen', *Z. Neur.*, vol. 70 (1921), p. 230.

¹ O. Graf, 'Die Arbeitspause in Theorie u. Praxis', *Psychol. Arb.*, vol. 9 (1928), p. 460.

² Kraepelin, 'Die Arbeitskurve', in Wundt's *Philosophische Studien*, vol. 19 (1902).

³ M. Offner, *Die geistige Ermüdung* (Berlin, 1928), 2nd edn.

⁴ B. Kern, *Wirkungsformen der Übung* (Münster, 1930).

ness to stimuli, are all to be conceived as *basic qualities of the psychophysical mechanism* (Kraepelin says of the personality).

Under *morbid* conditions all these qualities may suffer change. Kraepelin has examined their dependency on food-intake, sleep, intoxication (alcohol, coffee). With cerebral lesions we find an enormous slowing-down of the work-performance along with great fatiguability.¹ One finds other cases in which there is very little ability for performance, or practice-ability, and little fatiguability because there is virtually no effort; in this case the insufficiency is psychologically conditioned. With the neuroses (particularly after accidents) analyses of the work-curve have been made by Specht and Plaut.² It is possible to differentiate between the quick fatiguability of neurotic patients, the lack of determination in hysterics and the intentional poverty of performance shown by determined simulators. Usually with neurotics we have to confine ourselves to *subjective analyses*. The two main components are, on the one hand, adverse sensations and unpleasant feelings during effort, which tend to increase with the difficulty of the task, and on the other the feeling of 'not wanting', of weakness and of not being able to go further. Weakness of will depends on the unwitting acceptance that compensation will be lost if there is return to work. The excitement of the compensation proceedings tends to increase complaints and in particular the weakness of will (Compensation neuroses). It is not so uncommon to find that the examination shows decreased performance as the only objective symptom these patients have.

Concrete examination of work-performance together with certain currently held beliefs has led to a certain emphasis being put on the 'basic qualities of personality'. In this connection it must be pointed out that in fact only mechanical, automatic, learnable 'performances' are in question here, tasks that everyone can do and which can be quantitatively assessed, in short just those tasks that are commonly found rather a burden. The work-curve cannot be applied to qualitative performances, nor to productive activity, nor in particular to art, science and the general conduct of life. We shall value its contribution, however, as an objective demonstration of the way in which our nervous apparatus functions, that apparatus on which our life as a whole rests.

(c) Individual variations in performance

When Kraepelin in his analyses of the work-curve spoke of 'basic qualities of the personality' as shown in the various degrees of fatiguability, recuperability, trainability etc., he laid the foundations for a system which was capable of considerable elaboration. *All performances* which can be demonstrated experimentally reveal *individual differences*. These can in part be measured, and

¹ Busch, *Z. Neur.*, vol. 41, p. 283. 'Work with head injuries', Langendorff; *Z. Neur.*, vol. 58, p. 216. Ergograph tests, Bappert, 'Zur Frage der körperlichen Leistungsfähigkeit bei Hirnverletzten', *Z. Neur.*, vol. 73, p. 239.

² Specht, *Arch. Psychol.* (D), vol. 3 (1904), p. 245. Plaut, *Münch. med. Wschr.* (1906), p. 1274, *Neur. Zbl.* (1906), p. 481.

in part we can arrange them in typical polarities or opposites, or they may show a multipolarity.

For instance, 'types of imagery' have been differentiated: there may be individual preference for the visual, acoustic or kinaesthetic sense in imagery and memory; an individual may be an eidetic and an eidetic of a particular type. Similarly we find different types of memory, speech, thinking, perceiving and moving; different speeds, different rhythms, etc.

We are dealing with very heterogeneous matters. The one thing in common is that they all emerge from objective performance tests. Differences are looked for with the intention of finding certain basic psychological qualities due to what have been called constitutional variations in human beings. This does not give us the individual whom we understand, the aspect of personality which we call character, but the biological individual who is revealed in his performance.

One much discussed problem is that of right- and left-handedness. Right and left is a fundamental orientation in space for our bodies. It is a morphological feature of the body itself. There seems a very specific problem involved in whether a person prefers right or left in his movements. In any case left-handedness is regarded as a constitutional characteristic which is not appreciated as a physical sign but only becomes objective during performance. Attempts have been made to understand this in terms of personality development and structure, while others consider it only a chance finding.

*The facts*¹ appear to be as follows: Left-handed people are almost always in the minority. Incidence is stated to be 4 per cent in Russia, 13 per cent in Alsace-Lorraine, in Stuttgart 10 per cent of boys, 6.6 per cent of girls. 25 per cent of the stone-age tools discovered are said to have been made by left-handed people; the inhabitants of Celebes are said to be left-handed as a majority. Argument rages as to whether left- or right-handedness is an advantage or of no importance. Leonardo da Vinci and Menzel were both left-handed. Left-handedness shows strong hereditary trends and appears correlated to speech disorders. 61 per cent of boys and 81 per cent of girls with severe speech disorders were found to be left-handed (Schiller). 'The dominance of one cerebral hemisphere is necessary for the development of the higher centres, especially the speech centre', so that the effort to train both hands to equal skill is not a desirable one.

§ 2. THE ACTUAL FLOW OF PSYCHIC LIFE

The total present state can be considered from a number of standpoints: as an alteration or clouding of consciousness (pp. 137 ff.), as fatigue and exhaustion (pp. 465 ff., 206) or as the particular world in which the respective

¹ Maria Schiller, 'Probleme um die Linkshändigkeit', *Z. Neur.*, vol. 140 (1932), p. 496. H. Bürger, *Nervenarzt*, vol. 2, p. 464, on the whole problem of 'right and left'; a research report.

life goes on (pp. 280 ff.). Each mode is linked as a whole with the others but our knowledge can only grow by making distinctions. Alterations in the present state (of consciousness and of the biological whole) and in the person's relevant world (of intelligible, meaningful wholes) must be kept distinct from alterations in the psychic flow itself, which is to be discussed in what follows, and which manifests itself particularly in the way in which thinking is connected or disconnected. We are forced, however, to analyse it as a defect in, or reversal of, certain normal performances taken as a whole. The changes involved have some very old designations: e.g. flight of ideas, retardation, disorganized thought. In diagnosis a distinction is made between the manic-depressive changes (flight of ideas, retardation) and the schizophrenic ones (disorganisation of thought). Yet the flight of ideas can grow into disorganisation and schizophrenic states can show a classic flight of ideas.

(a) *Flight of ideas and retardation*

Below we give an illustration of what is meant by flight of ideas¹ and retardation. The examples are highly heterogeneous:

A patient produced the following in 'conversation' with his doctor in which *objectively* a flight of ideas was present: She was asked whether she had changed at all in the last year. She said 'Yes, I was dumb and numb then but not deaf, I know Mrs. Ida Teff, she is dead, probably an appendicitis; I don't know whether she lost her sight, sightless Hesse, His Highness of Hesse, sister Louisa, His Highness of Baden, buried and dead on September the twenty-eighth 1907, when I get back, red-gold-red . . .' With such patients the trend of thought is haphazardly interrupted. They start doing this and that and keep losing their target, but they are always busy about something and have a great number of notions. They cannot stick to the point and constantly lose themselves in side issues. They will then lose the thread and cannot recover it. They never finish what they begin, they jump from one thing to another, are breathless and led on by superficial connections. In contrast, the patient with *retardation* behaves in the opposite way in almost every respect. He shows no initiative, never begins anything, finds it hard to utter even one word, ponders over a question but nothing occurs to him.

What the patient *subjectively* experiences can sometimes be elicited by self-description: Patients, particularly in schizophrenia, will describe one mode of flight of ideas as a *crowding of thought*: Mrs. S. complained 'I can't hold on . . . it all dances round and round inside . . . I can't group anything together . . . I have no will . . . oh dear, what a lot of nonsense it all is . . .' A patient of Forel said . . . 'A whole uninterrupted string of ideas ran through my head . . . like clockwork . . . idea chased idea with the oddest associations . . . yet some kind of connection seemed there from link to link of the whole chain . . . what ideas have not tumbled about in my head . . . and what funny associations cropped up.' 'I kept on coming back

¹ Heilbronner, *Mschir. Psychiatr.*, vol. 13, pp. 272 ff.; vol. 17, pp. 436 ff. Liepmann, *Über Ideenflucht* (Halle, 1904). Aschaffenburg, *Psychol. Arb.*, vol. 4 (1904). Külpe, *Psychologie u. Medizin*, pp. 22 ff. L. Binswanger, *Über Ideenflucht* (Zürich, 1933). By flight of ideas, we mean here the disturbance in the actual flow of the total psychic life, not the mere verbal production of someone who actually need not be caught up in a 'flight of ideas'.

to certain ideas and images . . . droit de France . . . tannin . . . Barbara . . . Rohan . . . they were like milestones in the headlong chase of thoughts . . . I said them quickly, like a password as it were . . . the particular one which they had reached at certain points in my daily life, on entering the hall, at the opening of the side-room door, at mealtimes, when someone approached me and so on . . . I did it so as not to lose the trend and get a certain hold on the mad thought-sequences which were overwhelming me.'—A schizophrenic reported: 'my thoughts increased in speed, I could no longer grasp individual ideas, I thought I would snap at any moment; I only felt the movement of my thoughts, I could not see their content any longer . . . in the end I was not even aware of the thoughts . . . I was empty . . .'

A 30-year-old patient with a post-encephalitic state described the inner change in his thoughts with comparable phenomena. 'I cannot sit still for five minutes without thinking of something; thoughts go faster than I can speak; I know the answers before I say them . . . it is as if a film was reeling off in my mind . . . it all goes like lightning and I seem to get hold of every detail . . . when I don't answer at once and you think I have not understood, everything is repeating itself . . . I can't answer at once . . . all day it is like this, when I think, it occurs again and again and again' (Dorer).

The following self-descriptions show milder degrees of *retardation*: 'my mood was constantly changing . . . my good days were characterised by interest, carrying out what I wanted to do, personal stimulation, proper judgment of things and people and of myself, and with a certain tension; I looked for company and took pleasure in everything. The change of mood was not so sudden but progressed a little every day. On the other bad days, I *lost interest, felt stupid*, indecisive about things and what should be my attitude. I tried hard to hide these defects, and sometimes I could manage to evidence something of what I was like on my good days. My handwriting and manner of walking changed. Latterly there was also a *complete indifference*, and a failure to take in anything. Theatres, concerts, made no impression on me; I couldn't talk about them any more; I lost the trend in conversation and I could not link one idea to what had gone before; I was insensitive to jokes and points made in conversation; I didn't catch them.' (In the following year this patient showed paranoid deterioration.) Other patients complain, 'I have lost my memory and cannot follow a conversation . . .' 'I feel paralysed . . . I have no mind any more . . . I am completely stupid . . . I can't recall what I have read or heard . . . my will has gone . . . I haven't a trace of energy or drive . . . I can't make up my mind to do anything . . . it takes all I have just to move, etc.'

i. Interpretation of flight of ideas and retardation. We might say these phenomena are all characterised by the opposites of *accelerated or decreased tempo*. But this does not take us to the central point of the disturbance. The acceleration of an otherwise normal process would be a sign of health while slowing up in what is an otherwise undisturbed psychic process appears in epileptic personalities for example without any similarity to the phenomena of retardation which have been described. Perhaps the opposites of *excitement* and *inhibition* come closer to the point, but even though these can describe one aspect of the total process they are still indefinite. If we really want to get at the structure here it is best to make use of the contrast between *mechanical*,

associative, passive flow of ideas and *active, purposeful thought-processes* (governing ideas, determining tendencies). Associative processes bring in material, active processes order the thought. We see at once: on one side there is inhibition or excitation, a wealth or poverty of *associative events*, and on the other a retreat of active goal-formation along with its *determining tendencies*. When determining tendencies are diminished (because no goal-awareness exists, and therefore exercises no influence and in addition changes too fast) the flow of ideas is only guided by the constellations of the associative elements. Consciousness is fed by external sensory stimuli as well as images evoked by accidental constellations following all kinds of different associative principles. This gives us the objective picture of flight of ideas. The word 'idea' in 'flight of ideas' does not only refer to 'images' but to everything that can be called an 'element' in the general chaos of association. In the same way the goal-forming ideas are not just ideas but all those factors which bring about a selection and structuring of psychic content; the logical (perceived) necessities of the situation (speech, conversation, communication, task). Making use of this schema we can derive any number of subjective and objective types of retardation¹ and flights of ideas.

2. *Types of disturbed psychic flow.* (aa) *Classical flight of ideas.* Associative processes are excited; there is a massive flow of content into consciousness. In itself this might only imply increased mental productivity, but there is a crippling of determining tendency and gradually this disappears altogether; there is no longer any constant selection among the associations and they all get mixed up through chance conditioning, association of ideas, verbal associations, clang-associations etc.

So far there is no satisfactory or complete explanation of flight of ideas. It is not the result of some acceleration in the flow of our ideas; nor is it the result of pressure of speech. We cannot make it intelligible as a mere quick exchange of associations (e.g. clang-associations) nor as the predominance of inferior modes of association (loss of conceptual modes). The source of the phenomenon seems to lie in unknown extra-conscious processes; the performance has to be viewed as a whole, taking both sides of the thought-process into account, that is, the processes of association and the determining tendencies.

(bb) *Classical retardation.* This is the exact opposite to flight of ideas so far as associative processes are concerned. Autonomy over psychic content is limited. The content is not destroyed however as in dementia. No associations appear; nothing enters consciousness. There is a tendency towards a complete blank. Should a few sparse associations appear, the determining

¹ I have given the rendering of the traditional theory, although it has been sharply criticised and dismissed (by Höngswald, L. Binswanger). Even in flight of ideas, every idea, every element, contains an act of thought. These are not just automatic happenings; there is still an 'I' 'thinking'. Correct as this may be, it is no objection to closer analysis. The older theory is a valuable description, not a theory as to what is happening, which in any case still remains obscure. The experience itself lies in this opposition of thought and the material on which it works, and we do wrong to dismiss the whole thing.

tendency, as with flight of ideas, is extremely weak. Patients cannot concentrate. At times a reaction may be staged after long-drawn-out effort, but often the patients are completely mute, and linger for a long time in deep stupor.

(cc) *Conjunction of flight of ideas with retardation.* It seems that these two phenomena can appear together. Flight of ideas may be rich or poor in content, speech may be profuse (pressure of speech) or extremely scanty (mute).

Where patients are aware of this disturbance in their psychic process flight of ideas is described by them as a pressure of thoughts, and the retardation as a subjective inhibition. Seen as a whole it appears as thought retarded with flight of ideas.¹ The patients complain that they cannot cope with the mass of thoughts, the painful chase of images which storm through their mind; or they may complain that they can no longer think, not another thought comes. Should the patients also be aware of a loss in determining tendency, they will still try hard to bring some order into their thoughts and experience the complete ineffectiveness of their attempts to form controlling ideas. They experience a simultaneous excitement, pressure of thought, brought about by increased associations, and retardation through their incapacity to keep hold of a single, coherent thought in the middle of this hectic chase.

(dd) *Distractibility.*² Where determining tendencies have failed or are insufficient, flight of ideas comes about, provided the thought-process consists mainly of an increased production of associations. Where, however, the process is haphazardly conditioned by *external impressions* we use the term *distractibility*. The patient will immediately notice and name and include in his talk, for instance, a number of objects, something one holds in one's hands, a watch, a key, a pencil, or something one does—one knocks, plays with the watch, jingles keys. But the next minute, he is off on something else, a spot on the wall, the doctor's tie, anything noticeable in his environment. It is obvious that flight of ideas and distractibility will commonly occur in conjunction, but they do not always do so. A patient may be entirely unproductive in association, but every external stimulus may catch his attention, and reversely with other patients whose whole process of ideas seems to consist solely of associations linked in a typical flight of associations that cannot be interrupted by any external stimuli.

Distraction does not occur with every stimulus. One can often notice a certain selection of areas of *interest*, or of a certain *coherence*. This partially understandable kind of disturbance passes over by transitions into the opposite extreme, distractibility by *any stimulus whatsoever*. Every object is named indiscriminately, every word repeated, every movement imitated. In cases of pure distractibility, should some understandable element appear, it seems to us an 'echo-symptom', a purely automatic event. In the former case, the stimulus picked up by the distracted attention is still being elaborated by the patient in a way that seems abnormal, but in the latter case all that appears left is an unchanging, automatic reaction. It would be better

¹ Schröder, *Z. Neur.*, vol. 2.

² Heilbronner, *Mschr. Psychiatr.*, vol. 13, pp. 277 ff., vol. 17, pp. 431 ff.

then not to talk of distractibility but to keep this term for those cases where we get the impression that the patient is conscious of some change in the direction of his attention, he observes and is then again distracted, in a way for which we can have empathy.

(b) Confusion

Schizophrenic patients complain of fatigue, a loss of concentration, of a falling-off in their intellectual performance, poor memory. The meaning of these manifold complaints grows better defined when the observer can find objective disorganisation and actual disturbances of the thinking process. Beringer¹ selected a number of cases whose thought was not so disorganised as to make self-description impossible. He noted that the subjective reports (unlike many of the complaints of manic-depressive patients in regard to their retardation) were well correlated with the objective findings:

The patients complained: thoughts are so fleeting, as if cut off, connections are lost, thoughts are so rushed. It becomes worse when patients are left to themselves and better when they have something to do or are engaged in conversation. A patient said: 'I forget my thoughts so quickly; if I want to write something down, it has gone . . . the thoughts fall over each other . . . they are no longer clear . . . they go off like lightning . . . and another comes though I had not thought of it a moment before . . . I feel absolutely muddled . . . I can't control my thoughts . . . they are confused . . . they glance by, though I know they were there . . . there are always side thoughts beside the main thought . . . they confuse me and so one never gets anywhere . . . it gets worse . . . it's all criss-cross . . . everything mixed up and meaningless . . . even I have to laugh but I can't . . . I feel robbed of thought . . . everything I see and think seems to have lost its colour, it seems shallow, dull . . .' 'The university has shrunk to my cupboard . . .'

Much of this painful criss-cross experience is the lot of the patient who is passive; where he is active, he experiences the difficulties of his thought-processes and their extreme poverty.

When we try *tests of performance*, the patient may co-operate and try to do them, but we find a reduced power of registration, a marked deterioration in comprehending the logical structure of a story, the failure to recognise the nonsensical as such and greater difficulty in completing gaps in sentences, etc. The patient who gave the above clear description could not write a simple request to someone he knew: he had to write 14 pages, started afresh several times, but never achieved his end.

Carl Schneider² gives a very subtle description of such disordered schizophrenic thinking; there is 'Verschmelzung'—smelting or fusing, the bringing together of heterogeneous elements, 'Faseln'—mixing, muddling up actual definite but heterogeneous elements, 'Entgleiten'—snapping off, the unintentional breaking of the chain of thought, 'Entgleisen'—derailment, the interpolation of thought-contents in place of the true chain of thought, etc.

¹ Beringer, 'Beitrag zur Analyse schizophrener Denkstörungen', *Z. Neur.*, vol. 93 (1924).

² Carl Schneider, *Psychologie der Schizophrenie* (Leipzig, 1930).

In an effort to try and visualise this type of thinking—or rather this kind of psychic flow as a whole—comparisons have been made with the kind of thinking that occurs during fatigue or while falling asleep (Carl Schneider), or with archaic thinking of primitive people (Storch). But there can be no more than comparison. During fatigue or falling asleep, the primary change is the change in consciousness; in archaic thinking we see a stage in the historical development of the human mind (as a product of culture not as biological inheritance). In schizophrenic thinking however a primary disturbance of a peculiar type is taking place in the psychic flow and this is our one empirical fact.

§ 3. INTELLIGENCE

Intelligence is the term given to the individual's totality of abilities, those instruments of performance and purpose available to him for adaptation to life.

(a) *Analysis of intelligence*

We have to differentiate the preconditions for intelligence, the inventory of actual knowledge and intelligence proper. As *preconditions of intelligence* we may assume registration and memory, degree of fatiguability, mechanisms of motor phenomena, mechanisms of the speech apparatus etc. There often is a confusion between these preconditions and intelligence proper. The individual who has no memory, cannot speak, or tires very quickly, naturally cannot display his intelligence. But the cause then lies in the disturbance of some circumscribed function, as a result of which there is a disturbance in the manifestation of the intelligence, not in the intelligence itself. If we want to analyse anomalies of intelligence and differentiate them, it becomes very important to chisel out from the whole concept of intelligence those limited and basic psychophysiological functions which we have earlier on discussed. Liepmann speaks with pride of the advances made by 'separating out aphasia and apraxia from the undifferentiated morass of dementia'. In the past, aphasia had often been mistaken for dementia.

In the next place, we must not confuse *all that we have in our mind, our knowledge*, with intelligence. It is true that where there is great knowledge, we can conclude the existence of certain abilities which must be there to acquire what is not solely a reproduction of memory. But even then, we still find a far-reaching independence between mere learning ability and intelligence proper (the capacity for judgment). It is possible to learn a whole host of complicated matters, so that learning ability is again often confused with intelligence. In psychopathology, comparison between the actual store of knowledge and what is still left of ability sometimes provides us with a criterion for assessing acquired defect as opposed to congenital mental deficiency. In the latter case, the amount of knowledge and the ability are more appropriately

related to each other. Very slight knowledge is usually a sign of mental deficiency, and vice versa. We can therefore in extreme cases indirectly base our judgment of mental deficiency on a test of knowledge. Such a test is of more value to us, however, in determining those contents which provide the individual's working material. Actions, attitudes, behaviour are intelligible only if we know the extent of this material, the picture of the world which the mind has built; only so can we converse. The smaller the mental estate, the more we can observe that words mean one thing for the speaker and another for us. The words he uses go in their objective meaning beyond what he wants to say. They may deceptively suggest that he has more knowledge than is the fact. The size of one's mental estate depends not only on learning ability and interest but on the milieu from which we derive and in which we live. If we know the average level of knowledge within the different social classes, this is of considerable help when we come to assess the individual. Usually one overestimates the average extent of knowledge.¹ Rodenwaldt found in a majority of soldiers a complete lack of social orientation, ignorance of their political rights, even of the law of the land. They did not even know the country a few miles away from their village. There was scarcely a trace of any knowledge of history. More than half of them did not know who Bismarck was. Usually in any test of knowledge one must take the *schooling* into account, as well as the *general life experience*. This latter (in the form of knowledge acquired from spontaneous interest or in the course of work) gives us a much better criterion for intelligence. Recent investigations, however, rather surprisingly show that the majority of people have only a most superficial acquaintance with their own occupations.

Finally we come to *the intelligence itself*. It is a difficult matter to comprehend. It is almost impossible to calculate the many different criteria we use to assess someone as intelligent. Obviously there are a great many different abilities which can perhaps be isolated out precisely, and it seems probable that there is not just a series of greater or lesser degrees of intelligence but a ramifying tree of many different abilities. We may doubt whether there is a general intelligence, a general capacity to perform, a 'central factor of intelligence' which must disclose itself in every respect. But there is always a strong inclination to assume that such a factor exists. It is this which the older psychology called the power of judgment.

However that may be, the phenomena of intelligence are immensely varied. We find lively people with a *quick grasp* but who mislead through their very flexibility, yet are taken for exceptionally intelligent people. On test they appear as only average and superficial. Then we find a level of *practical intelligence* where there is quick and correct choice of many possibilities and an apt adaptation to new demands. Then there is an *abstract intelligence* which in

¹ Rodenwaldt, 'Aufnahmen des geistigen Inventars Gesunder als Massstab für Defektprüfungen bei Kranken', *Msch. Psychiatr.*, vol. 17 (1905). J. Lange, 'Über Intelligenzprüfungen an Normalen', *Psychol. Arb.*, vol. 7 (1922).

moments of decision becomes almost feebleminded but can achieve great mental feats when working quietly on its own. 'Doctors, judges, politicians may know theoretically many beautiful principles of pathology, law and statesmanship and can teach them, but in the application of them they may show themselves utterly futile. There may be a natural lack of judgment; they can see generalities in abstract but cannot decide whether the concrete case fits; or they have never been sufficiently trained by example and actual work to make judgments of this sort' (Kant).

Clinically we have not got much beyond a few very general aspects of intelligence. We lay much emphasis on the *capacity to judge*, on the *ability to think*, on a *flair for the essential*, on the ability to grasp viewpoints and ideas. In a difficult test the person who says he does not know something or cannot do it seems more intelligent than someone who goes off into irrelevant detail or tries to talk himself out of it. As well as the capacity for judgment there is *spontaneity* and *initiative*, which also count. In response to requests someone may well show intelligence in being able to judge, but when left to himself, he may sit around, an apathetic and very dull individual.

(b) *Types of dementia*

The concept of intelligence, viewed as the whole of a man's mental endowment, means that an analysis will only elicit particular features which in themselves never quite meet the intended concept. We therefore have a much better idea of the characteristics of particular types of intelligence than of intelligence as such. We shall now try to describe some types of disturbed intelligence, as follows:

1. *Fluctuation in output.* Intelligence means for us in general a lasting disposition, and dementia a lasting defect. If we cannot get an intelligent performance from people in acute psychoses, confusional states, stupor, flight of ideas, retardation, we do not say there is any disturbance of their intelligence. This can only be stated if intelligent performances cannot be elicited in settled, orderly, accessible states, that is in the absence of acute disturbance. When this is present we do not even hazard a judgment on the patient's intelligence, what it was before and what it will be in the future. However, it is not always easy to make this distinction between the transitory and lasting disturbance in every case. Disturbances such as diminution in mental output in intellectuals, artists, scientists, or the transient, more lasting or permanent disturbances that occur in psychasthenic persons, are by no means easily classified. Passing phases when patients feel their inadequacy strongly are quite common. Memory they feel has gone; they cannot think any more. These feelings of inadequacy are justified in fact; the patients are really unable to concentrate, they read mechanically without getting the meaning, they have to think all the time how to set about things, and constantly watch themselves instead of what they are doing. Thus they really lose sight of their work as a whole; they have no spontaneous ideas and without these work comes to a halt. Such

people have suffered a loss in productivity which may be transient or lasting. Inversely may come phases of exceptional productivity, of the richest creativeness. In all such cases we are dealing not with changes in the intelligence as a whole but with changes in productivity. Phases such as these are usually to be found in depressive and hypomanic states.

2. Congenital subnormality. There is a steadily descending range of capacity, running from the limited productivity of a concrete, reproductive intelligence, to the lowest grade of mental subnormality. Slight degrees of this are termed feeble-mindedness, moderate degrees imbecility and severe degrees idiocy. Here we are dealing with a psychic life that suffers impoverishment in all directions, with a low degree of differentiation. We can conceive it as a variation of human constitution in the direction of below average. As we get lower down, psychic life approximates more to that of animals; although the necessary instincts are well developed, experience does not move beyond the individual sensory experience and nothing fresh can be learned. No concepts are formed and planned, conscious behaviour is impossible. As they have no general viewpoints, such individuals are quite unable to form ideas, or advance ideals. Their life is spent within the narrow horizons of accidental, daily impressions. Yet at the lowest as at the highest level of human differentiation, we can see mental endowment is not unitary but consists of many unevenly developed abilities. We often see imbeciles who show special aptitudes, or even mental abilities such as arithmetical skill or a one-sided appreciation and memory for music.¹ At present we cannot distinguish psychologically the congenital mental defect due to organic lesions,² from those forms of congenital mental defect appearing as an abnormal constitutional variation.

3. 'Relative mental defect'. In theory we can separate the congenital fashioning of the intelligence from that of personality but in actuality we cannot always do so. There are odd individuals with an apparently high performance-ability, coupled with an astonishing incapacity; Bleuler called this situation 'relative mental defect' (*Verhältnisblödsinn*)³ because the individual's endowment is in no recognisable relationship to the level of aspiration and there is consequent inevitable failure. There is a disturbed relationship between the intelligence and the aspirations. The disproportionate drive poses tasks for the intelligence and brings the person into situations with which he cannot cope. Such people are often equipped with an excellent mechanical and verbal memory, and appear to superficial observation as versatile thinkers, but on closer view they are 'masters of confusion'. They are incapable of 'finding useful directives from experience whereby to manage their affairs'; they suffer from an incorrigible self-overestimation, and a total absence of self-criticism. In conversation a fine flow of uprushing associations is let loose in a kind of 'drawing-room

¹ Witzel, 'Ein Fall von phänomenalem Rechentalent bei einer Imbezillen', *Arch. Psychol.*, vol. 38.

² Sollier, *Der Idiot und der Imbezille* (Deutsch, 1891).

³ Bleuler, *Allg. Z. Psychiatr.*, vol. 71 (1914), p. 537. L. Buchner, *Allg. Z. Psychiatr.*, vol. 71.

idiocy' (Salonblödsinn), in an urge to be somebody and impress others. There is an impression of a flight of ideas but this is not so really. It is an understandable self-expansion coupled with an immense number of ideas, but they are controlled only by language facility and powers of mechanical memory. Ideas are not developed, only a chaotic knowledge displayed. Shallow, verbal witticisms take the place of responsible evaluations and attitudes; 'speak, rather than think' is the guiding motto. There is an intoxication with one's own wit, instead of any directed thinking, but the wit is only a reproduction of what has been read. Such people can deceive through their 'belief, reminiscent of *pseudologia phantastica*, that all they say is their own'. The chosen content is usually the most high-sounding problem.

4. *Organic Dementia*. We have to differentiate acquired, organic dementia in all its many forms from congenital feeble-mindedness and schizophrenic defect. The organic process usually destroys in a far-reaching manner the *preconditions of intelligence*, such as memory, powers of registration, sometimes the apparatus of speech, so that, for instance in senile dementia, we get clinical pictures where a person forgets his whole life, cannot speak properly any longer and can only make himself understood with difficulty. But from his behaviour and general conduct we can still see evidences of an educated man; he has retained his sense for the essential and under certain circumstances some power of judgment.

In other cases of arteriosclerosis, paralysis and gross degrees of epileptic dementia, the process in the brain leads to progressive deterioration of the whole intelligence. Finally the patient loses all power of judgment, any inclination to go for essentials, less indeed than a congenital mental defective. At the same time patients, as they talk, will bandy about fragments of previously acquired experience, so that a different picture arises from congenital mental deficiency, and one gets the picture immediately of an organic disorder. Apperceptive power is seriously reduced. They are guided by accidental impressions and have no effective counter-ideas; they lack all initiative and find themselves at last in the severest states of mental devastation where they can only vegetate physically.

All organic dementias of severe degree show characteristically a lack of insight. Only when the organic process is essentially restricted to the pre-conditions of intelligence (memory, etc.) does any sharp awareness of illness exist (e.g. in arteriosclerosis). In senile and arteriosclerotic dementia there is at the beginning, in contrast to paralytic dementia, an acute feeling by the patient of his own regression.¹

5. *Schizophrenic 'dementia' (deterioration)*. If with the organic dementias we find it difficult to separate personality from the intelligence, the schizophrenic deterioration or dulling of the kind from which the majority of chronic mental

¹ Eliasberg and Feuchtwanger give a psychological analysis of a progressive dementia after brain-injury. *Z. Neur.*, vol. 75 (1922), p. 516. Patient's total attitude and the disintegration and impoverishment of the situation is shown.

hospital patients suffer presents us with an even greater problem. Perhaps the intelligence remains quite intact in these cases and the changes are due to alterations in personality alone. It would be of fundamental importance for our understanding of these illnesses if it were possible to separate this latter type of case—which forms the majority—from those cases where a true disturbance of the intelligence could be demonstrated. In fact we do not find a disturbance of memory and the other preconditions of intelligence, there is no loss of knowledge, but there is a deterioration in thinking and behaviour which has been described as silly, hebephrenic. We also find a lack of grasp on the essentials, at least for what can be said to be essential in the social, objective and empirically real world. We have characterised schizophrenics by their lack of contact with reality and have contrasted them with paralytics, who in spite of severe destruction manage to maintain contact with their reality, in spite of disorientation too and reduction in awareness (Minkowski). The complete heterogeneity of the organic and schizophrenic 'dementias' is confirmed, the one in all its ruin, still a natural ruin, the other a crazy distortion. With the schizophrenias there is also in many cases a loss of spontaneity, a twilight living, which can be interrupted only by strong stimulation, to which very surprisingly they may respond. Instead of giving a general description we will quote a mild case of this deterioration, to bring out the peculiarities of this kind of loss of judgment. The remarks of the patient should not be read as intentional witticisms(!):

The patient, Nieber, is well orientated, in his senses, lively, chatty and jovial, always on the alert for smart and apt remarks; he is not acutely disturbed. On admission he implores immediate discharge; if one discharged him today he could call at the clinic occasionally. However, he goes off to the ward without difficulty and never brings the question up again; instead of this he speaks of his intention in the near future of making a dissertation at Tübingen for a doctorate in engineering . . . 'I shall give in it the blueprint of my life; I shall get the doctorate for sure unless I intentionally make some mistakes'. He wants to be employed by the clinic as a photographer; he asks for several private rooms for himself; he wants to be transferred to the first-class accommodation; but he never follows his requests up. He has a number of constantly changing activities which are soon relinquished and forgotten. He writes poetry, applications, letters to authorities, to doctors, to other hospitals, to titled people; he writes a 'dissertation'—'The toilet-paper'—extempore essay by H. J. Nieber. Here are some extracts from this voluminous manuscript: 'Essays have already been printed and printed about the immortality of the may-fly, about the risks of the shot-gun, about the disputability of Darwin's theory of descent. Why should an essay on toilet-paper not find a recognition and reward? I think the price of 30 M. is not too high for a volume full of writing. The social and political side of this subject will get particular attention . . . I therefore enclose a table which will offer a welcome aid to local politicians and the National Economy when it comes to discussion . . .' The patient draws with infinite care a cheque showing all the usual ornamentation and sends it to his previous hospital in payment for the food he had had . . . 'It seems to me the sum of 1000 M. is adequate for board

and lodging including doctors' fees.' In conversation he always surprised one by his peculiar phrases: 'Psychiatry is nothing else but the investigation of the rights and benefits of the law in relation to persons . . .' 'I hold the view that mental illnesses do not exist' . . .' Psychiatry has to offer an existence to people who are born for a working life . . .' One may feel like interpreting such talk as leg-pulling of those in the environment, but in fact this is not so. The patients' whole life is like this and is carried on in the institutions for decades without any efforts in earnest on their part.

6. Cultural subnormality. We distinguish between congenital mental subnormality and dementia that is acquired as the result of a morbid process, including in this latter category the organic and schizophrenic dementias. This is a division according to aetiology, which coincides with differences in the psychological characteristics. Of quite different origin, however, is the mental 'subnormality' which clinically appears due not to congenital causes or any morbid process arising from illness, but very largely due to the *abnormal cultural environment in which* the patient lives. It is a socially conditioned defect: 'bad upbringing, inadequate schooling, lack of stimulation, narrowing of interest to breadwinning, and maintenance of the vegetative self, malnutrition, irregular living—all these circumstances are liable to bring about gross defects in knowledge and judgment and an extremely egocentric and morally poor attitude' (Bonhoeffer). We may find many different kinds of defect due in this way to the milieu, in tramps, for instance, in prostitutes, in wealthy people who from childhood upwards have never done or experienced anything much, in people who have had to live in sanatoria for various chronic illnesses and in long-stay mental hospital patients of all types.

7. Emotional stupidity and pseudo-dementia. Defects in intelligence are confused sometimes with acute states and with the changes that take place in depression, hypomania and confusional conditions. They can also be easily mistaken for some failure in emotional reaction, emotional stupidity (Jung). This can occur in examinations, for instance, but also during a medical investigation or any other upsetting situation in people who are so disposed. Lastly, we may take for a disturbance of intelligence what is really a pseudo-dementia, a state of prison-psychosis; this can last sometimes for a long period with consciousness unclouded. It is due to hysterical disposition reacting to the impact of a prison-complex, and there is always recovery.

(c) Examination of intelligence.¹

How do we assess the intelligence of anyone? It must be based always on his *actual performance* and on his behaviour in the test-situation when given set tasks to do. Considering the narrow grooves in which most people pass

¹ Jaspers, Z. Neur., ref. teil. 1 (1910), p. 401. Stern, *Die psychologische Methoden der Intelligenzprüfung u. ihre Anwendung bei Schulkindern* (Leipzig, 1916), 2nd edn. Über die Untersuchung von Kindern nach der Methode Binet-Simon. Cf. Berichte von Bobertag, Z. angew. Psychol., vol. 3, pp. 230–59; vol. 5, pp. 105–203; vol. 6, pp. 495–518 (1909–17). G. Kloos is good, see his *Anleitung zur Intelligenzprüfung* (Jena, 1941).

their lives, a single lifetime is not enough to draw out the capacity of the intelligence to the full. The most important source for our assessment remains the *personal life history* and the *actual performance*. But we cannot remain satisfied with that. We like to feel we have made a reliable judgment, even if exploration has to be brief. We explore as much as we can, though the *incidental observations* of clinical practice sometimes give greater insight than the most carefully planned investigation. The observations arise from the *ordinary doctor's interview*. We put certain questions as doctors and long experience has shown their value (asking for differences, between a mistake and a lie, knowing and believing, etc., arithmetical problems not previously learnt, cp. pp. 140–155), questions as to how the patient sees his own situation, how he judges things from his occupational life and his own personal circumstances, etc.). Finally, *complex methods* have been worked out. For instance, the patient should fill in some text meaningfully, putting in words and syllables which have been purposefully left out (Ebbinghaus—completion test), or one asks the patient to describe pictures from memory (Stern—memory test). Patients are asked to repeat stories that have been told them etc. The results are assessed quantitatively, if possible (or numerically).

Up to now such investigations have yielded us the following: assessment of ability in any one field depends on the tests also being in that field. We cannot draw definite conclusions from the completion test, or memory test for instance, as to performance in other fields. We can indeed form some sort of picture of a person's intelligence if we use all the available sources (personal history, conversation, tests), but we cannot assess it in relation to all possible contingencies. It would be utopian to suppose that we can offer any opinion as to what work, at any rate a young child, is best fitted for through the use of an intelligence test, unless the concern is with some relatively simple task or with a plain property of the psychophysical apparatus. Quite often some surprising success or failure in the subsequent course of life will alter the judgment then made. In some extreme cases it may be possible to limit the future possibilities for those of very poor ability; it is also practicable to select experimentally from a large number of people those best fitted for a certain job, if one will allow for a proportion of mistakes. The method is certainly a sure one for detecting colour-blind people; but when it comes to selecting people for professions in the same way, one runs into the danger that experimentally the most intelligent individuals may well prove to be unfit.¹

In all quantitative assessments of intelligence the individual's maximum performance at any one time should be distinguished from how his correct, competent and worthwhile responses are related to those that are incorrect, incompetent and of no value. It can happen that someone may be regarded as not very intelligent from the latter point of view yet perform extremely well from the former, and vice versa.

¹ Cf. my *Idee der Universität* (Berlin, 1946), Achtes Kapitel.

CHAPTER III

SOMATIC ACCOMPANIMENTS AND EFFECTS AS SYMPTOMS OF PSYCHIC ACTIVITY (SOMATOPSYCHOLOGY—SOMATOPSYCHOLOGIE)

There are a large number of physical, objective phenomena which appear without any operation of the individual's will. There seems to be no conscious intent. Nor can we take them for meaningful, objective 'performances' nor for any intelligible psychic expression. They follow certain psychic events or occur simultaneously with them. They are physical findings that have or may have some relation to psychic events but they do not portray them nor reveal them in any sense which we can understand. To start with they are nothing else but non-psychic, objective, somatic facts.

Body—psyche relationship. In every human being we see the unity of body and psyche appearing as a living whole. We have the fact of the individual as a unity in the shape of a body which either is a psyche, or has a psyche or produces the appearance of a psyche. On the other hand, this undoubted body—psyche unity does not itself appear as a recognisable object. All that we see, think and comprehend is something already separated out from this unity, something particular, and we are faced with the problem of what in fact is its relation to the unity as a whole. It follows that if we regard all psychological and somatic analysis with suspicion, any talk of body—psyche unity not only becomes sterile but positively cripples our thought. The unity of body and psyche is only true as idea. As such, it keeps our analysis from assuming an absolute value and helps us to maintain the findings as relative knowledge. At the same time it fosters the question of what is the relationship of everything to everything else in somatic and psychic life. The unity itself remains dim and incomprehensible or beyond reach as an object of knowledge, but we should think of it as the only idea that can guide our knowledge of life, which is only a knowledge of particulars, and has only the limited certainty of the particular.

(a) *Separation of body and psyche.* The separateness of body and psyche may appear a perfectly clear and obvious notion, which needs no further explanation. But it always leaves us with the question *what is body and what is psyche?*

For example, *psyche* means direct inner experience (the material for phenomenology); it means whatever it is that produces meaningful function or appears as human expressiveness; it means the unity of the 'I', the self, the underlying psychic substance, etc.

Body, for example, means the morphological shape of life; visible, purposeful movement; the chemical, physical, biological processes; foci in the brain, etc.

If everything is termed psyche, this does not make the psychic whole any more empirically comprehensible than the body would be, if we term it the vague something that embraces every spatial event. We only get an empirical object, if we chisel

out clearly from the whole a version that is neither entirely of the body nor entirely of the psyche.

If in some way we manage to separate what belongs to the body and what to the psyche, we are still left with the problem of their *relationship*. This only becomes a fruitful question if it takes the form of something we can objectively test. If it is put as a general problem or a problem of principle, it reduces us to absurdities. Both of these questions must be discussed further:

(b) *Enquiry into the relationship of body and psyche.* The relationship of the physical and the psychic is rooted in a number of facts which we can formulate broadly while still using the concepts of body and psyche in a fairly undefined way:

Physical things affect the psyche (e.g. poisons, sickness, brain-injury, etc.).

Psychic things affect the body; either in the realisation of deliberate intentions (motor activity) or in unintended physical effects—heartbeat, blood-pressure, metabolism, etc.

Psychic things appear to be understandable in the physical phenomena (e.g. the psyche expresses itself in the body's posture and movement).

That there is a relationship seems to be a common, empirical fact, witnessed by all. This confirmation then leads us on to certain versions of what at any time may be thought to be body and what to be psyche. How any relationship is possible and what exactly happens within it eludes our observation. For instance, when I move my hand in writing, I know what I intend and my body obeys me. We can partly demonstrate how this happens in terms of the neurological and physiological events, but the ultimate act of all, the translation of psychic intention into a physical event is at present as inaccessible and incomprehensible as magic, though the magic is one of fact not of illusion. The same things have to be said of all psychic and bodily connections.

(c) *The relationship of body and psyche in general.* If we want to grasp the relationship of body and psyche in the form of some general principle, we shall find ourselves caught up in metaphysics in such a way that we shall get landed in absurdities. We have to be dualists, accepting a parallelism of psycho-physical events or some form of interaction; otherwise we have to be monistically materialist (the psyche becoming an incidental epiphenomenon, a property of the body) or else we have to take the path of the spiritualists (the physical being only a manifestation of some psychic substance, which alone is real). Any of these ideas will land us in impossible consequences. The empirical investigator can usually fall back on the category of interaction, in so far as psyche and body are treated separately; the psyche acts on the body and vice versa, without any need to state thereby anything as an absolute or final principle.

There have been metaphysical difficulties ever since Descartes parted body and psyche, as absolutes. He introduced the difference for the first time of inner and outer, between psychic states that are experienced and the physical processes in space. He saw these as two incommensurable realities, each one observable by itself, describable and open to enquiry; *res cogitans* and *res extensa*. Descartes' clarifying separation retains its value in the radical difference we make between the description of psychic experiences (phenomenology) and the observation of somatic events. But error began to creep in when the term 'psyche' was confined solely to the conscious inner experience and the term 'body' to the mechanically explicable, material event in space. It crept in too when these aspects of an extremely superficial division were

treated as if they were true substances. Reality in its abundance is essentially neither a psychic inner experience nor a physical process in space, but it is something occurring in the medium of both, as meaningful performance or as an expression which we understand, as behaviour, as the human world, or as mental creation. Once the dualistic division had grown into an absolute, there was no longer any room for such abundance. Descartes' division has indeed its application, and any analysis that follows his methods will yield us facts, though the sphere of application is limited and disappears altogether when we reach the encompassing nature of life itself.

Descartes wanted to surpass the old, and in its own way magnificent, conception of life as it had been held from *Aristotle* to *Thomas Aquinas*. This involved the concept of a hierarchy contained within the unity of psychophysical being and ranging from the vital levels of the psyche through the levels of emotion to the level of thought. Within the one, immaterial human soul lies the 'substantial form' of the human body. The body is, so to speak, ennobled and the psyche embodied at one and the same time. There is no assertion in principle of any basic difference in the nature of what is physical and what is psychic.

Today the study of the psychology of Thomas Aquinas is still rewarding. It gives us a prototype on a grand scale and his classifications are still worth reflecting upon. We will take one particular point: Aquinas differentiated sensual knowing and sensual striving (which are both directly dependent on the physical) from reasoning and spiritual striving (which are indirectly dependent on the physical). He divided the sensual field into: (1) The external senses, touch, taste, smell, hearing and sight. (2) The inner sense-capacities, among which we find the *general sense*, which brings the individual sensations into consciousness and covers everything that belongs to the senses—movement and rest, unity and multiplicity, size and shape. It is the mid-point where all the senses are gathered up into a unity. Then there is the *power of imagination* which steers our impressions and reproduces them in image and fantasy. There is also *sensual judgment* (instinctive drives, instinctive evaluations, which transcend perception and carry their own judgment with them; they participate, as it were, in reason) and there is *sensual memory* (which stores all those sensual experiences that carry a time-signal). (3) Sensual striving (the 'appetitus concupisibilis, irascibilis') and the passions.

The basic concept of the body–psyche whole can be greatly modified but it has never lost its fundamental feature—that of a *oneness* that is recognisable and absolute, whereas Descartes' newer philosophy took *two* substances as absolute. The older view pictured the whole in a way that preserved the abundance of reality without abandoning the unity of body and psyche and it continued to see the physical in everything psychic and the psychic in everything physical. For this reason, it has, right up to the present day, *often been revived in opposition to the views of Descartes*. A recent example of this is Bleuler's use of the term 'psychoid', which was to denote something common to somatic and psychic life alike: the function of memory, integration, the purposeful character of living structures and forces. The defect here, as with all such schematic ideas, is that a comprehensive viewpoint of this sort may indeed provide us with an ideal construct but this cannot be investigated nor can we use it in order to obtain new knowledge. *The one absolute* of the substantial Being of body–psyche unity *opposes the other*, that of the two absolute modes of Being, body and psyche. Both theoretical standpoints, that of Aquinas and that of Descartes, have to be discarded. Truth demands that we do away with *all* absolutes

in favour of definite, though always partial, knowledge which has to proceed step by step and never finds itself wholly in possession. The completeness of the whole can never be encompassed by the time-bound nature of human knowledge. Knowledge is only true within that part of space accessible to us. If we want to know the transcendental whole, which has both physical and psychic effects and is primarily both, we find it has vanished from us into the clarity of particular facts which are comprehensible but which are never the whole itself.

(d) *The coincidental manifestation of body and psyche as a fact for investigation.* Everyone *experiences* within himself this coincidental existence of body and psyche. This experience, in the form of bodily sensation, provides us with the material for phenomenology and somato-psychology. We see the part played by physical sensation in the perception of our own bodily events and also in our feelings, drives and sufferings. This experience, however, is no means for obtaining a generally valid knowledge of body–psyche unity, but, in so far as it is an experience, it becomes material for our knowledge of body–psyche relationships.

Again, psyche and body are one for us in *expression*. When we see a happy, human face, we do not divide body and psyche, nor do we have two different things in some relation to each other, but we are presented with a whole, which we only separate secondarily into physical phenomena and something inward and psychic. The fact of seeing someone's expression is a primary phenomenon of the way we grasp our world. It is a fact of infinite richness, enigmatic in principle, but always there, present and real. If we want to talk of the coincidence of body and psyche as a fact for investigation, it is only in this fashion that we shall encounter it. After we have separated body and psyche, we never find again what was once present as a real phenomenon, both medium and material of some specific (understandable) actuality, present to us before we start to reflect.

However we differentiate the physical and psychic life, we may indeed find empirical relationships which follow the separation, but we never think of an actual coincidence of body and psyche or any identity between the two, let alone see it.

If we wish to inscribe psychic structures into the somatic structures and maintain their identity, we become involved in purely theoretical notions that lack objective reference and on closer inspection seem absurd: for instance, we may think that memory images are planted in the ganglion cells and psychic associations in the fibres; or that psychic configurations are of the nature of physical configurations in the brain and are rooted there; or that the basis of freedom lies in what are statistically erratic, atomic events. The assumption that what is physical and what is psychic coincide somewhere in the brain is pure fantasy, and must always remain an untestable hypothesis, which stems from Descartes' idea of the pineal body as the seat of the soul (which is there like a rider on his horse). It is a vague, general truth that the psyche is tied to the body, but how and where this connection takes place fragments into a multitude of possibilities awaiting exploration. The negative position is certainly valid, that there is no one exclusive place for psychic reality; there is only the most diverse set of relationships and connections between what is psychic and what are indispensable somatic determinants. There are areas in the nervous system the destruction of which will cause immediate or early death. There are others the alteration of which will bring about unconsciousness or sleep and yet others the disturbance of which alters or abolishes individual functions (e.g. speech). There are also relationships of another kind which pertain to the

functioning of the neurohormonal endocrine system; for instance, hormones have an effect on the psychic moods and drives or psychic events may evoke the inner secretion of certain hormones with effect on body and psyche. There are other relationships too, of a different sort, between psychic type and body-build. Still, *no seat for the psyche is to be found*, neither in a crude localised sense, nor hormonally, nor atomically nor in ultramicroscopic events. Leibnitz's insight is still valid today, as regards our mechanical knowledge of the body: If we could enter the machine of the brain, as we might a factory, and could observe objectively the very smallest, and ultimate events, we would not find anything else but physical parts in active contact with each other, never anything like a perception or anything that might serve to explain one. To sum up, coincidence (and that restricted to what is an understandable manifestation) exists only at the point where in primary fashion we see and experience the psyche in the body and the body in the psyche. If we have separated body and psyche and are investigating their relationship, no such coincidence is to be found.

(e) *Areas for research into the body–psyche relationship.* The result of the above presentation is that only those fields of investigation present a body–psyche problem where either the unity of the two is affirmed as a primary object or where the method of separating them presupposes a definite form in which they are to be conceived.

Beyond this there are many areas for research where neither separation nor unity are a problem nor do they enter the subject-matter. They are areas where human actualities are investigated that exist in their own right without having to be related to this problem at all. Thus in psychopathology we deal with a host of subjects in which this question of body–psyche unity or division is altogether irrelevant for our enquiry, as for instance, behaviour, performance, creativity, meaningful connections, personal histories, and the majority of social and historical questions.

Relationships between the body and the psyche are investigated:

(1) *In the study of expression* (Ausdrucksspsychologie)—where physical characteristics and movements are seen by us as meaningful (pp. 253 ff.).

(2) *As a causal relationship*—where we look for some answer to the question—which modes of bodily existence affect the psyche and how? (pp. 463 ff.).

(3) *In the enquiry into body-build and constitution.* How far are these a basis for psychic characteristics? (pp. 633 ff.).

(4) *In the somatic consequences of psychic events.* We shall be dealing with this in the present chapter (Somato-psychology). These are the most superficial of body–psyche relationships, and compared with such matters as psychic expression, they carry minimal meaning, but we shall see how even here under abnormal conditions a certain meaning may be inferred from particular understandable connections.

In somato-psychology we classify our findings into three groups:

(1) *General basic psychosomatic facts.* Body sensations, continuous somatic accompaniments, sleep, hypnosis. As such they exist or can be produced in every human being. We will describe them and some of the disturbances that arise in this field.

(2) *Physical illnesses dependent on the psyche.* Some illnesses arise through the psyche, others are purely somatic disorders not wholly independent in their course from psychic events.

(3) Noteworthy *somatic findings in the psychoses*. These cannot be explained in terms of any known organic illnesses, though they look very like them. We can only record them for the time being. Possibly we are dealing with symptoms of organic illness as yet unknown responsible for the psychosis in question; possibly the relationships here are of quite a different order.

§ I. THE BASIC PSYCHO-SOMATIC FACTS

(a) *Body-sensations*

Bodily events are seen objectively by the outside observer in the form of visible signs. The somatic facts are established by methods of clinical and physiological examination. Everyone, however, with the help of his own body-sensations, can become his own observer. His body becomes an object to him. With the help of body-sensations he can observe his changing bodily state. There is something more here than the mere sensation of an external something; there is the feeling-sensation of one's own existence. The fact that body-sensations make perceptible something which I can then observe as something that confronts me gives rise to certain questions: first, whether there is an authentic coincidence between body-sensations and actual body-processes and, if so, how far does it extend; secondly, how far does the perception of one's own body reach (since the majority of organic processes are imperceptible and take place outside consciousness); thirdly, have the somatic complaints, descriptions, perceptions of patients any validity for our knowledge of the body?

An authentic coincidence rarely occurs. Apart from sensations due to primary organic processes, there are sensations brought about by organic changes which constantly accompany psychic life or arise psychogenically in a specific way; for instance, sensations of warmth and cold with vasomotor effects on the skin, leaden feelings during muscular relaxation, stomach-ache during psychogenically accelerated peristalsis. Lastly there are a host of body-sensations with no demonstrable physical cause brought about by attention, expectation, worry, etc.

Normally the range of body-sensations is not very wide, but the extent to which they are perceived can be enormously enlarged. Intensive direction of concern inwards—as described by J. H. Schultz during ‘autogenic’ training—leads to ‘the discovery of organic experiences’ which are not dependent on suggestion nor are they an illusory elaboration of normal sensation, but testable extensions of real bodily perception.

Patients tell us of innumerable *subjective sensations*. The somatopsyche is basically being referred to here. The ‘organ-sensations’, ‘bodily sensations’, ‘pains’, ‘unpleasant sensations’, ‘vital feelings’ of which they speak can all be divided into three groups:

1. *Hallucinations and pseudo-hallucinations*. These have been discussed on pp. 64 ff.

2. *Bodily processes* in the organs or in the nervous system; these are already *subjectively felt* and noted by the patients, although they *cannot yet be objectively confirmed* by the examiner. In spite of possible deception and the uncritical attitude of the average person, there is some point in the examiner investigating these subjective symptoms closely, taking into account the patient's ability to be objective. He may get certain hints of organic events or uncover the psychic source of the sensations which from the organic point of view are illusory.

3. Most people do not view their body-sensations with detachment. Rather they are apt to falsify their account through fear and other psychic reactions. These falsifications are in themselves a new reality. Psychic changes are connected with sensations which apparently have no physical basis, unless it be in the postulated somatic substratum of psychic life. These sensations are wholly dependent on psychic events. Hysterical and other similar sensations provide an example.¹ *Pains* are of special interest. Severe pains need not be felt. With wounded men arm-amputations can be carried out on rare occasions in the absence of narcotics, where there is a state of battle heroism, and the patient tells the story of his courage. Martyrs have painlessly endured torture and death. Severe pains may arise without any organic base; we can understand them as symbols, as unconscious means, as anxiety. Attentiveness and worry can increase pain, objective observation can diminish it, distraction can make it vanish.²

In general we may say that reports (especially of neurotic patients) on bodily sensations are of the nature of clinical findings, but hard to evaluate as a source for any knowledge of psycho-physical events. If we were to trust them as genuine sense-perceptions, as if they were real observations, it would mean treating the fantasies of neurotic people in the same way as observations of fact.³

(b) Constant somatic accompaniments

In all normal psychic processes, particularly where there are affects, we

¹ Samberger, 'Über das Juckgefühl', *Z. Neur.*, vol. 24, p. 313. Oppenheim, 'Über Dauerschwindel', *Neur. Zbl.* (1911), p. 290.

² F. Mohr, 'Schmerz u. Schmerzbehandlung', *Z. Psychother.*, vol. 10 (1918), p. 220.

³ V. v. Weizsäcker, 'Körpergeschehen u. Neurose', *Internat. Z. Psychoanalyse*, vol. 19 (1933), p. 16. He tries to 'link methodically anatomical-physiological knowledge with psychoanalytical findings'. He tries to explore the psycho-physical connections through the fantasies of a psychopath with a disturbance in micturition. He tests the 'supposition that the patient through his experiences has told us more about the process than we could ever perceive'. The patient in his analysis 'gives us only a picture, but in important points a very apt picture of organic events'. We should accept 'that the patient's ideas, pictures and formulations have illustrative value for something which he does not directly experience, namely the activities of his nervous system'. V. v. Weizsäcker believes that his method 'establishes the psychoanalytic method and the major part of its theory' and that 'we can now dare to approach psychoanalytic findings from another point of view'. I cannot accept this particular supposition of his and on reading his report and interpretation of this case of disturbance of micturition, I need must remain unconvinced.

can observe physical accompaniments or can confirm them with the help of experimental apparatus, even down to the slightest of psychic stirrings:

In shame or fright we find blushing and blanching. Disgust leads to vomiting, emotional upset brings tears; fear makes the heart beat, knees tremble, the face pale; cold sweat break out, the throat go dry, hair stand on end, pupils dilate, eyeballs protrude. In states of anxious tension, there is diarrhoea or the increased need to micturate.¹ Many other affects also increase the amount of urine. Psychic upsets inhibit secretion of the respiratory mucosae, salivary glands and lachrymal glands (in melancholia also).

Scientific apparatus² enables us to make exact observations of changes in respiration, heartbeat, blood pressure, blood-volume (by displacing the blood through various localised vaso-constrictions or dilatations), of fluctuations in a galvanic current taken from the skin, of pupillary changes. The dependence of gastric secretion on psychic influences is shown by its inhibition where there is listlessness, or during sleep, and the increase of secretion when food or something pleasant is imagined visually or heard.³ When we are investigating patients these physical accompaniments, if we watch the changes of intensity and course, will help us very greatly as a clue to the underlying psychic events. Thus there is an interest in learning whether during stupor consciousness is not entirely empty or whether something may not still be going on in the patient's mind.

Gregor⁴ gives a thorough evaluation of psychogalvanic reflex phenomena as a means of assessing psychic events in mental patients. If electrodes are placed at two points on the skin, on the hands for example, and a circuit established, the body yields a weak, galvanic current; the fluctuations of this current can be recorded as a time-sequence and plotted as a curve. The fluctuations are partly physically, partly physiologically and partly psychically determined. Through refinements of technique and critical observation it is possible to separate the latter fairly convincingly from the rest. The curve is studied either as a *resting-curve* or in the way it *fluctuates* when external stimuli are applied. Characteristic resting-curves emerge with either

¹ Bergmann and Katsch, *Dtsch. med. Wschr.* (1913). They watched sudden blanching in the abdominal wall and immobility of the intestines in animals, using a celluloid window. This occurred in states of unpleasant stimulation. The mere sight of food being offered started peristalsis.

² Wundt's *Physiological Psychology* gives the older work. Lehmann, *Die körperlichen Ausserungen psychischer Zustände* (Leipzig, 1899). More recently E. Weber, *Der Einfluss psychischer Vorgänge auf den Körper* (Berlin, 1910). Veraguth, 'Das psychogalvanische Reflexphänomenon', *Msch. Psychiatr.*, vol. 21, p. 397; vol. 23, p. 204. Leschke summarises in 'Die körperlichen Begleiterscheinungen seelischer Vorgänge', *Arch. Psychol.* (D), vol. 21 (1911), p. 435; vol. 31 (1914), pp. 27 ff.

³ Following Pavlov's discovery of this dependence, there have been many investigations, e.g. Schrottenbach, *Z. Neur.*, vol. 69 (Bibliography), p. 254.

⁴ Gregor and Gorn, 'Zur psychopathologischen u. klinischen Bedeutung des psychogalvanischen Phänomens', *Z. Neur.*, vol. 16 (1913), p. 1. Cp. also Gregor and Zaloziecki, *Klin. psych. u. nerv. Krankh.*, vol. 3, p. 22. Gregor, *Arch. Psychol.* (D), vol. 27 (1913), p. 241. 'Die Beeinflussung des psychogalvanischen Phänomens durch Suggestion in der Hypnose stellte' F. Georgi, *Arch. Psychiatr.* (D), vol. 62 (1921), p. 271.

diminished or increased psychogalvanic reactions to stimuli. There is also a differential response according to the type of stimuli (bell, pain caused by pinching the skin, doing sums, calling over emotive words—*affective tone due to 'complexes'*).

Gregor confirmed the following findings:

1. The different types of resting-curve may be interpreted as expressions of inner psychic events, though so far this is not very clear. Gregor terms the steeply rising curve the '*affect-curve*'. 2. Diminution or abolition of psychogalvanic reaction is found in chronic affective dullness (many catatonic end-states, paralyses, epilepsies and the arterio-sclerotic dementias), in temporary states of affect-loss, i.e. diminished affective responses during treatable melancholia, also in catatonic stupor and finally during certain phenomena of inhibition and exhaustion of a psychasthenic kind. 3. An increase in psychogalvanic reaction is found during arithmetical tests, which denotes greater effort in states of inhibition. 4. There are varied reactions to different stimuli; inhibited psychasthenic persons react most strongly to arithmetical tasks, demented (e.g. many paralytics, epileptics) will react most strongly to physical pain.—Notable among the special findings is the fact that reactions of normal strength are shown in congenital mental subnormality, even of low grade, which is not the case in acquired forms of emotional dulling. There is also the fact that with hebephrenia and paralytic excitement of a hypomanic character, all reactions are in abeyance, whereas in true hypomania they are always clearly and vigorously present.

Pupillary movements also accompany affective psychic events; and indeed in the absence of any outer stimuli, the pupil nearly always shows what we call *pupillary unrest* (*Pupillenunruhe*). This accompanies psychic activity, fluctuations in consciousness, attentiveness and mental effort. It corresponds to the psychogalvanic resting-curve. The pupils always dilate in response to psychic impressions, during any mental effort, during affect, and particularly in response to painful stimuli. When there is extreme fear, the pupils are maximally dilated and will not react to light. During sleep the pupils are small. With severe dementias and particularly with *dementia praecox* (Bumke's phenomenon),¹ pupillary unrest and reactive dilatation of pupils both disappear.

Other accompaniments of psychic events show themselves in the *blood-pressure*,² the *pulse-rate* and respiration,³ in *plethysmographic* investigations⁴ (where fluctuations in blood-volume of individual body-parts, the arms for instance, are recorded). During fear the blood-pressure rises enormously, and we also find a rise in mania and melancholia, especially in the latter. Pulse rate increases during mental effort, and feelings of displeasure; it shows temporarily during states of attentiveness to stimuli, in fright and tension as well as in states of pleasure. We note an *increase in excitability* in vaso-labile 'neuropaths', Basedow's disease, exhaustion, and convalescence. Typical of catatonia are: the tense vascular system (appearing plethysmographically as volume-rigidity) the rigid iris-muscles (fixed pupils), increased tonus

¹ Bumke, *Die Pupillenstörungen bei Geistes- und Nervenkrankheiten* (Jena, 1911), 2nd edn.

² Knauer, *Z. Neur.*, vol. 10, p. 319. Enebushe, 'Von der vasomotorischen Unruhe der Geisteskranken', *Z. Neur.*, vol. 34, p. 449.

³ Wiersma, *Z. Neur.*, vol. 19, p. 1.

⁴ de Jong, *Z. Neur.*, vol. 69, p. 61 (detailed literature on plethysmographic curves). H. Bickel, *Die wechselseitigen Beziehungen zw. psychischem Geschehen u. Blutkreislauf mit besonderer Berücksichtigung der Psychosen* (Leipzig, 1916) (record of blood-pressure and volume).

of the voluntary muscles. (All these symptoms should be regarded as due to autonomic innervation and not as psychic events—de Jong.)

Weinberg¹ took recordings with the plethysmograph, the electrocardiograph, and noted electrogalvanic phenomena, respiration and pupil reaction. All reacted simultaneously and persistently in response to every psychic event—e.g. the mere ringing of a bell—so that ‘the raising of the conscious level’ through the stimulus brings about phenomena which depend on increased ‘sympathetic stimulation’.

Berger² discovered a minute electric current emanating from the brain. The recording of this—electroencephalogram—showed various waves, individually distinct and characteristic for the particular person. These waves are an index of physiological events that are also closely related to psychic events. There is a big difference in the waves during the waking state and in sleep. Consciousness, attentiveness, indeed any activity is reflected in an alteration in the wave forms.

Physical accompaniments of psychic events appear in great numbers and we have only enumerated a few. They do not tell us much, except that they illustrate the universal link of psyche and soma. The concept that all these phenomena are consequences of psychic events is too one-sided. The relationship, as soon as it occurs, is a mutual one, acting back on the psyche itself. We can only comprehend the details of this happening by a better understanding of physiological relationships. These are always circular: the psychic event causes a series of somatic phenomena which in their turn modify the psychic event. We can scarcely see this in the swiftly moving accompaniments that we have discussed. Investigations of inner secretion gave clearer results in the case of events that lasted a longer time, from half an hour to a lengthy time-interval. Psychic excitation or inhibition, for instance, travels to the smooth muscles of the vessels relatively quickly, the effects on the endocrine glands are much slower. The circle is obvious—psyche, autonomic nervous system, endocrine glands, hormone production, effects of the hormones on somatic events and of both on the nervous system and psyche. Doubtless there are any number of such circles. During experimental recordings we can only objectively define one link at a time. The understanding of the whole enlarges with a better understanding of these physiological circles; how they summate and interact. To begin with we only know isolated samples. But often they may give us a clue as regards the complex psycho-physiological interaction; there can then follow almost exclusively animal experiments which help us to more precise physiological theories. We find that *psychic life*, as much in its smallest stirrings as in its moments of violent emotion, is *in its very last ramification intimately linked with somatic events*.

Somatic accompaniments change in intensity and in the mode of their

¹ Weinberg, *Z. Neur.*, vol. 85, p. 543; vol. 86 (1923), p. 375; vol. 93 (1924), p. 421.

² H. Berger, *Arch. Psychiatr. (D)*, vol. 87 (1929), p. 527. *Allg. Z. Psychiatr.*, vol. 108 (1938), p. 554. R. Jung, ‘Das Elektencephalogramm u. seine klinische Anwendung’, *Nervenarzt*, vol. 12, p. 569; vol. 14 (1941), p. 57, 104.

appearance within the one individual, and as between individuals. It is customary to say: vegetative reactivity is not a constant. Blushing, lachrymal and salivary secretion, dermographic phenomena, heart-reflexes, etc. vary enormously in degree. Also toxins like adrenalin, pilocarpin, atropine vary greatly in the strength and fashion of their effects. We may speak of a *constitutional disposition* of the autonomic nervous system and find that its reactivity has very little to do with the psychic development of a person, or conversely we may believe we have found a correlation between basic types of body-build and temperament.

Detailed investigation gives us a multiplicity of findings; e.g. with some people psychic excitement is accompanied by congestion of the nasal conchi. There is a mutual interaction between the nasal conchi and the genitalia. One may be lucky and succeed in intervening therapeutically—by physical or psychological means—in this circuit of autonomic-psychic effects when it is disturbed, but the methods are somewhat unpredictable.

(c) Sleep

*Physiological preface.*¹ Sleep is not a universal phenomenon (it is something quite different from the change that takes place in all biological processes as day alternates with night). But waking and sleeping are not specifically human attributes, as a waking consciousness is found in all warm-blooded vertebrates. Consciousness depends on the functioning of a vital, animal state of a very primitive kind. Even in the decerebrate dog, the sleep-waking rhythm persists. It is very probable that the function linked with consciousness and sleep is localised in the brain stem (perhaps in the grey matter of the third ventricle).

Sleep is necessary for life. It is a respite for the brain. Prolonged suppression of sleep (which is scarcely possible) causes death. We spend one-third of our life sleeping. Sleep is not paralysis but rest. It is also essentially different from narcosis; the latter does not refresh. Narcotic drugs have a refreshing effect not because they cause loss of consciousness but because of the natural sleep which they induce. On the other hand hypnotic sleep is a genuine sleep, differing from natural sleep only in the rapport sustained with the hypnotist, but it is not a difference in principle as rapport may also be made with someone dreaming in normal sleep, if one talks with them. Sleep is a function of the nerve centres which are the source for all somatic changes that occur during sleep: the slowing of respiration, of circulation, reduction in metabolism and body temperature, diminution of certain glandular secretions, reduced reaction to stimuli, immobility. During sleep, however, in contrast to narcosis, unconsciousness, etc., the psyche remains in touch with meaningful stimuli. The soldier who sleeps through the rattle of gunfire can be wakened by a distant telephone or a mother by the least noise from her baby; most extraordinary of all, but undoubtedly a fact, is punctual awakening at a certain predetermined time (our inner clock).

A distinction is made between *duration* and *depth* of sleep. People who need very little sleep, usually sleep deeply. Deep sleep refreshes more quickly than a light

¹ U. Ebbcke, *Handbuch der Physiologie* (Bethe and Bergmann), vol. 17 (1926). Pötzl, *Der Schlaf* (München, 1929); H. Winterstein, *Schlaf u. Traum* (Berlin, 1932).

sleep. The average duration of sleep in the first year of life is 18 hours; from the 7th to the 14th year it is still 10 hours; then up to the 50th year 8 hours; over 60 years it falls to 3–4 hours. The *depth of sleep* has been measured by a *curve*, which is arrived at by measuring the intensity of the stimulus needed to waken the individual. Normally the greatest depth occurs one to two hours after falling asleep; it then rises slowly and a light sleep is maintained until morning. The curve that shows the greatest depth towards morning is an abnormal one. A connection has been found between the sleep curve of the morning-worker (normal) and the night-worker.

Sleep is brought about by *physiological* and *psychological causes*:

Objective fatigue and subjective tiredness are preparatory. Severe fatigue in any one organ manifests itself in all the others. Fatigue toxins spread throughout the body; the longer the waking state, the greater and more compelling the tiredness becomes, until it is impossible to keep awake any longer.

If, as is usual, tiredness is not so great, the main condition for sleep is a situation that reduces stimuli to the minimum: darkness, quiet, a peaceful mind, a relaxed position, absence of muscle tension. The complete exclusion of stimuli induces sleep. A patient of Strümpell who had suffered extensive loss of sensation in various organs, would fall asleep at once as soon as one closed his remaining right eye, and stopped up the one hearing ear, his left one. Under normal conditions a complete exclusion of stimuli is impossible. The more excitability is reduced by fatigue toxins, the easier it is to sleep but first of all there has to be the additional auto-suggestion made by consciousness: 'I want to fall asleep; I shall fall asleep'. The preparatory physiological and suggestive psychic factors act together.

Among the physiological determinants of sleep, the following are probable from experience:

The importance of an inhibition of reflexes: Pavlov observed that dogs in a state of great attentiveness were overcome by insurmountable fatigue. He thought that inhibition is a localised sleep; sleep an extended inhibition. Concentration of one's attention on one object only is possibly the cause of hypnotic sleep, and can be related to this finding. Sleep has a relationship to the *brain-stem*. Animal experiments (e.g. cats fall asleep during electrical stimulation of certain brain-stem areas), as well as experience with encephalitis lethargica, point in this direction. It looks as if certain blocking points were localised in the brain-stem which inhibit excitation without blocking it out entirely. These are activated when we want to fall asleep and have brought about the appropriate situation, or else they enforce sleep upon us, when we are very tired.

*Sleep-disturbances*¹ are very various; they may affect falling asleep, waking, the mode of sleep, and may appear as insomnia.

Falling asleep is usually a rapid matter, taking only a few seconds. But with people who suffer from nervous symptoms it is very often a long-drawn-out affair. We can then observe several phases and a number of specific phenomena.² A state of somnolence develops with a steady increase in tiredness,

¹ See Gaupp, Goldscheider and Faust, Wiesbaden (*Kongr. inn. Med.*, 1913) for the nature and treatment of insomnia.

² Trömmel, 'Die Vorgänge beim Einschlafen', *J. Psychiatr.*, vol. 17, p. 343.

then suddenly, almost traumatically, there is a transition into a state of dissociation. These sudden eclipses into sleep may recur repeatedly, with a slight reawakening into somnolence, and along with this a consciousness that wavers between sleep and waking. During that time pseudo-hallucinations are common and sometimes actual sense-phenomena (hypnagogic hallucinations). Visions appear and disappear in a flash, broken phrases and words are heard or whole scenes experienced which can no longer be distinguished from dreaming proper and merge into it.

Auto-suggestion is one of the factors in falling asleep and this may fail. The intense struggle to sleep is coupled with doubt as to whether sleep will come, and this prevents it: 'to will yourself to sleep is to stay awake'. Willing must turn into suggestion, it must agree to wait, it must become passive in its activity. It must not try to enforce sleep but must learn to abandon itself to it. Normal *waking* is also rapid. The person is at once clear and collected. Disturbances in waking show themselves by a prolonging of this process, so that a state of sleepiness (drunk with sleep) intervenes between sleeping and waking.¹ This state can be so abnormal that the person can perform actions automatically without knowing anything about it.

The *quality of the sleep* is sometimes abnormally deep, so that patients sometimes feel as if they had been dead. It may however be abnormally light and the patients never feel refreshed, but have vivid, restless and anxious dreams, and feel as if only half of their being had been asleep, the other half had stayed awake and watched.

Duration of sleep may be very lengthy, for instance, in some depressive states. The patients are always wanting to sleep and sometimes sleep twelve hours uninterruptedly. On the other hand we find sleep abnormally curtailed. The patients go to sleep but are awake again soon after and then lie awake all night long. Or they only manage to get off to sleep towards morning.

There are many kinds of *insomnia*, and also many causes for it. We do not know whether there is a type of insomnia due to some localised lesion in the brain-stem. The place from which excessive sleep originates may also bring about insomnia when the pathological stimulus is of a different order.

Sleep sometimes shows unusual motor phenomena ranging from shaking, chewing, grinding the teeth, to talking in one's sleep, and alterations in awareness similar to hypnosis, with somnambulism and surprising behaviour with subsequent amnesia.

(d) Somatic effects in hypnosis

Experience with hypnosis teaches us how widely the psyche affects the body. The observation of the physical effects of hypnotic suggestion caused so much surprise that at first it was all felt to be deception. However, the finding of far-reaching physical effects due to suggestion have been established beyond doubt. Reddening and blistering with subsequent scarring of the skin have

¹ Pelz, 'Über eine eigenartige Störung des Erwachens', *Z. Neur.*, vol. 2, p. 688.

been brought about by suggesting that a hot coin is laid on the skin. Similarly, fever has been produced and postponement of menstruation. There have been specific alterations in gastric secretion through certain types of food being suggested, changes in metabolism due to the suggestion of emotional situations, pancreatic secretion after imaginary eating under hypnosis, the cure of warts.¹ Some of these are exceptional phenomena which only succeed in rare cases and remain somewhat controversial, such as the blister formation and the subsequent scarring. Others however are effects that are easily and frequently obtained.

Identical with these hypnotic effects are the physical effects that have been described by J. H. Schultz. He induced certain conditions through auto-suggestion and called the whole practice 'autogenic training'. It is surprising to hear that one is able in certain individual cases to increase or decrease the pulse rate enormously from 76 to 44 and up to 144.² The extreme possibilities of this procedure have not been exploited in western countries but we find it in India. It may be that the famous 'stigmatisations' (e.g. St. Francis of Assisi), analogous to the blisters raised under hypnotic suggestion, may be understood as produced by auto-suggestion of this kind.

Hypnosis achieves its effect through realistic, concrete images which exert their power by dominating feeling and mood. The patient carries out the normal reaction to the suggested situation, e.g. metabolism is increased because it is suggested that it is cold in the snow. The autonomic nervous system takes its cue from the experience—which is an imagined one—in spite of the quite different actual situation with its real stimuli. It is not possible to raise temperature, increase gastric juices or metabolism by direct suggestion; we can only do it through some suggested situation, which if real would have these effects.

Hypnotic effects can partly be comprehended as conditioned reflexes in the Pavlovian sense (Hansen). The image of food, when realistically present, provokes the gastric secretion. When the food is repeatedly shown to the dog but never given to him to eat, the conditioned reflex of gastric secretion fails to appear. In the same way, somatic effects of hypnotic suggestion will not appear if they are repeatedly tried out during the day but with no subsequent realisation. If genuine reinforcement of the conditioned response is permanently absent, the reflex disappears. The unconditioned reflex remains the reason why events may be influenced by the psyche. These physiological interpretations, however, by no means exhaust the totality of psycho-somatic relations.

We cannot assess how far psychic influences can affect the body. Up to

¹ Kohnstamm and Pinner, *Verh. dtsch. dermat. Ges.*, vol. 10 (1908). Heller and Schultz, *Münch. med. Wschr.*, vol. II (1909), p. 2612. Schindler, *Nervensystem u. Spontanblutungen* (Berlin, 1927) (stigmatization). Pollak, 'Zur Klinik der Stigmatization', *Z. Neur.*, vol. 162 (1938), p. 606. Fieber, Mohr, *Münch. med. Wschr.*, vol. 2 (1914), p. 2030. Kohnstamm, *Z. Neur.*, vol. 23, p. 379. Eichberg, *Dtsch. Z. Nervenheilk.*, vols. 68-9 (1921), p. 352. Re menstruation: Kohnstamm, *Ther. Gegenw.* (1907). Re warts: Bloch, *Klin. Wschr.*, vol. 2 (1927), p. 2271. Metabolism: Grafe, *Münch. med. Wschr.* (1921). Gastric secretion: Heyer, *Arch. Verdagskrkh.*, vol. 27, 29 (1920/1). Pancreas: Hansen, *Dtsch. Arch. klin. Med.*, vol. 157 (1927).

² J. Schultz, *Das autogene Training* (Leipzig, 1932), p. 75.

now research finds this field an expanding one. There is, in a complex way which remains difficult to evaluate, a psychic factor present in many physiological processes. Surprising effects can be achieved by the psyche and severe disturbances of physical processes may be traced to this source.

v. Weizäcker (*Aertzliche Fragen*: S 31. Leipzig, 1934) writes: 'We would do better to press research to try and make something of the puzzles that lie before us, instead of gazing at the miracles of stigmatisation, hysteria and hypnosis as exceptions of the rule. As exceptions they release us from suspecting anything analogous in pathological symptoms.' v. Weizäcker wished to make all illness understandable. But is it true that all somatic illnesses—even the severe, organic ones—are penetrated by the psyche? Could this be shown convincingly, not only would new fields of human knowledge open up, but a radically new sort of knowledge of physical events would be constituted. I doubt however, that this is possible yet suspect that there are rather close boundaries here, in spite of everything. The question, however, retains some justification.

§ 2. SOMATIC DISTURBANCES DEPENDENT ON THE PSYCHE

The whole body may be conceived as an organ of the psyche. When the body is seriously sick, psychic excitement may do damage through associated organic stress. But this is a rare and borderline case. Psychic effects usually work through mental content and determining tendencies. These are pathogenic only when the psyche is sick. It can then happen that if the psyche is disordered this will show itself in physical effects. The physical disorders connected with the psyche are extremely varied and not well understood. We will first clarify the facts and then discuss the interpretation of them.

(a) Main categories of psychically determined somatic disturbances

1. *Faints and fits.* Both can occur as an immediate result of psychic excitement. But both are also known to be conditioned by purely organic causes. In particular we differentiate organic, epileptic seizures from psychogenic hysterical seizures:

Gruhle¹ describes *psychogenic* seizures. For instance, 'A well-built man is walking quietly up and down the long corridor; he suddenly groans, grabs into the air and sinks down (he does not fall headlong). At first he lies on the floor, breathing heavily; his hand has torn open his jacket and shirt. Suddenly the convulsion starts, now with one arm, now with both, he threshes fairly vigorously about him. His body arches up and down, the legs bend and buckle or stretch out, now one, now the other or both together. We might characterise the movements as kicking. The face is contorted, the eyes firmly closed, but sometimes rolling wildly. If given a pinprick, kicking increases for the first few times, then ceases; pupillary reaction is difficult to test, as the patient throws his head about or shuts his eyes tight. If one manages to control this, pupils are usually found to be widely dilated (as in anxiety or pain), and they react poorly. Sometimes the patient wets himself, usually if he has been a bed-

¹ Gruhle, *Psychiatrie für Ärzte*. (Berlin, 1922), p. 93, 2nd edn.

wetter. The statement is often made that there is something theatrical about these attacks, but this is frequently not the case. After five to ten minutes, the movements diminish and gradually cease. The exhausted man, covered in sweat, passes into a long sleep and wakes up with only a patchy memory for events.'

Gruhle describes the contrasting picture of the *epileptic* seizure as follows: 'The epileptic seizure starts suddenly; the patient may indeed notice the signal (the "aura") for such a seizure (sensation of a gust of air, seeing red, seeing things small or large, seeing sparks, frightening enlargement of objects, rushing sounds, ringing, smells) but he is unable to speak. He may stagger forward a few steps as if pushed hard, then the seizure overtakes him. As he falls his face contorts, the mouth is screwed, foam forms on the lips, often blood-stained saliva comes from the mouth (from biting the tongue), the eyes are fixed, staring, turned one side or the other, a few violent twitches run lightning-fashion over the face, the head is turned to the side or jerks violently a few times in this direction, there is a grinding of the teeth, various muscle groups, sometimes all the muscles, are maximally contracted for a few seconds, a peculiar gurgle or groan comes from the mouth, breathing is very difficult. Then the spasm loosens. Repeated clonic jerks run through the musculature and the convulsion proper follows. A few 'wiping away' movements are interspersed. Perspiration covers the body, the face is blue or white as chalk; urine is voided; the pupils are fixed, the corneal reflex has gone; the patient does not react to stimuli but sometimes there is a certain unrest of the body after very strong and painful stimuli. The whole thing rarely lasts longer than five minutes. Often the seizure merges directly into deep sleep. On waking the patient is exhausted and weary. He complains of headache and is depressed; he does not remember the attack at all (there is total amnesia).'

The attack is the main symptom of the epilepsies. Seizures, however, occur not only in epilepsy but also in schizophrenia and almost all organic brain disorders. Seizures are essentially organic.¹ They are, therefore, quite different in kind from psychogenic attacks, which are very varied in appearance and have been artificially cultivated in all clinics up and down the country, particularly in the time of Charcot, Briquet and others in Paris, and have been the subject of elaborate description (*attitudes passionnelles*).

2. Organic dysfunctions. Psychic events may now and then influence almost all physiological functioning of the organs. Under certain circumstances of a psychic nature, a particular experience or some long-lasting emotional state, there will follow: stomach and intestinal disturbances, cardiac disturbances, vasomotor disturbances, disturbances in secretion, disturbances of vision, hearing², voice³, menstruation (cessation or premature commencement). In neurotic persons one often finds dysfunction which cannot be related to any

¹ Psychopaths show a rare reaction which has been described under the name 'affective epileptic seizure'. Bratz, 'Die affekteleptischen Anfälle der Neuropathen u. Psychopathen', *Mschr. Psychiatr.*, vol. 29 (1911), pp. 45, 162. Stahlmann, *Allg. Z. Psychiatr.*, vol. 68, p. 799.

² W. Kümmel, 'Entstehung, Erkennung, Behandlung u. Beurteilung seelisch verursachter Hörstörungen bei Soldaten', *Beitr. Anat. usw. Ohr usw.* (von Passov and Schaefer), vol. 2 (1918), H. 1-3.

³ K. Beck, 'Über Erfahrungen mit Stimmstörungen bei Kriegsteilnehmern', *Beitr. Anat. usw. Ohres usw.* (1918).

definite psychic event but which must have some connection with psychic abnormality, judging from the frequency with which the two go together.¹

Many neurological phenomena belong to this group, where they appear without any organic base: paralyses and sensory disturbances (their configuration follows the imagination of the patient, not the anatomical structure), tics, contractures, tremor, vertigo etc. We should refer to the neurological texts for all the innumerable variations of these bodily phenomena, particularly in hysteria.²

One of the most striking effects of psychic commotion is the sudden greying of the hair, as reported by Montaigne; there is also the sudden appearance of an alopecia areata.³ Psychogenic fever was for a long time doubted, but it must now be considered an established if rare phenomenon.⁴

In spite of the close psychic connection patients *regard* these somatic disturbances as something entirely alien, as if they were purely a physical illness. Hysterical phenomena can be observed appearing by themselves or accompanied by every kind of organic or functional disorder of the nervous system.

Most of these somatic disturbances are called *Organ-neuroses*. This does not mean that some organ can become neurotic of itself. It is the psyche that is neurotic; it, so to speak, chooses this or that organ and manifests its disturbance through it; it may be the organ itself is a *locus minoris resistentiae* and therefore more vulnerable or it may be that in the context of psychic meaning some particular organ appears 'symbolically' the more important. For a long time organ-neuroses were diagnosed far too freely. It was forgotten that the ground for such a diagnosis rested less on the positive findings but on the negative one of an absence of somatic findings. It was therefore correct to talk of the 'gradual reduction of the organ-neuroses' through the development of more exact methods of medical examination. The concept needed to be limited but not dropped entirely.⁵

This restriction of the organ-neuroses was accompanied by a development in the opposite direction: a growing recognition of the significance of psychic factors in disorders that were primarily somatic and organic.

¹ Wilmanns, *Die leichten Fälls des manisch-depressiven Irreseins u. ihre Beziehungen zu Störungen der Verdauungsgänge* (Leipzig, 1906). Dreyfus, *Nervöse Dyspepsie* (Jena, 1909). Homburger, 'Körperliche Störungen bei funktionellen Psychosen', *Dtsch. med. Wschr.*, vol. 1 (1909).

² Cf. Briquet, Charcot, Gille de la Tourette, Richer, Möbius, Babinski and the summary given by Binswanger, *Die Hysterie* (Vienna, 1904), and by Lewandowsky, *Die Hysterie* (Berlin, 1914).

³ Poehlmann, *Münch. med. Wschr.*, vol. 2 (1915).

⁴ Cp. Glaser, 'Zur Kenntnis des zerebralen Fiebers', *Z. Neur.*, vol. 17, p. 494. Summary by Lewandowsky, *Hysterie*, pp. 63 ff. 'Die Dissertation von Weinert,' *Über Temperatursteigerungen bei gesunden Menschen* (Heidelberg, 1912). This contains references from a related group of problems.

⁵ von Bergmann, *Dtsch. med. Wschr.*, vol. 53 (1927), pp. 2057 ff. 'An old clinician has said that nine out of ten gastric patients have nervous dyspepsia; nowadays not even the inverse ratio is accepted.' 'The concept of neurosis or neurotic seems to me a comfortable way out in a vast number of cases where the full nature of the illness has not been properly understood.' 'In the majority of cases, the diagnosis of neurosis is in practice a wrong diagnosis.'

3. *Dependence of primary somatic disorders on the psyche.* Even organic disorders are not entirely independent of the psyche in their course. There is a general acceptance of the fact that physical disorders may be influenced by psychic factors. It is very difficult to separate what is determined physically and what is determined psychically. The psyche looks for certain prepared channels in the body to produce its pathological effects. If, for instance, pains in the joints have existed due to a past arthritis these pains can be psychically continued after recovery or they can be reinvoked. In nearly all physical illnesses the psychic state during the period of convalescence is by no means unimportant. Therefore what can be influenced by the psyche is not necessarily a psychic condition nor need it be wholly psychogenic.

Another problem is whether organic illness accompanied by anatomical changes can *have a psychogenic source*. It seems this can be so:

Glycosuria is common in states of anxiety and depression.¹ *Diabetes* can start after some psychic commotion, and may be worsened through it.

Acute onset of *Basedow's diseases* has been observed following severe fright. Kohnstamm² reports a case showing how big a part psychic complexes play in this disorder. The onset may occur only a few hours after the fright but this is very rare. Usually a long period of sorrow, worry or anxiety precedes the onset; the strong psychic influences during its course have been universally accepted.³

Colitis membranacea (Mucous colitis) also may come on after psychic commotion and can be cured by psychic means.

The general view is that *asthma*, though facilitated by a somatic disposition, depends on psychic factors for its manifestation, course and cure. Medical research has shown that somatic disposition and events are decisive but the attacks and onset of the disorder can be precipitated psychically, and psychic factors may also be responsible for cessation of attacks. The relationship here does not mean that the psyche itself is disordered. Asthma like other physical accompaniments may be due to normal psychic excitation. However, as only a relatively few people suffer from asthma, we can best conceive it as a morbid somatic disposition and not a type of psychogenic reaction as are the majority of somatic accompaniments.⁴

The view has been put forward that from a purely reactive, nervous stomach-disturbance there can be a development through chronic functional anomalies into *ulcus duodenale* (duodenal ulcer), so that a man who gets an ulcer as the result of constant business strain might not have got it if he had lived a more restful life.

Alkan⁵ gives some examples of how somatic effects that are at first functional may lead to organic, anatomic disorder:

Lasting contraction of the smooth muscles in the attacked area create pressure and anaemia and thereby cause necrobiotic lesions, particularly so when the secretions at this point (the gastric juices) are psychogenically reinforced (as would be the case with *ulcus ventriculi* and *colitis ulcerosa*).—Spasm in tubular organs leads

¹ Mita, *Msch. Psychiatr.*, vol. 32, p. 159.

² Konnstamm, *Z. Neur.*, vol. 32, p. 357.

³ Rahm, *Der Nervenarzt*, vol. 3 (1930), p. 9.

⁴ Hansen, *Der Nervenarzt*, vol. 3, p. 513.

⁵ Leopold Alkan, *Anatomische Organerkrankungen aus seelischer Ursache* (Stuttgart, Hippocrates-Verlag, 1930).

to muscular hypertrophy of the upper parts with dilatation (oesophageal dilatation, hypertrophy of left ventricle in hypertension). Lasting spasm or paroxysm in tubular organs leads to chemical changes in the accumulating secretions (single cholesterol stone in the gall-bladder, obstructive oesophagitis). When infection is added, which would not harm where the flow is free, inflammation will occur after obstruction. Psychogenic alteration in the secretion of the endocrine glands may lead to anatomical changes in the glands (psychogenic diabetes, and Basedow's disease).

The psychogenesis of organic disease is established only over a small field. We lack factual confirmation over a wide area. Latterly V. v. Weizsäcker¹ has posed some fundamental questions and tries enlarging them by case histories. He finds it hard to be convinced because firstly, positive and negative cases can be found side by side. For instance, if one finds positive evidence of psychogenicity in one case, the next case fails to show it and nothing psychic can be found of any importance. Secondly, we are ignorant of the significance of inner organs for psychic life, whether, for instance, the liver has anything at all to do with indignation and envy. Thirdly, the relationship between the physical and the psychic factors seems an extremely irregular one. He thinks, however, that in cases of angina tonsillaris, diabetes insipidus etc., it is possible to recognise how the illness plays some decisive role in the crucial moments of life. He does not intend to offer any insight which could be conceptualised and generally formulated; his subject-matter is purely biographical.

The influence the psyche exerts on organic illness may be very extensive. The subjective state can be improved by suggestion and hypnosis, and suggestion on its own is of utmost importance in all kinds of therapy. Objectively some surprising results have been achieved. The nexus of organic and psychic factors can strike one as grotesque. For instance Marx² reports a case from the Cushing clinic:

A 14-year-old boy is admitted with severe diabetes insipidus; he drinks up to 11 litres (22 pints) a day. It is found that the boy had started masturbation and felt that excessive drinking cleansed him and dissolved his conflict. Through psycho-analytic treatment he recovers to such an extent that he now only drinks about 1.5 litres. One morning he is found dead in his bed; post-mortem findings were a large tumour of the brain-stem. In this case the thirst, as a symptom of organic disturbance of the nervous system, became related to the instinctual life of the patient and to his thinking, in so far as he struggled to gain the mastery of his masturbation. The relationships were so tightly interwoven that because of it a therapeutic influence could be exerted both on the thirst and the polyuria.

4. Functional disturbance of complex instinctive behaviour. There are many physical functions which can be disturbed without the patient experiencing anything at the time of the disturbance other than what any patient may feel

¹ V. v. Weizsäcker, *Studien zur Pathogenese* (Leipzig, 1935).

² H. Marx, 'Innere Sekretion', *Handbuch der inneren Medizin*, von Bergman et al., vol. 6, 1, p. 422.

when confronted with a bodily discomfort. There are others, however, where complex functions are involved, and volition as well. Here the functional disturbance is in obvious relation to the psychic disturbance appearing at the same time. Functions cannot be carried out as the patient experiences anxiety, inhibition, sudden passivity feelings or confusion. The same thing happens whether he is walking, writing, urinating, or having sexual intercourse, etc. Writer's cramp, disturbance of micturition, sexual impotence or vaginismus are the result.

Traces of such disturbances are universal. One blushes, just when one does not want to, walks or talks awkwardly, when one thinks people are watching. Even reflexes can be influenced. Attracting attention may increase both coughing and sneezing reflexes, particularly the latter, but they can also be suppressed for the same reason. (Darwin's bet with his friends that snuff would no longer make them sneeze; they tried hard, tears came into their eyes, but Darwin won his bet.)

(b) *The origin of somatic disturbances*

There is a very tangled relationship between the psyche and massive attacks, organ disturbance, and complex behavioral functions, even if sometimes it appears relatively simple in the individual case. In spite of what individually seems so plausible, the total relationship of body and psyche still remains obscure and extremely complex. Extra-conscious mechanisms are obviously numerous. Organs and physical predispositions have to meet the psyche half-way. It looks as if the psyche chooses the organs in which to manifest itself by dysfunction, or as if it chooses the functions into which its own disturbance can enter, like an interloper, as it were.

The several *physiological links* can to some extent be guessed: nowadays we view the autonomic nervous system together with the endocrine system as the media between the central nervous system, so closely linked with psychic events, and the body. This neuro-hormonal system regulates the activity of the organs outside our consciousness. Through the brain it must be accessible to the psyche and under certain circumstances far-reaching effects are possible. Those people whose autonomic nervous system is particularly excitable and responsive to the slightest psychic influence have been called by Bergmann 'vegetativ Stigmatisierte' (people with autonomic stigmatisation).

Many explanations have been offered in individual cases. Thus anaemia of the brain caused by contraction of the small cerebral arteries has been advanced to explain fainting for psychic reasons (through terror, sight of blood, over-crowded rooms, etc.).

The ways in which somatic disturbances arise lend themselves to the following descriptive schema:

1. A large number of organic dysfunctions occur purely *automatically*, such as palpitations, tremor and others. Examples are disturbances in the

digestive system after emotional upsets, abnormal subjective sensations, alteration in appetite, diarrhoea or constipation. We can only note them and record the phenomena as with the physical phenomena that accompany psychic events.

2. Somatic disturbances have a *tendency to become fixed* if they recur, and sometimes even if they only happen once. When psychic commotion has ceased, they linger on and the individual senses these disturbances as physical illness which recur on the most diverse occasions (habituation reactions); or a reaction which is roused for the first time by some powerful emotional event (localised pain, cramp) may recur later on when something of a similar kind is experienced, lesser in degree but reminiscent of the initial event (analogous to Pavlov's conditioned reflex).

Disturbance of function can develop and fixate in areas that by chance happen to be active during an affect. An upsetting message comes over the telephone, the hand holding the receiver feels as if paralysed, 'writer's cramp' sets in and so on. An actual tiredness caused by playing the piano and felt in the hands and arms becomes connected with affects of jealousy and competition and then appears as an independent complex of sensations which will arise on any occasion, e.g. when simply listening to music, should this also give rise to feelings of envy at another's ability.

3. In the foregoing cases there is no connection between the content of the psychic experience and the particular somatic effects. It is only that they appear together simultaneously. For an explanation one has to resort to increased or abnormal irritability due to the morbid state. There are, however, a large number of somatic phenomena, the *specific quality of which can be understood in terms of the experience, the situation or the personal conflict*. For example, unpleasant sensations and dysfunctions arise, which we term hypochondriacal, through specific attention being directed to a particular function, through careful observation of some slight disturbance perhaps, through definite worries and fearful anticipations. In the beginning such disturbances are only fears, in the course of time they become real. Such somatic disturbances, where the content can be understood in terms of the preceding psychic content, may also appear quite suddenly, e.g. paralysis of the arms after a fall, deafness after a slap, etc. These diverse phenomena have several things in common: (1) an *understandable connection between cause and effect*; (2) an effect on bodily functions that *otherwise are independent of our will and imagination*, e.g. sensation, menstruation, digestion; (3) the formation of a *vicious circle*. It seems that in healthy people the cycle of 'body-psyche-process of living' involves reflex increase in feeling through the somatic accompaniments of feeling, and a fuller realisation of meaning as feelings mount. With patients, everything (e.g. automatic and chance instinctual disturbances) can become the prey of psychic determinants which so modify it that the slightest disturbance may then turn into a serious illness. This mechanism is probably present in us all to

a slight degree and it is termed the *hysterical mechanism*. In some people it is more developed and dominates their whole life, in others it appears only when they are ill (e.g. in organic disorder) or under duress.

The term '*hysterical*' is used in a number of ways. *Psychogenic* is the broader concept. *Hysterical* is used for the fundamental characteristic of phenomena into which meaning has slipped, there is meaning but it is hidden, and there is some distortion, displacement, self-deception or deception of others involved. These dysfunctions are motivated by events that contain a dishonesty somewhere. The body then becomes an organ of double speech, and like speech is used to hide or disclose. This is done subconsciously, however, not consciously and only instinctual purpose is at work.

We can subsume these three groups under three commonplace categories: *automatic physical effects*, *fixed reactions* and *hysterical symptoms*. All three are closely related to each other. Purely automatic physical sequelae as well as hysterical symptoms can get fixated, and where somatic dysfunction becomes fixed through psychic stress, the hysterical component can hardly be distinguished from the purely automatic ones.

In the individual case we usually find ourselves dealing with all three factors which we can only separate out in theory or in the borderline case. The following is a case of Wittkower's:¹ 'An eighteen-year-old girl witnessed a railway disaster in which a worker was cut to pieces by a passing train. She felt nausea among all the excitement and did not eat for days; she vomited every morning during the first lesson at school. Since that time she has a railway phobia, anxiety and crying attacks. She also has compulsive phantasies about dismemberment in which she sees herself or a relative as the victim.'

The third group—*somatic phenomena which are understandable in a psychic context*—need fuller discussion. This does not apply so much to those that we have just discussed: (1) physical effects of anxious scrutiny, worry, fearful anticipation; (2) simultaneous linking of somatic events and psychic commotion on the first occasion and on repetition (analogous to Pavlov's conditioned reflex): e.g. a psychic trauma causes diarrhoea, vomiting, asthma, which can recur afterwards on the slightest stimulus; (3) detachment of what were originally psychically determined somatic phenomena, and their subsequent independent existence and development. The physiological aspect of this is still obscure but the psychological aspect is quite simple and clear.

The dependence of *vital processes* on *psychic mood* needs no further discussion either. The whole psychic condition, whether elated or hopeless, cheerful or depressed, tending to activity or withdrawal, plays on the somatic state uninterruptedly. We have long experienced the fact that illness, even that of organic origin, depends very greatly on psychic attitude, though it is hard to prove this in detail. The will to live, hope and courage are of the greatest importance. We can have the same experience in everyday life. Subjective

¹ Wittkower, *Nervenarzt*, vol. 3, p. 206.

tiredness is lost if the work is enjoyed. Fresh experiences and hopes can bring about an enormous increase in strength and effectiveness. The tired hunter springs to life when at last he sights his game.

In all these understandable phenomena we have tried to see the *specific somatic content as psychically meaningful*; we have tried to see the somatic event as an essential in the psychic and social context of the individual. In this the respective relationship between body and psyche has remained unconscious yet in principle open to consciousness; if the patient gains understanding of the connection, this reverts back with healing effect on the somatic phenomena, always provided there is a change in the psychic attitude along with the mere intellectual understanding. And here we have reached the field of interpretation which is most seductive but dangerous to enter. There is no doubt that fundamental knowledge may be gained here, but nowhere else do genuine evidence and gross deception go so closely together. A wealth of possible experience seems to offer itself but with it come confusing ambivalences and mistaken acceptances of the first interpretation that comes to hand.

Here are a few examples from the extensive literature which deals with these questions:

1. Hysterical phenomena in the narrower sense—paryses, sensory disturbances, etc.—are connected with images, intentions and goals which have disappeared from consciousness. How they do this is difficult to understand but they are not completely inaccessible to consciousness. Simulations can lapse into hysteria, and then we should cease to talk of simulation.

2. This psychic rearrangement has been made comprehensible as an escape of psychic energy, e.g. the discharge of repressed sexual wishes, by means of a conversion into somatic phenomena which symbolically indicate the source. Alternatively the phenomena may serve as a displacement or substitute for direct but forbidden gratification (Freud).

3. The psychic unconscious events are further differentiated. The patient may punish himself by a symptom for some instinctual wish or act which is against his conscience; he may surrender his will, grow weak and unresistive and more readily accessible for any kind of illness to which he is exposed.

4. Organs have a language which expresses what the conscious will does not say: kidney haemorrhage, fluor albus, eczema of the vulva, are thought to be expressions of resentment against cohabitation and when the corresponding situation improves will vanish.

These are not objective relationships of body and psyche but have only been deduced. They are plausible and the time of onset and cessation of the trouble seems to indicate a possible connection and in many cases a certain one. Yet all this is still very far away from phenomena genuinely expressing an objective unity of body and psyche.

It has been asked why after emotional disturbances or long-lasting conflicts there seems to be some kind of *organ choice*: sometimes the heart and the circulation, sometimes the intestinal tract, sometimes the organs of respiration.

The accepted answer is that there is some organ inferiority, either constitutional or due to illness, that is the organ is in some way prepared, a locus minoris resistentiae, which meets the distress half-way. A gall-bladder disorder will channel the likelihood for breakdown.

Heyer¹ goes beyond this and gives quite a different answer:

Somatic states which may be psychically conditioned are:—in the intestinal tract, nausea, swallowing of air; in the circulation, anxious tension; in the respiratory system, asthma, phrenocardia. All these states are of symbolic significance; they are not only experienced physically but are felt to be meaningful.

Organs are *hidden speech* which the psyche understands and through which it talks. *Vomiting* is an expression of resentment (Napoleon is said to have vomited when told he would be taken off to St. Helena). *Air-swallowing* means to swallow down something, e.g. something humiliating, which one cannot contest. *Anxiety* means one is afraid for one's own life, for its very basis, for its full realisation. *Asthma* means one cannot stand the air, that is the atmosphere which has arisen through situations, conflicts and particular people in particular places. *Phrenocardia* (heart-neurosis) in which the diaphragm contracts and pain and palpitation follow, means a fixation of inspiration, a kind of tension not followed by release. (In the sexual act, tension and excitement are not followed by release and satisfaction.) In all these the person expresses some actual unbearable aspect of his life symbolically through his organs without knowing that he does so.

To try and reach clear understanding, Heyer distinguished what he called *life-spheres*: the *vegetative sphere* (digestive system); the *sphere of animal life* (life of the blood; blood, heart and circulation)—the *respiratory sphere* (breathing). Each sphere has a specific nature which is connected symbolically with psychic actualities. 1. 'The intestinal life is plant-like, peaceful and dark, deeply unconscious, the basis of existence.' Through this intestinal life movements travel in waves, much as the waves of the seasons pass through nature. 2. 'The life of the blood is that of hot passions, affects, of temperament and of instinct; it is the sphere of the sexual drives.' The dominating movement here is not of waves but of contraction and expansion. We can compare the life of the roaming and hunting animal. 3. Respiration also has a polarised nature; there are sequences of tension and relaxation, very close to a moment of ego-life. 'The light, easy quality of the breath, its relation to air and ether gives us a feeling of height, freedom, limitlessness, which we receive hardly at all from the vegetative and animal spheres of our being.' The bird is a symbol for air and breath.

The different life-spheres (organ-systems of digestion, circulation and respiration) are thus linked with certain 'basic', 'archaic' or 'universal' feelings which always preserve their separate character. Thus conversely 'these specific psychic movements express themselves through the corresponding organ-system'. We will confine ourselves to the main example given: In the circulation, the carrier of the animal life of drive and passion, the basic dysfunction is anxiety, arising through the infirmity of the elements of life (as in coronary sclerosis, anaemia, etc.) and through suppression of the blood, that is of urge and passion. Anxious tension is the person's loss of unity with the animal in his blood, he feels anxiety lest the animal in him has grown too weak, or anxiety lest it may be too powerful and devour him. Therefore

¹ Gustav R. Heyer, *Der Organismus der Seele* (München, 1932).

these are 'circulation-neuroses' which occur 'not only in people who do not follow the will of the blood (or of their sexuality) and repress it, but in those equally who dissipate their mental self in nature'. These neuroses of circulation therefore are fostered in 'conflicts with the untried world of earth and urge' no less than in a neglect of 'the illuminating human mind'.

This quotation shows how theories of this sort weave a complex web of concepts: (1) vital, physiological relationships, such as that between the heart and anxiety, sexuality and anxiety; (2) possible symbolic interpretations in which organs are experienced as a symbol for what is psychic; (3) a mystical symbolism, in which expression is given to a metaphysical interpretation of life. The interweaving of these heterogeneous elements is not without its charm, but from the scientific point of view it is insufferable. A vast inextricable confusion is created from obvious empirical facts, which are extremely difficult to isolate and grasp clearly. Patterns of possible experiences, of understandable connections with somatic phenomena, are mixed up with speculative metaphysical and cosmic interpretations. What emerges as true is only the general, indefinite reminder that the occurrence of a body-psyche relationship and all the facts that demonstrate it cannot be even approximately exhausted by our customary simple schemata and most certainly cannot be sufficiently comprehended in this way. There is no scientific value in this psychotherapeutically nourished, fantastic configuration, justified though it may be as a negative kind of appeal against being too satisfied with the simplicities of physiological causation.

v. Weizsäcker's far-reaching studies on the subject of psychic pathogenesis in severe organic illness are wide open to this kind of interpretation, without his being necessarily in full agreement with it. Sometimes he seems to adopt it but he is careful to refrain from any too precise interpretation, being in favour of a biological approach, in which somatic events play a part in the dramatic unrolling of the psychic and social situation, but his study offers no universal fixed form of understandable connection, which could be used to provide a scientific theory of causation. His case-histories can be read with some wonder; it seems that anything is possible, but in the end we know as little as when we started.

§ 3. SOMATIC FINDINGS IN PSYCHOSIS

The final group of somatic symptoms to be observed in patients cannot up to now be related to anything psychic whatsoever. They are rather physical signs of morbid physical processes which are perhaps at the same time the source of the psychic illness, or at any rate are in some relation to it. These are not symptoms of definite physical disease (cerebral processes) but we will class them as somatic signs, physical symptoms of psychosis, without being able to recognise them as signs of any known disorder. Thus first and foremost in the group of the schizophrenias we have to record certain increased reflexes,

changes in the pupils, oedema, cyanosed hands and feet, strong, peculiar smelling perspiration, the 'greasy face', pigmentations and trophic disturbances. All that can be directly observed has long been methodically complemented by special findings: for instance, body-weight, amenorrhoea. In the last ten years physiological investigation has been pursued with all the refinements of modern medicine. Some of the findings are random findings accumulated into a limitless host; others provide a clear picture of the somatic phenomena produced by the physiological processes in psychosis. Here are a few examples:

(a) *Body-weight*

Fluctuations in *body-weight* can reach an extraordinary degree with schizophrenic patients; it is a somatic symptom of varying significance. There may be a fall into complete emaciation and deep marasmus in the acute psychoses and a great gain in weight during convalescence from the acute phase, so that changes in body-weight may be an important indication of which way the illness is going. The increase in weight takes place during the return to health as well as at the start of the lasting state of dementia which can follow after an acute phase. (Increase in weight without any psychic improvement is therefore an ominous symptom.) In the latter case there is sometimes a notable over-eating, and a bloated, fat habitus. Loss of weight is seen in severe psychic shock, in worry and in long-lasting depressive states, and in nervous disturbances of all kinds (loss of 20 lb. or more). In the particular case it is not easy to decide how far the change in body-weight is an accompaniment of a morbid physical process that is also responsible for the psychic disturbances, and how far this change is a direct consequence of psychic events themselves. It seems that both types of relationship are there. I used to observe a patient with a traumatic neurosis who always lost several kilo. during his stays in hospital, in spite of eating the excellent food, perhaps because the situation always caused him extreme distress.

Reichardt¹ investigated the relationship between body-weight and cerebral or psychotic illnesses. He found body-weight and mental state showed a far-reaching independence, so that no definite correlations could be established. For instance, he observed severe fluctuations in some acute psychoses, but in general he found the weight-curve stationary in states of mental deficiency and end-states; frequent endogenous increases and decreases of weight in brain diseases, for instance, in paralyses, and a particular, excessive weight-loss in catatonic syndromes. As distinct from those that last over long periods, brief fluctuations in weight have been found to be due to fluctuations in water retention.

¹ Reichardt, *Untersuchungen über das Gehirn* (Jena, 1912), Part 2, 'Hirn u. Körper'. O. Rehm, 'Über Körbergewicht u. Menstruation bei akuten u. chronischen Psychosen', *Arch. Psychiatr. (D)*, (1919), vol. 61, p. 385.

(b) *Cessation of menses*

This occurs frequently in psychosis. Haymann¹ found it took place as follows:

	% of cases
in paranoia	0%
in hysteria, psychopathic and degenerative states .	11%
in manic-depressive insanity	34%
in dementia praecox	60%
in paranoid types	36%
in hebephrenic types	50%
in catatonic types	93%
in paralysis, tumours and other organic brain disorders	66-75%

Menstruation disappears in the majority of cases only after the psychic symptoms have appeared. In a large number of cases cessation of menstruation coincides with the onset of a loss in weight. When weight increases, the menses reappear. (This is so whether there is recovery or a final defect state.)

(c) *Endocrine disturbances*

In scattered cases the Cushing-syndrome is found with schizophrenia. As the latter progresses, the former tends to vanish. A hypophyseal tumour had been excluded. This finding only shows that schizophrenic processes tend to invade the field of hormonal activity.²

(d) *Systematic physiological investigations to find clinical pictures with typical somatic pathology*

Numerous metabolic investigations have been made, examinations of the blood, analyses of the urine, etc., but they all so far show equivocal findings. In some circumstances they may give valuable hints but for the most part they tend to be interminable and barren of results. In some cases of schizophrenia, for example, particularly with catatonia, and also in paralytic stupor, the metabolism was found to be slowed down. Other findings have been elicited with the help of modern metabolic studies of the pathology in such conditions as paralysis, schizophrenia, epilepsy, circular psychosis.

The unusually painstaking and thorough work of Gjessing³ opened a new chapter. He did not set out to collect a large amount of data in order to make statistical comparison (such a method can only give indications, but is not any use as a research method itself). Instead he made a series of investigations of a few patients daily over a long period of time, so that he could observe changes

¹ Haymann, 'Menstruationsstörungen bei Psychosen', *Z. Neur.* (1913), vol. 15, p. 511.

² S. Voss, 'Das Cushingsche Syndrom als Initialerscheinung bei Schizophrenie', *Z. Neur.*, vol. 165.

³ R. Gjessing, 'Beiträge zur Kenntnis der Pathophysiologie des katatonen Stupors usw.', *Arch. Psychiatr. (D)*, (1932), vol. 96, p. 319, 393; (1936), vol. 104, p. 355; (1939), vol. 109, p. 525.

in their physical state and compare these with changes in their psychosis. He did not try to investigate a single physiological phenomenon but a composite whole, which included examination of the blood, urine, faeces, metabolism etc. Lastly he selected his individual cases carefully; there had to be an absolutely definite diagnosis and they had to be typical cases and show an individual suitability for investigation. He gives exact reports on individual cases. Among them are a few, very conspicuous, classic cases:

Catatonic stupor starts suddenly; the emergence from it is critical. In the pre-stupor state there is slight motor restlessness. During the *waking period* he found diminished B.M.R. and a diminished pulse rate, lowered blood-pressure, reduced blood-sugar, leucopenia, and lymphocytosis; retention of nitrogen. (This picture occurring during the waking period Gjessing called the 'retentionsyndrome'.) As *stupor began* he found: marked, autonomic fluctuations (change in size of pupils, pulse rate, colour of face, perspiration, muscle-tone). *During the stuporose period* he found: raised basic metabolic rate, raised pulse rate, blood-pressure, blood-sugar; slight hyperleukocytosis, increased nitrogen secretion. (Gjessing called this picture 'the compensation syndrome'.) Symptoms returned periodically alternating with the stupor that lasted 2–3 weeks.

Gjessing found similar phenomena in states of *catatonic excitement*. Many cases of stupor and excitement however follow an altogether irregular course. The author always found that there was retention of nitrogen, autonomic changes, nitrogen excretion—with the nitrogen retention occurring during the waking period.

The idea is to obtain a physiological-chemical syndrome which will show some inner consistency and correlate with definite forms of catatonic stupor and excitement. Gjessing refrains from causal explanation (whether the psyche or the soma is the determining factor). He only suggests that we are dealing with the results of periodic stimulation of the brain-stem. In abnormal states the waking nitrogen retention is reversed; during stupor or excitement, there is as it were a recovery from nitrogen retention.

After this there were further investigations and new problems were demonstrated. This was all very different from the kind of disease entities usual in general medicine but without any corresponding morbid findings of a causal nature.

Jahn and Greving¹ found concentration of the blood, increased formation of red blood-cells (increase of erythrocytes and of early forms: the marrow of the long bones in section showed red instead of yellow) with a reduced destruction of red blood-cells—a unique finding. They attributed this finding along with the other somatic findings to a flooding of the blood with some poison—a poisonous substance stemming from the albumen metabolism which had the same effect as histamine in animal experiments. The cases concerned were the cases of fatal catatonia which had already been described at some length.

¹ Jahn and Greving, 'Untersuchungen über die körperlichen Störungen bei katatonen Stuporen u. der tödlichen Katatonie', *Arch. Psychiatr. (D)*, (1936), vol. 105, p. 105.

The classical picture of *fatal catatonia* was described as follows:¹ Unlimited motor restlessness appears to increase without inhibition to the point of self-destruction, while the physical strength develops tremendously. There is severe acrocyanosis. The moist skin of the extremities is cold and shows many places where pressure or knocks have caused confluent petechiae which soon turn into yellow spots. The initially raised blood-pressure falls; the excitement settles down. The patients lie weakly in bed with an expression of inner tension and sometimes with clouded consciousness. Although the skin is cold, the body temperature may be raised to 40° C. Section does not give any clear picture of the cause of death and no changes which would point us to any important cause of the illness.

K. Scheid² describes another picture, in schizophrenia: He found marked increase of sedimentation rate at certain periods coupled with high temperature, and the symptom of increased rate of formation and destruction of red-blood corpuscles. Both new formation and destruction generally kept in balance; when haemolysis was stormy, there was a marked anaemia. There were no signs of any serious physical disorder underlying the febrile episode.

We are always dealing with particular pictures or some narrowly circumscribed type, never with a recognition of the somato-pathology of schizophrenia as a whole. Comprehensive laws are therefore not to be found, and we are left with the rarity of the classical case and the many current contradictions. For instance, Jahn and Greving find a lack of blood-destruction in fatal catatonia while K. F. Scheid³ found an increased blood-destruction in catatonic episodes; a lowering of the haemoglobin content and the appearance of breakdown products of haemoglobin.

It is natural to think of a physical disorder which conducts itself basically like all other physical disorders. *In support of this* are the severe somatic symptoms and, on the psychological side, the similarity between schizophrenic experiences and experiences with mescaline (and other poisons). This points to some agent, which will be discovered eventually as the cause. *Against* such a hypothesis however are the lack of pathological anatomical findings which would indicate the cause and, in addition, the unusual deviations in the somatic findings, such as the type of circulatory disorder which is present. The fresh findings are impressive. Their significance is not yet clear. A decisive factor is whether the same disorder can in principle occur in animals or whether the whole illness is specifically human. In any case it is a phenomenon of human nature, a process in that substratum of human life where psyche and soma are as yet inseparable.

¹ Stauder, *Arch. Psychiat.* (D), vol. 102, p. 614.

² K. Scheid, *Febrile Episoden bei schizophrenen Psychosen* (Leipzig, 1937). Cf. 'Die Somato-pathologie der Schizophrenie', *Z. Neur.* (1938), vol. 163, p. 585.

³ K. F. Scheid, *Nervenarzt*, vol. 10, p. 228.

CHAPTER IV

MEANINGFUL OBJECTIVE PHENOMENA

Introduction. Meaningful objective phenomena are what we term the sensory phenomena which we understand as expressions of the psyche. They consist of the human physiognomy (shape and countenance), involuntary gestures, speech and writing, artistic productions and conscious purposeful behaviour. These phenomena are, however, highly heterogeneous and are scarcely comparable. Thought, art and purposeful actions have an objective meaning which is not a psychological one as such and any understanding we may have of it does not necessarily imply an understanding of the psyche. We can for example understand the meaning of a sentence in a rational way without necessarily understanding the man who utters it; we need not even think of him. There is an objective world of the mind in which we move without thinking of the psyche at all and from this springs the spirit of enquiry into psychological matters. Hence we divide our meaningful phenomena into several different spheres:

1. The human psyche is expressed through the body and its movements. This *expression* is involuntary. It becomes objective to the observer but not to the individual who is thereby understood (Section I).

2. The individual lives in *his own personal world*—by means of his attitudes, behaviour, actions and the shape he gives to his environment and social relations. What he is appears in his actions and in his activity and these provide him with a known content (Section II).

3. The individual *objectifies this content* for himself in speech, productive work and ideas which form a world of the mind. He takes a firm hold on what he has materially understood, produced, created and intends to create (Section III).

These three spheres signify contents which concern us not only from the psychological point of view; in fact to begin with there is no psychological interest at all. If we are to study them psychologically this requires first of all an inward appropriation of these contents and an unerring capacity to perceive them with understanding. Apart from this there are no limits to such a study. The highest mental creation can still be questioned as to its psychic origins; what involuntary elements are being expressed, what is its effect on the psychic life and what significance has it as a footing for the psyche, etc.? The realm of the understandable is of course not exhausted by this psychic aspect of the understandable and we should remember that from other points of view the mind is regarded as a world of meaning divorced from the psyche and the human individual considered a free and rational creature. However, as

psychopathologists we are only interested in the understanding of objective meaning in so far as this is a precondition for our psychological understanding of such a meaning as it exists in the psyche of an actual individual. In the psychology of expression indeed the direct perception of another person through what he sees and says depends entirely on the cultural breadth of the psychopathologist's personality. It is not surprising that many content themselves with ordinary trivialities while others feel very much the limitation of their understanding and access to other minds. Confronted with the individual they grasp a good deal yet they do not penetrate completely and a certain reserve descends.

In all three spheres of meaningful objective phenomena we can observe certain particular elements that belong essentially to a whole which is not visible to us in the same way as a single objective fact. As regards the phenomena of expression, this whole is the unconscious *Formniveau* (Klages—level of development); as regards the existence of the individual in his own world, it is the *configuration* or '*gestalt*' of this world (*Weltgestalt*) and as regards the objectification of ideas through knowledge and productivity, it is the *total consciousness of a single mind*.

Each sphere has its own particular principle, but for the most part all three go together. All three, for instance, have something of the expressive character that is the dominant principle of the first sphere. When a thought-content, purpose or practical intention exists objectively in the world, we find that from the psychological point of view there is no such thing as mere reason or pure purpose. All psychic manifestations are pervaded by an expressive atmosphere: thoughts are spoken in a certain way, there is the tone of voice and the style of speech; goals are obtained in a certain way, there is a particular kind of body-movement or a particular individual mode of behaviour matched to the concrete situation. Further it is just this person who has this thought, has just this or that purpose, reflecting perhaps an expression of personality or some particular pattern of mood. 'Performance' which in itself is not expressive takes on in the individual an expressive aspect: motility is harnessed to expressive movement, speech acquires expressive personal tone and form, the working-performance becomes a personal gesture through its rhythm and style.

Let us remind ourselves of the basic classifications of individual phenomena: subjective phenomena—experiences—which are studied by *phenomenology*; objective phenomena, either meaningless or meaningful; if the former they are studied by *somato-psychology*; if the latter, we either assess and measure them as performances (*performance-psychology*) or we understand them, either as human expression (the *psychology of expression*) or as life in a particular world (the *psychology of the personal world*) or as mental productions (the *psychology of creativity*).

We have a psychological need to give things *objectivity and meaning*, and in addition our intentions are always based on something unintentional and impulsive. This primary impulsiveness can be differentiated into:

1. An *urge to expression* in the narrow sense of involuntary, undirected 'giving vent' to psychic stirrings. The degree of expressive facility differs in the individual and in the race.

2. An urge to *present the self* which brings an element of half-intention, since the individual validates himself in the presentation either for some real or imaginary onlooker or for himself alone. This self-presentation is a basic human characteristic and an indispensable and positive factor in everyone's life. But there can be self-deception; form, setting and gesture are then no longer a direct outcome of living but take on a life of their own. As a string of shifting immediacies or in the shape of some rigid mask they come to substitute for life itself.

3. *A need for communication*—human beings desire to relate themselves to others in mutual understanding. At first there is only the need to understand objective contents, ideas directed to objects, practical purposes and practical theories. Later the person needs to communicate himself. Language is found by the individual ready-made, a remarkable, enigmatic instrument of communication for him to use.

4. *An urge to activity*, to direct behaviour and grasp the situation and everything that is waiting to be done. But whichever direction this primary impulsiveness takes it will always be associated with meaning and thus distinguished from the purely vital drives.

For all meaningful phenomena the rule holds that most is to be learnt from *cases that are unusual, well differentiated and complex*. These illuminate the rest and experience is enriched not so much by the number of cases we have seen as by the depth to which we have penetrated in any one case. Individual cases, therefore, have a principle of importance which is essentially different from what they have in the somatic sphere where it is always 'a case of . . .' In the psychological study of expression, the single case can be of exceptional importance simply as an example on its own.

SECTION ONE

EXPRESSION OF THE PSYCHE THROUGH BODY AND MOVEMENT

(PSYCHOLOGY OF EXPRESSION—AUSDRUCKSPSYCHOLOGIE)

(a) *Somatic accompaniments and psychic expression*

When we speak of somatic accompaniments of psychic events we simply register a relationship (for example, between fear and dilatation of pupils). We register it and make it part of our knowledge. But if we speak about the expression of psychic events, we imply that we understand the somatic phenomena in terms of what the psyche wishes to express, e.g. laughter is an immediate understanding of something funny. Expressive phenomena are

always *objective*, in so far as they can be perceived by the senses, and manifest themselves as matters of fact, which can be photographed or recorded. On the other hand, they are always *subjective* since actual perception of them does not make them expressive; this comes only when there has been understanding of their meaning and importance. Insight into expressive phenomena requires therefore rather different evidence beyond the simple registration of purely objective physical facts. It has been said that all our understanding of expression rests on conclusions drawn by analogy from one's own psychic life and applied to that of others. Conclusions by analogy are a myth. The fact is rather that we understand quite directly, without any need for reflection; we understand in a lightning flash, at the very moment of perception. We understand an expression we have never seen in ourselves (it could be that it is a future man who studies himself in a mirror). Then there is the fact that children who cannot yet speak will understand gesture. Lastly, even animals understand expression to a limited extent. The psychological process of empathy has been invoked to explain the understanding of expression. Whether this explanation is true or false, it remains a psychological problem, not a methodological one. The phenomenon of understanding expression is always a direct one, our consciousness recognises in it something final and immediately objective. We do not see ourselves in the other person but the other person or his meaning as existing in their own right, the other's experience, which in that form we have never had. All the same we are *not to take* understanding of expression as *something simply right and valid just because of its immediacy*. Even in the case of mere sense-perception this is not so; each particular is governed by our knowledge as a whole; and there are deceptions in the sensory sphere. It is the same with the understanding of expression, except that deceptions are more numerous and control more difficult—conclusions by analogy come secondarily; each individual expression is capable of many possible meanings and only understandable in relation to some whole. We also show a wide range of difference in the vividness and breadth of our understanding of expression. Understanding is linked with one's own possibilities of experience, one's own history, and one's own measure of learning, its width, depth and general complexity. For this reason we find that where there is a certain mental poverty, there tends to be a denial that the understanding of expression can have any validity. There is a commonplace use of it and a certain violence done to it within the confines of the individual's prejudices. We must not forget that any knowledge we may have of the psychic life of others has come to us through the understanding of expression. Performances, as such, somatic accompaniments as such, even our understanding of mental content as something merely objective, all teach us to recognise the psyche but only from outside.

A basic mistake in method is to confuse our concepts; for instance, calling all somatic accompaniments and sequelae the phenomena of expression. It is true they are this but only in so far as they can be 'understood' as psychic

expression, as in a gesture. Increased intestinal peristalsis prompted by affective changes is not an expressive movement but simply a synergic accompaniment. The frontier of understandable expression is not well demarcated. Dilated pupils as phenomena of fear are not 'understood' by us, but if we know of this fact and notice it several times, this knowledge seems a direct perception of fear in the pupils; this is only so, however, if the fear is simultaneously grasped as a genuine expression. A dilated pupil as such has no inner link with fear in our minds. It can have other causes, atropine, for example, which come to mind just as quickly. Similarly if someone constantly needs to go to the lavatory. In the appropriate situation and with other genuine expressive phenomena present we know that some strong affect is at work; otherwise we would be inclined to think in terms of some purely physical disturbance.

(b) *Understanding the expression*

We perceive in form and movement a direct manifestation of psychic events or psychic mood. If we reflect on this type of seeing we are bound to doubt its importance for the comprehension of empirical reality. We are making use of a symbolism that is universal; we are seeing quite directly everyone's person and movements of adaptation, not as mere mathematical quantities nor as sensory qualities, but as something living, carriers of mood and significance. For clarity's sake it is as well to review the *different ways in which we see shape and form*:

To begin with we need to extract some clear forms for observation out of all the confusion of the phenomena, and to look for favourable conditions in which to descry what we may call the basic phenomena, basic configurations, simple forms, etc. Next, there is need for analysis. We need to see what these configurations are, how they change, develop and summate into a whole. Here the path of investigation diverges.

Either we resort to *mathematics*, that is think or build constructs in terms of quantities and derive our basic forms in this way. If successful, we become as it were a second creator of forms and shapes, which we contrive, handle and survey. Knowledge thus gained is thought of in mechanistic terms, limits are set and endlessness controlled by the use of mathematical formulae.

Or we try to stay close to the *real shapes and forms*, which will not submit to mathematical handling because their nature is infinite. We study morphology (Goethe), observe the growth of forms and their endless transformations, try and help ourselves with diagrams, and delineate types. But we use all these simply as pointers on the way, so that we can find some language for nature's 'blueprints', the primary configurations, whether of animals or plants, without making any attempt to deduce them (a mistake Haeckel made in his general morphology). The basic forms are not spatial and therefore subject to mathematical definition as such, but they are shapes that live. Their inner structure which can be mathematically explained is only one of their aspects. Morphology is not deductive but tries to lead us towards a pure apperception through a process of dynamic and structured seeing.

What we see in this way is the totality of basic characteristics belonging to the spatial phenomena of our environment. Clear vision is always accompanied by a 'feeling'—an overtone, betokening *the meaning, the sense of the forms, their psyche*. Something inward, as it were, reveals itself directly present in the external form, whether this is the aesthetic–ethical effect of mere colour or at the other extreme the emotional appeal of animal forms or the human shape.

We would like to put this 'soul of things', their psychic quality, into words, understand it, and make it a fruitful concept at which we have arrived methodically. The path of investigation diverges once more.

Either we mistranslate this quality into a rational meaning, something we can know, and we say that things, forms and movements signify something. The '*signatura rerum*' then represents a physiognomy of the universe of which we can make use to control everything through an immense system of meanings in which things are simply the signs. This leads us to a superstitious pseudo-science, the rationalism of which offers a striking analogy to the mechanistic explanations of the world, which it successfully applies, but it differs from these in the fundamental deceptions on which it rests and its lack of general validity (e.g. astrology, medical pharmacology derived from the '*signatura rerum*', etc.).

Alternatively, we can stay close to the '*soul of things*', their psychic quality. No interpretations are made but we open our senses to living experience, to the perception of the inward element in things. Goethe's 'pure reflective gaze' accompanies a contemplation of form which *does not know but sees*, and this vision of the inward life of things (Klages uses the term 'Bilder') forms the substance of our union with the world. This union may be of unlimited depth; it comes as a gift with every step we take and cannot be methodically developed; it remains bound up with everything that reveals itself to a receptive attitude and an unfeigned preparedness to accept. This mode of perceiving with its empirical clarity comes to us late in time. Hitherto it has been embedded in superstition and delusion and it has been continually exposed to self-defeating efforts at defence through rational argument and systematic theory, which has attempted to bring it within the boundaries of reason.

The understanding of expression has its place within this universal world of psychic perception, this 'vision of the soul of things'. The psychic quality, the inward element, can be seen in the outward form and movement of the *human body*, made visible to us as expression. But this psychic quality is something radically different from the psyche of the nature-myths. Psychic expression as we understand it in men is something *empirically real*. It is accessible to us, present as something that *responds*; we treat it as an *empirically real force*. The decisive question then arises; which phenomena are an expression of real psychic life, which are merely conditioned by chance somatic events? And which are only an expression in the sense that a branch has a form, the cloud has a shape, and water has a flow? Sensitivity for form and movement is a precondition for our perceiving *expression at all*, but something more is needed if this is to develop into any knowledge of an *empirical psychic reality*.

It is easy to give a theoretical answer. *Empirical confirmation* is first achieved by making a demonstrable relation between the expression as under-

stood and the rest of human reality accessible to us in speech, etc. Secondly, we can test one phenomenon of expression against another, and thirdly we can constantly relate every particular to some whole. The understanding of expression is the same as general understanding, in that the particulars may be meagre and deceptive and can only be rightly understood in terms of the whole which they have gone to form. This is the natural round of understanding and the psychology of expression follows the same rule.

Understanding of expression becomes most questionable when applied to individuals as a science of character. Anyone may come across this if he has had anything to do with graphology or with the study of physiognomy and gesture. Such studies when concretely applied are nearly always impressive, seem to succeed by inspiration and, though fashions fluctuate, are warmly acclaimed. In individual cases the interpretation is usually compelling unless the environment is especially critical. This seems due among other things to the fact that meaningful opposites are always linked and something is always right provided one can find the right dialectic in which to express it. There is also nearly always something striking in the person's mood or nature, which only needs to be emphasised and expanded verbally. Lastly one may be lucky and hit on something very personal, and the matters that are not correct are quickly forgotten. Our first acquaintance with characterology, graphology or the study of physiognomy may seem something of a revelation and especially seductive because such methods are often linked with some kind of natural philosophy. If we can avoid the seduction without losing sight of the genuine impulses which are part of it, we have made a step towards science and a liberal philosophy. The first basic experience of disillusion comes when, with graphology for instance, we find the most superficial of efforts is met with the most enthusiastic acceptance. We have to experience such embarrassing situations before we can be properly critical as psychologists.

(c) *Techniques of investigation*

We can investigate the phenomena of expression in two different ways:

1. We can explore the *extra-conscious mechanisms* which condition the expression. In the case of speech we know of *disturbances* in the extra-conscious apparatus, appearing in the form of motor and sensory aphasia. Corresponding disturbances, known as amimia and paramimia, occur with gesture. For instance, when the patient wants to say 'yes' by nodding his head, he opens his mouth, but he cannot find the right movement. Finally, there may be spontaneous excited gestures which are not any expression of psychic states but only disturbances in the extra-conscious apparatus. Thus in certain cerebral diseases (in pseudo-bulbar palsy, for instance) we can recognise a forced laughter and crying following any kind of stimulus. In such cases, the neurologist is investigating disturbances in the extra-conscious apparatus of expressive movement. It is of course possible to do this with normal functioning if we record the movements exactly as if they were somatic accompaniments and analyse their somatic function. Duchenne¹ tried to do this with different kinds of facial expression, comparing them with the effects of electric stimulation

¹ Duchenne, *Mécanismes de la Physiognomie humaine* (1862).

of individual muscle groups. He wanted to find out which groups were concerned in each case. Similarly with the help of Kraepelin's writing-balance, it was possible to show that in the simple movement of making a full-stop, every individual has a specific and constant pressure-curve. Sommer demonstrated the movement of the face muscles during mimicry.¹

2. The above gives us some knowledge of the extra-conscious mechanisms; we also add to our technical equipment for the recording of expressive movement (use of camera, film, tracing, etc.). But we have not added anything to our knowledge of the psyche. The second and more properly psychological investigation of expressive phenomena sets out to do just this. It hopes to *extend 'understanding'* beyond *this point*. In everyday life we all have the common experience of understanding expression and the investigation aims at making such understanding conscious; it seeks to increase and deepen it and delineate it properly. Something like this is clearly possible if we take an unprejudiced look at graphology. Much that is new can be learnt from handwriting—even though it is only one of the many modes of expression.

Some *technical preconditions* are needed for the deliberate study of expression and for any planned attempt to extend our understanding: *material has to be secured* from the stream of phenomena and collected in some way so that comparisons may be made at any time. Movements are very difficult to get hold of—they can only be filmed and this limits matters very much. In moments of psychic import the apparatus is not at hand or would be too disturbing. We have to fall back on description and on repeated observation of new cases as far as one can get repetition in this way. Sometimes we may make use of drawing. *Handwriting* has an advantage in that if the writer is relatively fluent it offers complicated movements that can be compared at any time. The bodily shape, the physiognomy, may be dealt with best by photography but even here we run into considerable difficulties.

We can see that only some of the phenomena of expression can be recorded by means other than description. Yet *clear and methodical description* is the first condition for any truly scientific grasp which will make the immediate understanding of expression conscious, control and expand it. In graphology scientific development became possible through the technically skilful, objective, complex and quite un-psychological analysis of the form of the handwriting (see Preyer's work); in the same way the scientific study of physiognomy was developed through accurate description of body-shape.

(d) Summary

Phenomena of expression may be divided as follows: (1) Material for the *study of physiognomy*: This is a study of facial and bodily form (body-build) in so far as both may be understood as the expression of a psychic life, manifesting itself in them. (2) Material for the *study of involuntary gesture*: This is a study of the actual changing facial and bodily movements, which are unquestionably an immediate expression of psychic events and rapidly come and go. (3) Material for the *study of graphology*: In handwriting the investigating

¹ Cf. Trotsenburg, 'Über Untersuchung von Handlungen', *Arch. Psychiat.* (D), vol. 62, p. 728. Record of hand-pressure as a time-sequence in various individuals and under various conditions.

psychologist has before him a movement of gesture that has so to speak been 'frozen' and can therefore be examined all the more easily.

§ I. THE STUDY OF PHYSIognomy

This is the most problematic field of expression, and doubts have been felt whether it can even be considered as such. It should only deal with the persistent features of the physiognomy which have come about through expressive movements and appear as a *frozen gesture* (e.g. 'folds of thought' on the forehead). Only such phenomena allow for understanding. They can to some extent be portrayed as expressive gestures, and have no particular principle of their own.

If the psychiatrist thinks of the characteristic appearance of many of his patients, which often suggests his diagnosis at first sight, very little of this will strike him as the expression of anything psychic. *None* of the phenomena which reveal the *somatic process* in the *habitus* belong to the field of *psychic expression*:

e.g. the plump, swollen forms of myxoedema; signs of paralysis in the face, the limbs and the speech in G.P.I.; the tremor, sweating, high colour and puffiness of delirium tremens; the miserable, physical habitus of psychoses where there is severe physical illness; the emaciation, wrinkled skin, the dimness of the corneal margin and other signs of age.

If on seeing a hunchback we unwittingly ascribe to him a bitter and sardonic mentality, something else has entered the situation. He may have acquired his deformity in childhood through a lesion in his spinal column, and there is no psychic element, in any case. But sometimes such a deformity or some other physical suffering may entail *psychic consequences* such as the development of resentment and as it happens we wrongly suppose the hunchback to mean this. Or perhaps resentment is really there in face and bearing and the hunchback itself only increases the strength of our impression, but this is not what is meant by an expressive physiognomy. Generally we must imagine that from an early age the physical frame plays a part in shaping a person's self-awareness and general behaviour. All through one's life, what one feels about oneself and one's appearance is continually being supplemented by such items as whether one is small or tall, strong or weak or sickly, whether one is in any sense beautiful or ugly, even though originally this had nothing to do with one's psyche. The individual models himself according to his body and with its help and in its company there is psychic growth, so that body-form and psychic life become reciprocal even if at first they were apart. We also find that in different people body-form and character match in varying degree: in one case our whole impression is one of unity; in another, the nature is lean though the body is fat, and in another the phlegmatic temperament matches rather oddly with the bony frame. In every case primary somatic factors take

effect in the body-form and the psyche comports itself in relation to these, but essentially they do *not* coincide with the psyche in the sense that they are an expression of it.

Leaving aside every gesture, every 'frozen' gesture, every physical trace of illness, everything we may have linked with the psyche as a primary somatic cause for an understandable psychic change, we find our total impression of the somatic phenomenon of an individual still leaves something to account for; that is, the persisting physical form of the individual, what we have called his *physiognomy*, the *unique individual quality* which has grown up with him and is only capable of a slow and limited variation as life runs on. Once puberty is past, it tends to settle finally, though sometimes this occurs rather later. In so far as the bodily *habitus* is not linked with the specific disturbance of any organ (with endocrine effects) such as in myxoedema, acromegaly, etc., but really exhibits the true fashion of the individual's life, we may call it his physiognomy. When we look at different kinds of physiognomy we can immediately picture an appropriate psychic life, indistinct perhaps but undoubtedly belonging and creating a certain psychic atmosphere. If we follow these impressions up and try to reduce this 'feeling' to some kind of knowledge, we find there are two ways of doing this, each different from the other in theory and method. We have to keep the two distinct if we want any clear discussion on these matters.

1. In regarding the physiognomy of an individual the nature of the psyche is perceived directly in the bodily form. Descriptions of body-build together with the relevant character-type have a striking evidential quality and they convince us immediately, like a work of art, when there is apt and revealing presentation by the expert. We certainly get the impression that things are in fact just as he says. But we may wonder whether this is a method of research or for any expansion of our impression. If there is something valid, the following would hold: A 'being' which cannot be divided into body and psyche develops from the basic constitution (*Anlage*) of man and every living thing. However valid such a division may otherwise be, it is not so here because the 'being' appears in what is physical; the same 'being' which is body and psyche and embraces both. Instead of the two standpoints of bodily, external reality, on the one hand, the subject of biological science, and on the other psychic, incorporeal existence as 'experience' with its inner relationships, we have the idea of a 'being' which could encompass them both but which always remains individual yet somehow typical, constituting the innermost character of man. There would appear to be some unitary characteristic present in all that could be read off from behaviour and bearing and—to take an extreme example—even from the shape of the ears. People with this orientation see in the latter something indistinct, incomplete but essentially characteristic. They tend to express all this in the form of epigrammatic and arbitrary judgments and speak of an ethical bump, a metaphysical ridge or a lecherous lobe, etc. We would do well to keep an eye on logical possibilities of this sort and be clear about them. If we discard the whole study as a fanciful sort of game and clarify our own minds about it, we can see to it that such ideas are not admitted as exact formulations. Yet genuine efforts of this

kind deserve interest and need not undermine our scientific facts. Those who claim to read the essential features of anyone in the way just defined might as well claim to see the essence of the universe in the symbols of nature—they are what we used to call 'natural philosophers'. The whole thing is really metaphysics. The kind of being which expresses itself simultaneously in human character and the shape of the ear must lie at so deep a level that it is inaccessible to empirical research. Suppose we try to apply such methods: someone has his character read from the shape of his ear; let us then check the assessment with all the biographical data we can find. We shall undoubtedly come across major successful performances of an unexpected kind as I found in my own investigations. These spring from the individual's unchecked direct intuitions. The absurdity becomes apparent of bottling up such human powers into a science of bumps, ridges, proportions, etc., so that we may read mechanically from the shape of someone's ear what a whole lifetime can hardly reveal, the essential nature of a man. We cannot objectify the intuitions that come to us of the nature behind the forms because what is involved is not the measurable aspect of a form but its undefined nature. The situation is not one of registrable individual forms and their measurement but of the mutual relationships of form and measurement. These relationships are not specific ones which can be measured but tail off into an indefinite potentiality which cannot be reduced to any rational dimension.

2. Completely different from the above is the method of *objective* research. It abandons intuitive understanding and tries to relate certain well-defined body-shapes and character traits. This is done simply by counting the *frequency* of simultaneous occurrences. The aim is not to find any essential connection, nor is any found; nothing comes to light as a psychic phenomenon but there is only *statistical correlation*. Even if only a few empirical cases of body-build fail to be associated with the expected psychic type or are associated with another or opposite type, this will exclude any important, necessary relationship between body-build and character or at any rate makes it questionable. Statistical correlations such as these only throw up the question, they do not give us any information about the nature of the relationship.

It seems in fact to be extremely difficult to find an exact correlation statistically because bodily form as well as character do not lend themselves *unequivocally to simple measurement and enumeration*. We can only see them in the form of types. But these types are not of a generic nature, and we cannot classify under them unreservedly. They do not appear in reality in pure form except very rarely and usually they are 'mixed'. We use them as a kind of 'yardstick', not as actual categories to which a case either belongs or not. Even in 'mixed' cases we cannot measure them as we can the protein content in urine and say so much of this type, so much of the other. Counting is too exact and there is nothing quantifiable. Different observers not in contact with each other are likely to come to different conclusions on the same material. However that may be, we are not dealing here with the question of physiognomy but with the kind of enquiry which asks what the relation of diabetes or Basedow's disease or tuberculosis is to dementia praecox. The only difference is that in these latter instances the relationships can be exactly numbered, and found to be either absent or present and if present to what degree. This cannot be done with the relationship between body-build and character; it cannot be exactly reckoned. Perhaps something as yet unrecognised lies behind all

this, something which gives some colour to these unproductive investigations, but even if this underlying factor could be found by the first line of approach we should not be able to make it accessible to quantitative and exact research.

These two ways of investigation which we have just described are completely heterogeneous from the point of view of method. The first way lays itself open to a wide sweep of possible interpretations through the use of bodily forms as symbols, but after a while it narrows down dangerously into preconceived categories, unequivocal assertions and banalities. The second method makes an objective study of countable factors but in the process loses the form; there is a desire to be exact and exactness is shown, but one is reduced to simple elements, endless correlations and the heaping up of findings which only end in saying nothing. The symbolic nature of the study of physiognomy calls for some exact research to confirm it, but the process of doing this annihilates itself. Simple, objective factors might well be material for the study of physiognomy, but they happen to lack any obvious symbolic significance.

In this chapter we shall confine ourselves to the first line of approach which is the only truly appropriate study of physiognomy, and we will reflect on this remarkable way of viewing bodies, heads and hands. The *judgments made in this respect* may be conceived as *threefold*:

1. *Single forms.* Single features are generally conceived as character-symptoms and we take them as 'signs' in our conclusions as to a person's nature. This is as far as the study of physiognomy usually can go; where it aspires to be a science it only becomes absurd. All statements of the sort that such a study must make are quickly contradicted by actual experience. It is also somewhat grotesque to suppose that human characteristics should manifest themselves in such crude, measurable form; in character we are dealing with structures that are highly differentiated and do not lend themselves readily to conceptual formulation.¹

2. Instead of using 'signs' as symptoms of human properties, we let ourselves experience the inward effect of significant form. We steep ourselves in the *morphological whole*. Nothing is deduced from this but we catch sight directly of something psychic which displays itself as a natural unity of head, hand and bodily form, and is seen as such by our inward eye. This can hardly stand as a scientific formulation or communication; it is more like an artistic translation, a portrait. It concerns itself with those slight, intangible deviations which can alter the whole cast of countenance, those features which cannot be

¹ *Phrenology* has a place here. The work rests on a theory of localisation of character-properties in certain cranial areas visible on the skull, from which one can see whether these characteristics are well or poorly developed. This theory, created by *Gall*, had much influence during the nineteenth century; it was unsuccessfully resurrected by *Möbius*, who made some experimental comparisons and claimed he could recognise a 'mathematical organ' in a prominence of the lateral forehead. (P. J. Möbius, *Über die Anlage zur Mathematik* (Leipzig, 1900)). See also Gustav Scheve, *Phrenologische Bilder* (Leipzig, 1874), 3rd edn. *Chiromancy* also has a place here, which deduces character traits from the hand (apart from fortune-telling). See v. Schräck-Notzing, *Handlesekunst u. Wissenschaft*. G. Kühnel, *Z. Neur.* (1932), vol. 141. F. Griese, *Die Psychologie der Arbeiterhand* (Vienna and Leipzig, 1927).

'caught' by any amount of calculation and thought, but only by the artist's eye, features that can be caricatured in the wide play of their peculiarities and eccentricities but do not alter the character essentially. It is obvious that the study of physiognomy is not a teachable science, anyhow at present; yet, thanks to the artist, we have any number of portraits, characterisations, non-conceptualised meanings, in the sphere of physiognomy.¹ So far we have an irreconcilable division between seeing a form and measuring a proportion or a quantity. In the case of crude connections measurement is more certain than our own assessment. In the case of fine morphological relationships, which matter in physiognomy, the eye is a much more sensitive and exact instrument.

3. Finally there is a *meaning* in bodily form which goes beyond the psychological meaning. This is grasped by the artist, who distorts the body-shapes according to his own inner vision, and chooses extended, thick, slanting or angular forms, without any caricature of some exaggerated psychic feature. The human form is drawn into the universal symbolism of all the forms and shapes of the world. Man is then seen as of metaphysical rather than of psychological importance. Physiognomy is of no relevance here. But the scientific problem still remains, where and how is the dividing line to be drawn between the specific symbolism of the human psyche, as revealed in the physiognomy, and the universal, metaphysical symbolism of the cosmos. It is this which casts doubt on the study of human physiognomy once it has taken the first step towards being a science with a set of communicable concepts.

An empirically valid study of physiognomy could grow only in the field described under point (2)—the symbolism of morphological wholes. Here we could try to produce a *methodical theory* and some training in the observation of the human physiognomy, or again, we could produce a *theory* of what certain physiognomic features may mean *in terms of psychic content*:

As to method, the innate ability to see meaningful form can be cultivated by the specific exercise of it, training the eye through description, by schematic illustration, by the use of carefully selected and contrasted photographs, by analysis of the work of great artists, and by instructing the student to observe living behaviour, and if possible measure it, for although numerical findings teach us little, they give good opportunity for intelligent seeing. The constant reward of this methodical approach is the factual experience of the observer, who finds he cannot have enough of this scrutiny of the human countenance. Even though his general scientific knowledge is not greatly enlarged, there is a steady broadening of his vision so far as human nature is concerned. He acquires a visual knowledge, if not a conceptual one.²

In terms of content, the significance of certain physiognomic features may be stated, some classification of basic types may be made, certain schemata of

¹ For the human face in Art, see Bulle, *Der schöne Mensch im Altertum* (München, F. Hirt, 1912), pp. 427–54 (bibliography, and in particular that concerning ancient physiognomists). Waetzoldt, *Die Kunst des Porträts* (Leipzig, 1908).

² Cp. the excellent analysis of L. F. Clauss, *Rasse und Seele*.

opposites and different dimensions may be drawn up, and every individual be classified accordingly. This systematic treatment of types of physiognomy has always been thought questionable:

Looking at the matter *historically* we find there is an extensive literature on this matter of the human physiognomy. There are ancient Indian writings, in which, for example, three types were distinguished (taking into account bone-structure, body-circumference, size of genitalia, hair and voice). These were expressed as animal types, the Hare, the Ox and the Horse. In ancient times such problems were also discussed in Europe.¹ A comparison of human and animal types always has something impressive about it which goes beyond the mere joke, but it is difficult to say anything serious about it. *In the eighteenth century* educated people were much preoccupied with the question of physiognomy,² and it became fashionable. Lichtenberg analysed the subject critically but did not refrain from dabbling in it himself.³ Hegel endeavoured to grasp and settle it once and for all.⁴ It was always tempting to advance the solid, comprehensible elements, i.e. human physiognomy understood as 'frozen' gesture, and to remain satisfied with this.

However, in the cultural world of *the romantics*, C. G. Carus⁵ once more developed a learned and systematic theory of human physiognomy, which can be recommended for its careful comparative method to anyone interested in this subject. Carus wished 'to see and understand the whole world as a symbol of God, and man as a symbol of God's idea of the soul'. His symbolic system, therefore, draws into its context the whole cosmos as well as the fields of morphology and physiology. For him the symbolism is visible but not comparable; it is something direct that cannot be mediated. Carus studies 'the outcome of the creative acts of idea, the organisation and in particular the external appearance of the individual as a whole'. From this we need must arrive at a clearer understanding of his inner psychic being and character. The moment of vision is conclusive, 'it is the capacity to discover the kernel in the husk, the nature of the psychic idea in the symbol of the form'. Carus wanted to turn this unconscious vision into a science and a practical art; he wanted to know what were the *basic principles* which could be applied to countless individuals, and what *practical skill* was needed to apply the principles in the individual case. In this general discussion, there is something most suggestive, which somehow confirms our own vague and imprecise experience, but when he tries to conceptualise this into a science, he meets the same fate as others in the field. When he comes to particulars, he ceases to be convincing. He tries measurement (organoscopy), describes body-surface according to its individual modelling (physiognomy), observes changes in form during the course of life (pathognomy). He draws into his net every scientific finding and anything that appears possible material from the physiognomic point of view. Thus he accumulates a wealth of data and tries always to keep the whole in view while he attends to the smallest detail. To him is due the creation of the first and up to now the only basic 'scientific' system for the study of physiognomy.

¹ See the literature quoted by Bulle.

² Lavater, *Physiognomische Fragmente* (Leipzig, 1775). Goethe, *Cottasche Jubiläumsausgabe*, 33, pp. 20 ff. Klages, *Graphologische Monatshefte* (1901), vol. 5, pp. 91–9.

³ Lichtenberg, *Über Physiognomik wider die Physiognomen* (Göttingen, 1778).

⁴ Hegel, *Phänomenologie des Geistes* (Ausgabe Lassons, pp. 203 ff.)

⁵ C. G. Carus, *Symbolik der menschlichen Gestalt* (Leipzig, 1853).

At present there seems no attempt to study physiognomy which would allow comparison with these older attempts in the degree of their thoroughness, wealth of material and general depth of human understanding. Yet it is the fashion to talk about the physiognomy of things. Nowadays we look and interpret where we used to explain and comprehend or else scrutinise and question. In this way, many remarkable notions creep in which, though they teach us nothing specific, do not leave us totally unmoved.¹

If we have grasped what has been said above about the methods and history of the study of physiognomy, we may still be doubtful whether scientific research can replace intuition with any definite findings, but we are not on that account prepared to ignore this whole field and let the subject drop. Even if exact knowledge is not possible, such studies are an education of our sensibility for form. Our responsiveness to form and shape is increased and cultivated through the presentation of forms as concrete, observable wholes, which we can fully accept without according them the status of empirical facts of general application. They create for us rather an 'atmosphere' without which we would be the poorer when we come to study our psychiatric realities. The artistic approach offers us something incomparable, but the psychiatrist on his side can always try to represent the forms he sees as 'types'. This has been done and we are impressed, though not by the theory, only by the 'art', which enriches our mode of observation but does not tell us what to think.

i. One such attempt was the once-famous '*theory of degeneration*'. It was supposed that in the morphological deviations of bodily form one could detect the degenerate nature of an individual (signs of degeneration, stigmata degenerationis). His character, his tendency to neurotic and mental illness, and in particular his criminal predispositions, were also revealed.

These morphological abnormalities were, for example: Bodily proportions that deviated markedly from average, e.g. too long legs in relation to the trunk; peculiar head-formation, like turret-skull; deviant bone-formation, e.g. too small chin, extreme smallness of the mastoid bone; dental malformation; high palate; malformations such as harelip; excessive or absent body-hair; special hairy moles; shape of the nose and ears (to which much attention was paid); attached ear-lobes, big and protruding ears, prominence of the Darwinian ear-fold, mobility of the ears.

This theory of degeneration tried to look into the deep substratum of life from which psychic and somatic phenomena simultaneously spring. The psychic degeneration—as shown in personality disorders (psychopathies), psychoses and mental defect—was also supposed to declare itself in the appropriate bodily deviations. This theory held something intuitively plausible for contemporary thought. But once it tried to make a scientific

¹ Rudolf Kassner, *Die Grundlage der Physiognomik* (Leipzig, 1922), an essay which deals with human physiognomy and certain experiences in an unmethodical way and reflects on the philosophical interpretations of the impressions.

theory out of this intuitive grasp of the human shape, it was applicable only within extremely narrow limits.

If we are going to talk of abnormal familial deviations (without thinking of progressive degeneration) we have to conceive of certain constitutions, which occur familiarly, and give these families a distinctive character which is recognisable sometimes through quite slight indications.¹ In such cases the signs of degeneration are connected with anomalies of the nervous system or other organ-systems. They are the result of faulty development and group themselves together in typical syndromes of morphological and functional signs (e.g. trembling, deafness). The most significant example is *status dysraphicus*.

It has often been emphasised that we frequently find stigmata such as these in healthy people and many severe psychic abnormalities are found without them yet this theory has had historical importance and however critically it is reviewed it still has a certain validity. We may reject it scientifically but we cannot be talked out of it completely. We cannot draw any practical consequences from it but we are unable to be wholly indifferent to the forms described. Degeneration is a concept which, if one wants to get hold of it firmly in relation to the empirical facts, melts away in one's grip. It seems to want to say something about the ultimate springs of life but fails to do so. It can however do one thing. It can keep interest and enquiry alive and supply us with a term for something which we see intuitively but for which no adequate theory is as yet forthcoming. In addition it means from the start that we abandon the study of physiognomy proper and treat the signs of degeneration as symptoms, thus exchanging the scrutiny of the human physiognomy for a naturalistic pseudo-science. Symbolism vanishes but the particular relationship of symptom to degenerative disease with which one is left cannot be taken as a medical fact and must definitely be disputed.²

2. Kretschmer³ tried to relate body-build to psychic properties. His theory is a comparable one in its methods but very different in content. He distinguishes the dysplastic types, which occur in relatively few people and then three main body-builds: leptosome (asthenic), athletic and pyknic. The following are the main cues given by his descriptions:

(a) *Leptosome*: little increase in girth with undiminished growth in length, slender, lanky people; narrow shoulders, narrow flat chests; sharp costal angle, receding face owing to insufficient development of the chin, similarly a receding forehead, resulting in an angular profile, with the tip of the nose as the vertex; nose excessively long.

Associated with the above is a schizothymic character: corresponding to the thin, angular, sharp-nosed body we find an angular, cold, edgy nature.

¹ F. Curtius, 'Über Degenerationszeichen', *Eugen. usw.*, vol. 3 (1953), p. 25.

² Lombroso, *Die Ursachen u. Bekämpfung des Verbrechens* (D) (Berlin, 1912). Baer, 'Über jugendliche Mörder', *Arch. Kriminalanthrop.*, vol. 11 (1913), p. 160.

³ Kretschmer, *Körperbau u. Charakter* (Berlin, 1921), 1940 edn., pp. 13, 14. Kretschmer and Enke, *Die Persönlichkeit der Athletiker* (Leipzig, 1936).

(b) *Pyknic*: squat figure, soft, broad countenance on a short, thick neck, tendency to put on fat; deep, round chest, fat belly, slenderly built motor-apparatus (shoulder-girdle and extremities), skull large, round, broad and deep but not high; well-modelled contours, harmonious proportions.

Associated with the above is the cyclothymic or syntonic character; a well-rounded, natural, open nature. Corresponding to the body-build, we find a balanced, warm-hearted, accommodating character; they are people who are active in their environment, frank and sociable, either on the serious side or rather cheerful.

(c) *Athletic*: broad, wide shoulders; a tall figure; strong bone-development; strong muscles; thick skin; heavy bony structure; large hands and feet; high forehead; massive, high-vaulted head; strong, protruding chin; facial circumference—elongated egg-shape; broad cheek bones and prominent supra-orbital ridges. The facial skull protrudes in comparison with the cranium.

Associated with the above is a quiet, reflective nature to the extent of being cumbersome and clumsy. There is a poverty of responsiveness, and due to this the person appears very stable and his reactions massive. There is a dislike of movement, they are sparing of speech, and there is an absence of lightness and flexibility; this leads to what has been called the 'viscous' temperament. 'A spirit of heaviness lies over everything.'

Kretschmer's theory of the connection between body-build and character is only one section of a much more comprehensive conception of man as a whole, which will be discussed later on in this book (p. 641). Here we need say only one thing: These types are intuitively perceived forms, which enrich and clarify our seeing in the same way as Art does, but not as a concept would. We feel that we can see in the body-build—as we saw the psychic deviation in the morphological degeneration—a certain type of character which has been most vividly described by Kretschmer. But this enrichment of our vision does not have any empirical significance and does not allow us to draw any conclusions. A single, well-defined case can empirically contradict any general validity it may seem to have, yet if we take the theory on its own terms it is not one which we would repudiate completely.

Kretschmer's book begins as follows: 'People think of the devil as thin, with a pointed beard. Fat devils have an admixture of good-natured stupidity. A conspirator is hunchbacked and coughs behind his hand. The old witch has a thin and bird-like face. Where there is wine and merriment, who is there but the fat knight, Falstaff, with his red nose and gleaming pate! The woman of the people with her sound commonsense, stands hand on hip, sturdy and round as a ball. Saints look emaciated; they are long-limbed, pale and gothic. In short: virtue and the devil should have a sharp nose; humour a broad one.' He then takes as his motto for all this, Caesar's remarks to Cassius:

'Let me have men about me that are fat;
Sleekheaded men and such as sleep o' nights;
Yond' Cassius has a lean and hungry look;
He thinks too much; such men are dangerous . . .
Would he were fatter! . . .'

Conrad comments on the unsurpassed description which then follows of leptosome and pyknic body-build and schizothyme and cyclothyme personalities. He says quite rightly—underlining what is unscientific, particularly from the point of view of the natural sciences—‘Any attempt to improve on the picture would only distort and spoil it, like touching up the painting of one of the Old Masters.’ Max Schmidt expresses his enthusiasm also by saying, ‘Kretschmer has given an almost inspired description of the two types. If one thinks of all the different schizophrenic and manic-depressive patients whom one has encountered in the past, and lets them pass through one’s mind, they will fall quite effortlessly into these two types.’ In Denmark—so the Danish author writes—we find two historic cases, Christian VII and Grundvig: ‘These two personalities might well stand as a symbol for the two characteristic types of psychosis. Christian VII, the small, slender, asthenic leptosome, degenerate in colour and schizophrenic; Grundtvig, the large, broad, corpulent and pyknic cyclothyme.’

Indeed the descriptions affect us like *a work of art* and the impact is one of direct conviction. The achievement lies in the compelling force that makes the reader see with Kretschmer’s eyes. But it is precisely this which poses the question: *exactly what does this truthfulness mean?*

Can we say with Conrad: ‘We may be sure no fruity, comfortable or cheerful soul inhabits that lean, lanky and narrow-chested body, nor is there a dry, prim, sentimental soul in that fat, stubby-limbed and capacious frame.’? I do not think so. Such certainty belongs to intuition, to the study of physiognomy and to this extent no further investigation is needed. But empirically it is far from certain and there are constant contradictions by the individual case.

There have therefore been those who were not satisfied with direct, intuitive insights of this sort. Instead *they have counted* how often character-type and body-build coincide in this way. Mere *correlation* appears in the place of an *essential connection*. But this means we embark on a radically different course. Correlations can exist between phenomena which have no observable or essential relationship to each other. When we find correlations, the next question is ‘why?’ The unity of the human physiognomy cannot provide a cause, because its nature is not causal; it is a plasticity that we somehow understand. In the second place, if it were the cause, no exceptions must be found in the coincidence of the effects. The method of seeking correlations gives rise to a type of knowledge quite distinct from that gleaned from the study of human physiognomy.

The *paradox* remains: We know practically nothing, yet it is in the nature of the drive for knowledge to try and find some satisfactory shapes and forms even where there is no exact knowledge, on which judgment may be based; there is the urge at least to see. Anyone so engaged has to travel far before he can predict or schematise his findings. Lichtenberg said long ago: ‘I have always found that those who expected most from the study of physiognomy, which is a practical art, were those with a limited knowledge of the world. People of wide knowledge are the best students of physiognomy and expect most of the rules to be broken.’ ‘The study of physiognomy, next to prophecy,

is the most deceiving of all human arts that have ever been concocted by our extravagant minds.'

§ 2. INVOLUNTARY GESTURE (MIMIK)

The study of physiognomy concerns itself with *established bodily form* as a distinguishing characteristic of the psyche. The study of involuntary gesture deals with *bodily movement* as a manifestation of psychic life. In the study of physiognomy there is no principle which makes the connection between body and psyche understandable, and which could serve us methodically as a reliable criterion. In the study of involuntary gesture, however, such principles do exist. It is here and not in the study of physiognomy that we stand on the firm ground of insights that can be discussed.

(a) Types of bodily movement

We have to make some distinctions in order to visualise clearly what is meant by involuntary gesture. We must first exclude those phenomena which we discussed earlier on, the *accompaniments and sequelae* of psychic processes, such as blushing, blanching, shaking at the knees, tremor, paralytic rigidity of the face in acute fear, etc. These are movements which we do not directly 'understand' but only link with psychic events through experience, without any inner glimpse of the psyche.

In the second place, we must distinguish *voluntary movements* from involuntary gesture. Voluntary movements have an intended goal, while the expressive movements of involuntary gesture are unintentional. Voluntary movements include gesticulations, signs and indications (e.g. shaking of the head, nodding, waving) which by convention say something (though the convention differs in different cultures). The movements are related to speech as an incomplete means of communication. Involuntary gesture proper, however, has got no intention and does not consciously want to communicate: it is a universal human form of utterance, understood in part even by animals, so it seems.

Movements of involuntary gesture: for instance, a cheerful expression of face, or a tense or sorrowful one, etc. These are involuntary and unintentional. All voluntary movements, however, have an aspect of involuntary gesture, none is quite like the other even if the same end is in view; they vary in the individual and according to the emotional state. The way someone looks at me, gives me his hand, the way he walks, the timbre of his voice, it is all involuntary expression; it contains a self-revealing, unintentional content alongside the one that is purposely intended.

Among involuntary gestures, we may further distinguish the following:

1. There are infinite nuances, a wealth of self-revealing movements, which *constantly accompany psychic events* and make them visible in the person's expression. They are transparently clear to others, and can be understood as the ceaseless play

of a secret, sensitive resonance in the features, look and voice. To some extent these phenomena are common to man and animals.

2. *Laughing and crying*¹ are in a class apart. They are reactions to a human crisis; small, somatic catastrophes in which the body, being so to speak at a loss, becomes disorganised. But the disorganisation is still symbolic—symbolism is present in all gesture—yet here the situation is not transparently clear to others because both responses are marginal. Laughing and crying are exclusively human, they are not shared by any animal, but for the human race they are universal.

3. There are certain movements which are *marginal as between movements of expression and somatic accompaniments*. In spite of their reflex character, they seem to have an element of expressiveness: yawning, stretching the limbs when tired. Animals share these movements too.

4. All movement can merge into *rhythmic* repetition. Klages² has dealt with the subject of the nature and universal significance of rhythm.

(b) *Understanding involuntary gesture—general principles*

It lies outside our experience to say whether or not the morphological processes that freeze into the forms of human physiognomy have sprung from psychic impulses. On the other hand, however, it is our continual experience that bodily movements are linked with the psyche, with its mood, purposes and essential nature. The understanding of the movements of gesture has therefore a good basis which can be tested and communicated. This relationship between the psyche and that movement which is its 'expression' has been *reduced to certain principles*. These can render our immediate interpretations conscious, control them, relate them and finally expand them. The principles of expression have been recognised and formulated by eminent investigators.³ They hold for all kinds of movement, voluntary and involuntary, self-revealing gestures of face, gait and posture and handwriting as the record of such movement. There are two main principles:

1. Every inner activity is accompanied by a movement which is an understandable symbol for it. Bitter feelings, for instance, reveal themselves involuntarily by movements connected with having a bitter taste in the mouth. Keen thinking goes with a firm, fixed gaze directed to the near-distance as if some object stood there. With involuntary gesture the person is not aware himself of the symbolisation, and the observer, directly perceiving the bitterness or the keen attention, does not know either in the first instance how he came to perceive it. Here we see a direct manifestation of the psyche. These symbolic processes have been investigated in great detail; Piderit has studied gesture, Klages uses a wider context and in the case of handwriting goes into the matter more minutely.

¹ Plessner, *Lachen u. Weinen* (Arnheim, 1941).

² L. Klages, *Vom Wesen des Rhythmus*. Pallat and Hilker, *Künstlerische Körperschulung* (Breslau, 1923, reprinted, Kampen and Sylt, 1933).

³ Piderit, *Grundzüge der Mimik u. Physiognomik* (Braunschweig, 1868). *Mimik u. Physiognomik* (Detmold, 1867), 3rd edn., 1919. Klages, *Ausdrucksbewegung u. Gestaltungskraft* (Leipzig, 1936). Darwin, *Der Ausdruck der Gemütsbewegungen bei Menschen u. Tieren* (1872). Hendel's

2. Movements are influenced by the personality which selects unwittingly their mode and form according to what 'suits' it, what it feels is fine, fitting, stylish, sound or desirable in some way. There is a drive for this *self-presentation* which uses '*key-symbols of the personality*' in shaping all involuntary gestures. Natural direct expressiveness then gets moulded by a more conscious expression, of which the person is himself aware. Klages was the first to grasp this—particularly in the case of handwriting—and noted the way in which complex personal and social ideals take on expressive shape.

3. Frequently repeated movements of gesture leave certain traces in the body, particularly in the face. The study of physiognomy, so far as it understands the traces of gesture, establishes certain forms of '*frozen*' gesture and so may be seen as part of the study of gesture, the only area in the whole study of physiognomy that has some empirical basis for further exploration.¹

(c) *Psychopathological observations*

1. We have only occasional, unsystematic descriptions of patients' involuntary gestures and the fixed forms of expression that arise from them. Here are a few, haphazard examples:²

The passion for movement of manic patients, who make aimless movements for the sheer sake of moving, out of 'delight' in it as such, and the drive to give vent to exuberant excitement; *pressure of movement in anxious patients* who are always seeking peace and respite, always trying to get rid of something, and run to and fro in desperation, push against walls and gesticulate monotonously.

The indestructibly exuberant features of manic patients, exactly like those of natural delight; the unnatural, silly, exaggerated jollity of *hebephrenics*, the painful dejectedness of cyclothymes appearing as a slight indication at the corners of the mouth and eyes; the profoundly downcast, passively resigned expression of the severe depression which turns into chronic *melancholia*; the cold, apparently empty expression of mute melancholics (even when the patients can talk about their distress it is not quite convincing); the distracted features and excited despair in the alarming anxiety of agitated melancholia.

The dream-like, absentminded expression of certain patients with *clouded consciousness*, who seem to be revelling in a number of imaginary experiences; the empty expression of many *hysterical twilight states*, which can change so easily into expressions of fright or worry or an ungenuine astonishment.

The empty, expressionless face of many *demented* patients, who sit around like human vegetables with a fixed expression (sometimes perpetually smiling, sometimes defiant, sometimes dull, sometimes tormented); *paranoid* patients who stalk about, dignified and grave, full of stoic calm and contempt; the sharp, piercing look of the paranoid woman; her suspicious, mistrustful, testing and dogged countenance; the sudden glance shot by some stuporous catatonics.

Bibliothek—phylogenetic viewpoint; he confuses expression proper with somatic accompaniments. Bühler, *Ausdrucktheorie* (Jena, 1933). Lersch, *Gesicht u. Seele* (München, 1932). Fischer, *Ausdruck der Persönlichkeit* (Leipzig, 1934). Strehle, *Analyse des Gebarens* (Berlin, 1935).

¹ F. Lange, *Die Sprache des menschlichen Antlitzes, eine wissenschaftliche Physiognomik* (München, 1937).

² Oppenheim, *Allg. Z. Psychiatr.*, vol. 40, p. 840. Th. Kirchhoff, *Der Gesichtsausdruck beim Gesunden u. beim Geisteskranken* (Berlin, J. Springer, 1922).

The shifting, soft, melting expression, the swimming eyes of *hysterics*, their flirtatious, half-conscious, highly exaggerated looks.

The inconstant features and restless eyes of *neurasthenics*. The torn, tormented look of some *early hebephrenics* behind which surprisingly little psychic content is to be found.

The loutish look of the ineducable, the brutal, animal expression of true moral insanity; 'the sad eyes of the trapped animal' which Heyer noted in the childish, retarded inmates of his institution.

Homburger described many of the 'motor forms of expression'.¹ Heyer described the state of certain personality disorders (psychopaths)—'hard, tight individuals, every movement well controlled, nothing soft, supple, biddable or easy about them; the whole bearing boardlike'.

Besides observations on bearing and movement as significant psychic expression, attention has also been paid to the way in which expression in its turn affects the psyche. Stance and posture are accompanied by an inner posture and atmosphere. Hence the possible significance for the psychic state² of physical exercise and physical culture. We have a particular case of this in the body posture during sleep.³ 'Everyone has his sleep ritual or likes to ensure certain conditions without which he cannot sleep' (Freud).

2. *Laughing and crying* are of special interest. This phenomenon can occur as a physical compulsion in cases of bulbar paralysis. There is no psychic motivation. Schizophrenics are often seen to laugh; melancholics are tearless; depressives may sob loudly but get no relief.

3. *Yawning*⁴ is a complex movement which occurs involuntarily and seems akin to stretching. It occurs spontaneously on waking, during fatigue and boredom. It seems a purely physical event but under certain conditions can be an expressive movement. Landauer⁵ takes stretching as purely physiological but has no evidence for this. We can think of a series of such reflexes including sneezing which never become expressive movements in this way.

4. For a long time attention has been directed to the *rhythmic movements* and *stereotypies* of mental patients. Comparisons have been drawn between the *rhythmic movements* of idiots and demented patients and the circling movements of wild animals in captivity. But so far no real analysis has been made.⁶ Kläsi⁷ has defined *stereotypies* as 'manifestations which are repeated over a long period always in the same form. They are separated off from the person's total activity; that is, they are automatic and neither express a mood nor are they at all appropriate to any objective purpose.' They are diverse in *origin* and meaning. They may be remnants of once meaningful movements or may spring

¹ Bumke's *Handbuch der Geisteskrankheiten* (1932). Also *Z. Neur.*, vol. 78 (1922), p. 562; and vol. 85 (1923), p. 274.

² J. Faust, *Aktive Entspannungsbehandlung*, 2nd edn. (Stuttgart, 1938).

³ H. Thorner, *Nervenarzt*, vol. 4 (1931), p. 197.

⁴ E. Levy, *Z. Neur.*, vol. 72, p. 161.

⁵ Landauer, *Z. Neur.*, vol. 58, p. 296.

⁶ Cp. Fausser, *Allg. Z. Psychiatr.*, vol. 62 (1905).

⁷ Kläsi, *Über die Bedeutung u. Entstehung der Stereotypien* (Berlin, Karger, 1922).

from a delusional world; they may be rituals, movements of defence against bodily hallucinations, and so on.

Since Klages the concept of rhythm has taken on a definite and narrower meaning in contrast to 'beat'. Rhythm is living, infinitely variable expression; beat is mechanical, arbitrary repetition. Langelüddeke¹ has investigated schizophrenics, manic-depressives and patients suffering from Parkinsonism and has taken Klages' point of view.

§ 3. HANDWRITING

Handwriting is particularly suitable for the investigation of movements of expression because it is a fixed form and can thus be more thoroughly examined. Simulation usually plays little part. In the majority of people there is a great deal of play-acting in their other expressive movements, from movements of embarrassment (scratching the head, twiddling buttons) which like certain laughter is intended to cover up something, right up to gestures confirmed by constant exercise and habit. These have no special meaning but surround the person with a wall of conventional expression behind which the real self hides. In handwriting, however, we see much less of this. The disadvantage is that valuable results can only be obtained when the handwriting is well established and to some extent formed. It would take us too far afield if we were to discuss the details of graphological understanding in respect of character, temperament and mood, and the regular changes that take place under different affects, during personality development, in abnormal mental states and under different experimental conditions.²

As with all understandable phenomena that can only be understood as a whole, every individual feature of the writing has such complex relationships and possibilities that only a most thorough and detailed examination will give us anything like a clear picture. The essay of Klages³ shows us how even the pressure used in writing can lead us on to the psychology of the whole personality, provided we regard the effort as a movement of expression. The older method of interpreting certain special 'signs' in the handwriting has been completely discarded.

The writing of *mental patients*⁴ has been investigated chiefly from the

¹ A. Langelüddeke, 'Rhythmus u. Takt', *Z. Neur.*, vol. 113 (1928), p. 1.

² Klages, *Die Probleme der Graphologie* (Leipzig, 1910); *Handschrift u. Charakter*, 2nd edn. (Leipzig, 1920); *Graphologischen Monatshefte* (München, 1897–1908); and *Graphologische Praxis* (München, 1901–8). Preyer, *Zur Psychologie des Schreibens* (Hamburg, 1895, 1912). G. Meyer, *Die wissenschaftlichen Grundlagen der Graphologie* (Jena, 1901). R. Saudek, *Wissenschaftliche Graphologie* (München, 1926); *Experimentelle Graphologie* (Berlin, 1929).

³ Klages, *Zur Theorie des Schreibdrucks*, Graphol. M. 6 and 7.

⁴ Köster, *Die Schrift bei Geisteskranken* (Leipzig, 1903). Erlenmeyer, *Die Schrift* (1897). Goldscheider, *Arch. Psychiatr.* (D), vol. 24. Kraepelin's *Psychologische Arbeiten*. Lomer, 'Manisch-depressives Irresein', *Z. Neur.*, vol. 20, p. 447. *Arch. Psychiatr.* (D), vol. 53, p. 1. *Allg. Z. Psy.*, vol. 71, p. 195. Schönfeld and Menzel, *Tuberkulose, Charakter u. Handschrift* (Brünn, Prague, Leipzig, 1934). Jakoby, *Handschrift u. Sexualität* (Berlin, 1932). Unger, 'Geisteskrankheit u. Handschrift', *Z. Neur.*, vol. 152 (1935), p. 569.

point of view of neurological disturbances. It has also been investigated from the point of view of content, but hardly at all as a form of psychic expression. *Paralytic handwriting* has been described a long time ago: we get omissions, reduplication of letters, mistakes of meaning, tremor and ataxic phenomena in moving the pen. Certain *dementing processes* show themselves strikingly in the handwriting: repetition of the same word or letter in an otherwise orderly script, fantastic flourishes and ornamentation of a manneristic and stereotyped kind. In many *organic dements* the writing finally disintegrates into a completely unformed scribble. Disturbances such as *agraphia* are analogous to aphasia: otherwise healthy patients can no longer read words or write them or can do neither. They write meaningless letters and syllables, in the same way as patients with sensory aphasia speak paraphasically. In *manic* and in *depressive* states the writing shows typical changes in size, pressure and form (G. Meyer, Lomer).

SECTION TWO

THE INDIVIDUAL'S PERSONAL WORLD

(PSYCHOLOGY OF THE PERSONAL WORLD—WELTPSYCHOLOGIE)

We contrast the phenomena of expression with those other meaningful objective psychic phenomena in all of which there is a meaning conceived, intended or carried out by the individual himself. The meaning has to be understood before the psyche is understood. In this sense we understand the objective meaning, the rational content, the intended purpose and the aesthetic vision in the sense-data of speech, written words and behaviour. Just as the precondition for seeing anything at all is a sensitive capacity for the perception of movement and form plus a certain trustworthiness of impression, so there is a precondition for understanding the meaning of these objective mental products whenever they occur. The precondition is a broad understanding of the world of the mind and a wide experience. To acquire broad understanding is only the first step; *having taken it*, we can proceed to comprehend meaning directly as essentially the expression of an individual psyche. The same problems are encountered here as we met when considering the psychology of expression.

We divide these objectified meanings into *action in the world* and *pure mental creation*. To obtain clear concepts we must now describe action and creation in a methodical manner, just as we described handwriting, movement and bodily form. The more fundamental the content, the more we have to leave the everyday world of common sense and look for appropriate scientific concepts and an appropriate methodology (e.g. linguistics, aesthetics, the humanities, etc.). But up to now psychopathology has confined itself only to the simplest objective manifestations of this sort,

All these objectified meanings have an aspect which we can understand as an involuntary expression of the psyche, something which we could call their particular tone, melodic line, style or atmosphere. To this extent *everything may be said to be mere expression* and therefore—as language itself indicates—have a ‘physiognomy’ in the widest sense. Goethe interested himself in Lavater’s study of physiognomy. He enlarged the meaning to include the entire range of human phenomena:

The study of physiognomy ‘deduces the inner from the outer’ but what is the ‘outer’ in Man? Surely not just his naked form, his unintended gestures which denote the forces within him and their interplay? A host of things modifies and shrouds him: his social status, his habits, his possessions and his clothes! It would seem extremely difficult, if not impossible, to penetrate all these different layers into his innermost self, even find some fixed point among all these unknown quantities. But we need not despair . . . he is not only affected by all that envelops him; he too takes effect on all this and so on himself and, as he is modified, so he modifies all that is around him. Clothes and furniture help us to deduce a man’s character. Nature forms man, man naturally transforms himself. Set in the vast universe, he builds his own small world within it, makes his own fences and walls, and furnishes everything after his own image. His social status and circumstances may well determine his surroundings but the way in which he lets himself be determined is of the greatest significance. He may furnish his world indifferently, as others of his kind, because this is how he finds it. Indifference may grow into neglect. But he may also show eagerness and energy, he may go on to higher levels or (which is not so common) take a step back. It will not be held against me, I hope, that I try in this way to enlarge the field of physiognomic study.

This organic, comprehensive view of human beings and of the way in which they behave in their own world supplies the background for every individual analysis. For this we must first differentiate our concepts as follows: taking the *individual findings* one by one, we can distinguish *behaviour*, in the form of attitude and gesture, how a man presents himself to himself and others; *the way he has shaped his environment*—his choice of clothing, dwelling and his physical environment; *the whole way he lives*—how he acts, the paths he selects, the entirety of his behaviour, of the environment he has shaped, and of his usual repetitive, everyday conduct; *overt deliberate actions*, which represent specific volitional acts, deliberately designed for effect, with full awareness of all that they imply.

These individual findings will bring us at last to some conception of the patient’s world, a conception of what he actually experiences as his reality. We can grasp directly the transformation that has taken place, a transformation that affects his world and his way of living in that world; that is, we can grasp the whole new configuration of this patient’s world, the only thing that gives lucidity and meaning to the individual phenomena as they appear.

§ I. ANALYSIS OF CONDUCT

(a) Behaviour

Behaviour, especially in the minor things of everyday life, may be interpreted as a symptom of personality or of an emotional attitude, but usually such interpretation is not elaborated as it tends to be rather vague and indefinite. We describe the patients' 'habitus' instead and try to depict the behaviour. Behaviour as such is not particularly valuable as an objective symptom but in studying it we get a clue from the *idea of possible interpretation*.

Individual pieces of behaviour are easy enough to name: e.g. nail-biting, destructiveness (tearing up linen), etc. In the old texts we find descriptions of how patients behave when they get together on their own, at home, at work, out of doors, indoors and we find classifications such as: sociable, solitary, restless, immobile, pacing about, the collector, etc.

The description of the many odd kinds of behaviour met with in chronic states and acute psychoses is a task which falls to special psychiatry. What we need, therefore, is to find some *typical behaviour complexes* rather than strings of separate features. The following are a few examples:

Catatonic, and also hebephrenic, behaviour¹ is characterised by a dramatic quality and theatrical posing. Patients declaim and recite with vivid and absurd gesticulation. Trivialities are announced in a lofty manner as if the highest interest of mankind were concerned. A displaced preference for serious matters shows itself in a mannered, stereotyped fashion. Bearing and clothing become odd and strange. The prophet lets his hair grow and assumes the appearance of an ascetic.

Hebephrenic behaviour is illustrated by the following letter, written by a patient who was perfectly conscious and well oriented, after he had escaped from his father during a walk outside the hospital, though he had been quickly caught again. 'Dearest Dad . . . it was a pity you did not understand me . . . I am really not at all ill . . . you should have walked. I am now back in hospital because of your galloping after me . . . I hope you realise there is nothing wrong with me . . . you will understand I have to go back to my piano studies. I asked you again, please forgive me, chasing after me made you a little heated . . . don't be angry with me over this, greeting to you all, most sincerely your self-reproachful, because he couldn't—can't, can't couldn't (latest word!) escape from the hospital, Karl. Fetch me soon.'

During the examination of patients who consciously or unconsciously want to conceal something, there is often a very characteristic '*talking round the point*'. A patient when asked about his hallucinations, which he previously had disclosed, said: 'All the time one lives one hears voices; its only too easy for one to get the wrong idea; the expression "one hears voices" is really a legal phrase. In the beginning I did hear something, but after I had been in this hospital for half a year I got convinced that there could be no question of hearing voices in the popular sense

¹ Kahlbaum, *Die Katatonie* (Berlin, 1874), pp. 31 ff. Hecker, 'Die Hebephrenie', *Virchows Arch.*, vol. 52.

of the word.' General remarks sometimes are all that one gets to hear: 'That not so much' . . . 'I can't say for certain . . .' 'I would like to tell you, something is not quite right . . .' . . . 'My enemy . . .' people say so . . .' 'I'll tell you, if I have to be so . . .'

In acute states we see any number of mannerisms and grimacings. Patients behave quite incomprehensibly (though sometimes the motive appears when later on some self-description is given). One patient may solemnly kiss the earth, again and again; others devote themselves to a military drill; others clench their fists, beat wildly on walls or furniture, assume strange postures.

At the start of a psychosis behaviour often shows restlessness, haste, irresponsibility. There is an apparent lack of feeling for everything, which is suddenly interrupted by an outbreak of strong feeling; uncertain, puzzled questions are asked of everyone, an exaggerated attraction or repulsion is shown to relatives; there are sudden, unexpected actions, journeys, long walks in the night. It is as if the adolescent years have returned. AtTRACTIONS AND INTERESTS CHANGE RAPIDLY. Patients become devout, become indifferent to erotic interests or inhibited. They seem only interested in themselves and engrossed in themselves. People close to them notice their expression has changed, it is no longer natural. At first it is uncanny to see these subtle changes, the smile becoming more of a grin, etc.

The behaviour of the cheerful, excited (manic) patient and the sad, retarded (depressed) patient is directly self-evident.

In some reactive hysterical psychoses, *childish behaviour* is particularly characteristic. Patients behave as if they had become children again ('retour à l'enfance' —Janet). They cannot count, make gross mistakes, move helplessly like infants, put naïve questions, show their feelings like children, and generally give a 'silly' effect. They do not seem to know how to do anything, like to be spoiled and nursed, make childish boasts: 'I can drink such a big glass of beer, I can drink 70–80 glasses . . .' Such behaviour is an essential part of the Ganser-syndrome.

An example of *paralytic behaviour*: A capable and respectable business man in Vienna leaves his job when 33 years of age. A few days after that he is in Munich and steals a wallet with 60 Marks in it from his room-mate, as well as a watch and a waistcoat. Next day he buys a motor-bike for 860 Marks, and pays for it with a 1000-mark note. He has several such notes as well as a purse with 250 pfennig pieces. He does not know how to ride the bike and pushes it. Next day he has his motor-bike repaired in Nurnberg. Meanwhile he tells everyone that he wants to go to Karlsruhe where his business is. It is noticed however that he cannot ride the bike and the firm persuade him to go to Karlsruhe by train and they will send it after him. A few days later the motor-bike is returned to them, 'addressee unknown'. In Karlsruhe meanwhile the patient has perpetrated a few thefts at his hotel. He sells some stolen shoes to a shoemaker for 3 Marks. He introduces himself as the editor of the *Badisches Landeszeitung* and says he wants to go to the States. He buys three pairs of socks, and a camera but by evening he has been arrested and taken to the mental hospital at Heidelberg. The dilapidated man has no insight, comments on his thefts, 'everyone can slip up sometime'; otherwise he adjusts to his stay in hospital, satisfied and apathetic. He can be talked into any kind of notion; memory and power of registration are very poor; he talks all kinds of nonsense all day long. Soon the physical symptoms that had been noticed immediately began to increase and a severe paralytic dementia developed.

(b) *The shape given to the environment*

Housing, clothing, and environment all feel our impact whether we are conscious of this or not, and they may be considered as the very emanation of human nature. Nowadays we see little of this in our patients. Mental hospitals do not afford much opportunity with their smooth walls, hygienic equipment and everything bare, cold, strange and impersonal. In some nursing homes, however, we see sometimes how characteristically and with what affection chronic patients will shape their environment, how they collect peculiar treasures and arrange them in strange patterns. We can also see how greatly attached some patients are to this private world of theirs and how all their happiness often depends on having possession of one small room they can call their own.

(c) *The whole way of life*

A patient's whole way of life is built up of behaviour and actions that repeat themselves endlessly. They go to make up his general conduct in regard to others, his work and his family. From the patient's life history we can often see whether we are dealing with some development of an unchanging 'Anlage' or whether everything points to an alteration in the whole conduct from a given point in time.

Our destinies depend a good deal on the details and small circumstances which we have created for ourselves but rather more perhaps than we usually care to think on the type of our personality, and great good fortune is sometimes understandable as the direct result of a person's attitude in that he has taken quick advantage of an opportunity which others have let slide. It is in this sense that we try to understand a person's fate as in part at least the direct product of himself.

(d) *Overt actions*

The mentally ill person can live outside hospital and not be primarily conspicuous for those symptoms which later strike us as important and basic features of the illness (e.g. subjective experiences). What makes him conspicuous is his *noticeable overt social conduct*. From the standpoint of psychological analysis, this is something 'peripheral', but individual actions are so striking that they often come into the centre of consideration as something ominous both for the community and the patient.

The ordinary environment always stresses the *content* of the activity and originally scientific psychiatry was no exception. *Different modes of action* were designated according to characteristic content and classified as different illnesses. Psychiatry thus built up a theory of *monomania*, which was soon discarded as it was only concerned with a description of externals; a few of the names still survive: kleptomania,¹ pyromania, dipsomania,² nymphomania, homicidal monomania, etc.

¹ G. Schmidt, *Zbl. Neurol.*, vol. 92 (1939).

² Gaupp, *Die Dipsomanie* (Jena, 1901).

Wandering, suicide, refusal of food and above all crime are the overt actions of patients that achieve most notoriety.

*Wandering*¹ is observed in paranoiacs who go from place to place hoping to escape persecution; also in demented patients who can no longer make any social adjustment but let fate drive them aimlessly up and down the country. It can also be observed in melancholic patients who will wander about in anxious distress but we come across it mostly in the form of particular states such as the so-called *fugue-states*.

Fugue-states imply wandering which begins *suddenly*, usually without any adequate understandable connection with the preceding psychic state; they do not appear as the sequelae of chronic disorder. The wandering has *no plan* and there is *no destination*. 'Fugue-states for the most part may be regarded as a morbid *reaction* of constitutionally degenerate individuals to *states of dysphoria*'. These states of dysphoria may be *autochthonous* adverse moods. Insignificant factors in the environment may however *precipitate them*. The tendency to run away may become *habitual* and it can then be precipitated by smaller and smaller stimuli' (Heilbronner).

Suicide² when due to psychosis may be the result of extreme mental anguish in melancholia, an extreme weariness of living and utter despair or, in dementias, it may spring from a sudden impulse. A half-hearted attempt at suicide is not so uncommon. The individual sees to it that some lucky chance saves him at the right moment. Most suicides, however, are not committed by the mentally ill but by people who are abnormally disposed (psychopaths). The percentage of suicide in psychotic patients as against the total number of suicides varies with different authors from 3 per cent to 66 per cent. Gruhle assumes that some 10 per cent to 20 per cent of all suicides are due to genuine psychosis. Suicide in really mentally ill people is characterised by a particular cruelty and by the tenacity with which the attempt is repeated if it miscarried in any way. Often psychosis can be recognised by this one feature alone.

In acutely ill patients we sometimes come across brutal attempts at *self-mutilation*; they gouge out their own eyes, cut off the penis, etc.³

There are a number of psychic reasons for the *refusal to eat*:⁴ conscious intention to commit suicide; total absence of appetite; disdain of food; fear of being poisoned; blocking when offered food (sometimes these patients will eat when unobserved); retardation of all psychic life to the extent of stupor. Other patients on the contrary will eat everything eatable and uneatable; everything they come across goes into their mouth; they will eat faeces, drink urine.

Sometimes patients will later give their reason for not eating: for instance, 'I have lost the feel of my body and think I have become a spirit which lives on air and love . . .' 'I don't need to eat any longer; I am waiting for paradise to feed on fruits' . . . 'Latterly food revolts me, I think it is human flesh or live animals which I can see moving' (Gruhle).

¹ Ludwig Mayer, *Der Wandertrieb*, Diss. (Würzburg, 1934). Stier, *Fahnenflucht u. unerlaubte Entfernung* (Halle, 1918). Heilbronner, 'Über Fugue u. fugueähnliche Zustände', *Jb. Psychiatr.*, vol. 23 (1903), p. 107.

² H. W. Gruhle, *Selbstmord* (Leipzig, 1940) (excellent informative review). See my *Philosophie* (1932), vol. 2, pp. 300–14, for a philosophical discussion.

³ Freymuth, *Allg. Z. Psychiatr.*, vol. 51, p. 260. Flägge, *Arch. Psychiatr. (D)*, vol. 11, p. 184.

⁴ Krüger, *Allg. Z. Psychiatr.*, vol. 69 (1912), p. 326.

The texts¹ on criminal psychology give good orientation in regard to the *crimes* committed by mental patients and people suffering from personality disorders (psychopaths).

Persecuted paranoiacs not only write to the papers, compose pamphlets, write to the Public Prosecutor, but take their own steps to murder; they not only write love-letters to famous people but will attack the supposed mistress in the street. The despairing *melancholic* kills his family as well as himself. Patients in *twilight states* may become violent as a result of sudden delusional notions or some accidental stimulus.

An especially alarming event is the *meaningless murder* committed in the *preceding or initial stages of schizophrenia*. Motivation appears lacking, the deed is carried out with an unfeeling callousness, there is no insight or regret. The person talks with an alien indifference of what he has done. These really sick people have not been recognised as such by those around them and often not by their own doctor. They consider themselves quite well but it is impossible really to understand what they have done. Only later on does diagnosis become certain.²

§ 2. TRANSFORMATION OF THE PERSONAL WORLD

Every creature and hence every man lives in a world which surrounds him (*Umwelt*), that is, the world which the subject apperceives and makes his own, which becomes active in him and on which, he in his turn, acts. The *objective setting* (*objektive Umgebung*) is all that is there for the observer even if not there for the subject who characteristically lives as if it were not there. The *picture of the world* (*Weltbild*) is that part of the surrounding world of which the individual has become conscious and which has reality for him. The surrounding world and the objective setting both include more than the world-picture does: they include all that is unconsciously present in the surroundings, all that is actually effective and existent in feeling and mood, all that is simply the objective setting and all that has taken unknown effect.

The concrete world of the individual always develops *historically*. It stands within a tradition and always exists in society and community. Therefore any inquiry into how a human being lives in the world and how different he may find it must be of an historical and social nature. We are presented with a wealth of complicated structures which we may call after the particular human manifestation prevailing at the time: e.g. man as a creature of instinct, economic man, man in power, professional man, the worker, the peasant, etc. The world which objectively exists provides the space in which the individual

¹ v. Krafft-Ebing, *Gerichtliche Psychopathologie*. Cramer, *Gerichtliche Psychiatrie*. Hoche, *Handbuch der gerichtlichen Psychiatrie*, 3rd edn. Further: *Monatsschrift für Kriminalbiologie u. Strafrechtsreform*, Bisher, 32nd edn.

² Glaser, 'Tötungsdelikt als Symptom von beginnender Schizophrenie', *Z. Neur.*, vol. 150 (1934), p. 1. K. Wilmans, 'Über Morde im Prodromalstadium der Schizophrenie', *Z. Neur.*, vol. 170 (1940), p. 583. Bürger-Prinz, *Msch. Krim.*, vol. 32 (1941), p. 149. Schottky, 'Über Brandstiftungen', *Z. Neur.*, vol. 173 (1941), p. 109.

takes his ways and byways and is the material from which he currently builds his personal world.

It is not the task of psychopathology to investigate all this but it is important for any psychopathologist to have some orientation here and be factually informed about the concrete worlds from which his patients come.

The question arises whether there may be transformations in a *psychopathological* sense, whether there are *specific 'private worlds'* in the case of psychotics and psychopaths (personality disorders). Or whether all 'abnormal' worlds are only a particular realisation of forms and components which are essentially universal and historical and have nothing to do with being sick or well. In this case it is only the mode of their realisation, and the singular way in which they are experienced, which could be called abnormal.

In every case it is most rewarding to try and grasp this abnormal world as such, whenever it may be open to our observation. Patients' conduct, actions, ways of thinking and knowing become connected meaningfully in all their detail once we have a comprehensive picture of their transformed world as a whole; then, given the over-all context, they become understandable even if the total structure has to remain incomprehensible to any form of genetic understanding.¹

Two distinctions have to be made: there is the constant metamorphosis of all human worlds through the processes of culture, the *historical manifold*, and there is an *unhistorical variety* of psychopathological possibilities. L. Binswanger reminds us that Hegel's thesis still holds: 'Individuality is its own world'. But we can investigate it either as a cultural, historical phenomenon or as a psychological or psychopathological one. Whether and when psychopathological world-pictures, in themselves unhistorical, have had any relevance for history and culture is a matter for historical research but no unequivocal answers have yet been found.

The fact of a 'personal world' is both a *subjective* and *objective* phenomenon. Just as feelings give rise to thoughts which clarify the feelings and increase them by acting back on them, so the subject's total frame of reference grows up into a world, which manifests itself subjectively in emotional atmospheres, feelings, states of mind, and objectively in opinions, mental content, ideas and symbols.

When does a 'personal world' become abnormal? The normal world is characterised by objective human ties, a mutuality in which all men meet; it is a satisfying world, a world that brings increase and makes life unfold. We can speak of an abnormal personal world: (1) if it springs from a specific type of event, which can be empirically recognised, e.g. the schizophrenic process,

¹ von Gebssel, E. Straus, von Bayer, L. Binswanger, Kunz, all make valuable contributions. Here we are dealing only with the descriptive aspect of such enquiries. What they try to achieve in the way of a 'constructive-genetic' psychology and anthropology is discussed later (p. 540). It sometimes may seem that these authors are only describing well-known findings in another way, but it is just in this fresh description that we find something essentially new, a concept of the whole that poses fresh questions.

even though the products of this world may be thoroughly positive. (2) if it divides people instead of bringing them together. (3) if it narrows down progressively, atrophies, no longer has any expanding or heightening effects; (4) if it dies away altogether, and the feeling vanishes of 'being in secure possession of spiritual and material goods, the firm ground in which the personality roots and from which it gains the heart to achieve its potentialities and enjoy its growth' (Ideler). Children who are uprooted from their own world at an early age fall prey to destructive nostalgia; so, at the beginning of psychoses, the transformation of the person's world may become an annihilating and ruinous catastrophe.

We cannot say how far this study of personal worlds will lead, we can only attempt it. Formulations of a comprehensive and general character may sound impressive but their use is limited. The chief thing is how successful can one be in presenting these concrete, private universes clearly and convincingly for purposes of observation. What sort of world is the patient's world, seen with his eyes? Here are a few reports:

(a) *The worlds of schizophrenic patients*

Schizophrenic psychic life, particularly thinking and delusion, can be analysed as a particular phenomenon of experience (experience of primary delusion) and as a disturbance of the thought-process (schizophrenic thinking). In both cases attention has to be given to the form of the disturbance. We may rightly feel that this is an advance on the old classification of delusion according to content, but we should be wrong to neglect the question of the possible components of the disturbance, the enquiry into the specific schizophrenic nature of the patient's world-formation. There is without doubt a typical and common connection between content and psychosis: delusions of catastrophe, cosmic delusions, delusions of reprieve, rather less common but still very characteristic delusions of persecution, of jealousy, of marriage, etc. One effect of the change in personality already shows itself in connection with the primary experience of delusion, namely that the content is held to with the utmost conviction. von Bayer¹ quite rightly says the schizophrenic world discloses itself in the delusion more tangibly, vividly and in greater detail than in any other of the psychopathological phenomena. He finds that the formal changes in experience and function never by themselves define the nature of the schizophrenic psychic life satisfactorily. Rather it is an established fact that schizophrenia brings with it a transformation of the *content of experience*. It is not merely chance contents of a general human kind haphazardly interpreted into meaningless structures, but primary contents themselves that constitute the character of the disturbance.

Schizophrenics, however, are not surrounded by a single schizophrenic world, but by a number of such worlds. If there were a single, uniform world-formation schizophrenics would understand each other and form their own

¹ W. v. Bayer, 'Über konformen Wahn', *Z. Neur.*, vol. 140 (1932), p. 398.

community. But we find just the opposite. They hardly ever understand each other; if anything, a healthy person understands them better. There are, however, exceptions. These should be of the greatest interest. We can in this way obtain indirectly an objective picture of a typical schizophrenic world. A community of schizophrenics is certainly almost an impossibility, since in every case it has to grow artificially and is not there naturally, as with all communities of healthy people. In acute psychoses lack of awareness excludes any communal life anyway. In the chronic end states, however, it is the individual rigidity and the pervading egocentricity of the delusion that precludes any communal life, or almost so. A number of favourable conditions have to coincide for any schizophrenic community to arise and grow. We have found that it can happen and on occasion has actually existed. This is of some importance. v. Bayer observes:

A married couple fell ill simultaneously with a schizophrenic process, and this enabled their delusions to develop in common; it spread to the children (who were healthy and in them the illness was only 'induced'). A family delusion was elaborated with a common content and common behaviour resulted. They developed common ideas as to the origin and course of the persecution directed against them; 'people talk about them, newspapers allude to them; people are sent to spy on them; some machine hums and blows evil-smelling fumes into the house, and projects magic pictures and shapes on to the ceiling'. The husband tended to have visual, the wife acoustic hallucinations. The man reported thought-withdrawal, the wife had experiences of being bound. The community-aspect lies in the content not so much in the formal aspect of the disturbances. They achieved a form of understanding in a world they knew in common, in which the individual peculiarities of the separate experiences were absorbed into the common whole: 'we are persecuted; whenever we encounter the outside world, the persecution is there'. So these patients with their children lived as a group in a world of their own and mutually afflicted. Persecution and threats continually increased in their environment, the Authorities, the Republic, the Catholics, etc., were all acting against the family. Persecution came from all directions, from the whole of the world that surrounded them, near and far. The persecutors were always sly and secret, allusions always hidden, something caught in passing, showing that they were being controlled, talked about or mocked. Secret machinations assumed vast proportions. The patients were ringed round by a world of enemies, in a world which they understood in common, constantly nourished on new experiences. The result was common action, e.g. measures of defence against the 'machine', alterations to the house, plans to discover the persecutors, etc. The last result of all was the admission to hospital.

The *means* of communication were of course no different from those used by healthy people; logical constructions, the giving of reasons and information, systematising, with daily repetition and confirmation. The *content* of the communication, however, was the delusion that had risen from the springs of schizophrenic experience. Because of the actual proximity of the family members this became something which they all could share. We cannot unfortunately answer the question whether the patients understood among themselves

something which we fail to understand. If this were so, we should be able to see at last the specific content of a schizophrenic world. The putting of the question is more important than the empirical answers so far obtained. In v. Bayer's case the delusional content was only one of personal persecution, a relatively trivial content. How would it be if one encountered the not very likely possibility of a schizophrenic community united in common delusions of a merciful cosmos, a content which they mutually elaborate as true by means of their common experience of it?

For the time being the question stays open: why is schizophrenia in its initial stages so often (though not in the majority of cases) a process of cosmic, religious or metaphysical revelation? It is an extremely impressive fact: this exhibition of fine and subtle understanding, this impossible, shattering piano-performance, this masterly creativity (van Gogh, Hölderlin), these peculiar experiences of the end of the world or the creation of fresh ones, these spiritual revelations and this grim daily struggle in the transitional periods between health and collapse. Such experiences cannot be grasped simply in terms of the psychosis which is sweeping the victim out of his familiar world, an objective symbol as it were of the radical, destructive event attacking him. Even if we speak of existence or the psyche as disintegrating, we are still only using analogies. We observe that a new world has come into being and so far that is the only fact we have.

(b) The worlds of obsessional patients

The obsessional patient is pursued by ideas and images which not only seem to him alien but silly, and yet he has to keep to them as if they were true. If he does not do this he is overtaken by unbearable anxiety. The patient, for instance, finds he must do something or else someone will die, or something dreadful will happen. It is as if his doing and thinking can obstruct or influence events in a magical way. His thoughts become built into a system of meanings and his actions into a system of ceremonial rituals. But whatever he does or thinks, a doubt is always left behind whether his performance has been correct or complete. The doubt forces him to start all over again.

Straus¹ reports on the self-description of a 40-year-old obsessional patient, who was 'contaminated' with everything connected with death, corruption, graveyards, etc., and had constantly to defend herself against this 'contamination' and undo it. In her self-description she even had to leave out any words so related and there are therefore certain gaps:

In January 1931 . . . a very dear friend. His wife came to see us every Sunday after she had been to . . . At first this did not trouble me. After 4–6 months I felt uneasy about her gloves, then her coat, her shoes, etc. I saw to it these did not get too near me. As we lived close to . . . everyone who went there made me uneasy, and quite a number go. If any of these people touched me, I had to wash my clothing.

¹ E. Straus, 'Ein Beitrag zur Pathologie der Zwangsscheinungen', *Msch. Psychiatr.*, vol. 98 (1938), p. 61.

Or if anyone who had been there came into my flat, I found my movements restricted. I got the feeling that the room was very small and that my dress was touching everything. I washed everything in Dettol to get some peace. Everything got large again and I felt I had room. If I wanted to go to the shops and there was someone in the shop, I couldn't go in because the person might come up against me; so I got no peace all day long and the thing persecuted me all the time. Sometimes I had to wipe something off, here or there, sometimes I had to wash. Pictures in the papers which showed such things troubled me. If my hand touched them, I had to wash. I cannot write it all down, there is too much that upsets me. Inside I am in a constant turmoil.

v. Gebssattel¹ gives an unusually impressive description of how these patients live in their own peculiar world, or rather how they lose their own life, world and all, in the trap of a magical mechanism:

Certain actions have to be repeated endlessly by the patients; they have to be endlessly controlling or making sure, they have to carry out something which is never completed until they are exhausted; all the time they are convinced of the nonsensical nature of their activity. The hand-washing, the rituals and ceremonies are a defence against disaster. They mean something different from what they mean to the beholder: everywhere contamination threatens, corruption and death—all kinds of disintegration. It is a magical world, though there is no belief in it; yet the obsessional patient has fallen into it; it is a pseudo-magical counter-world. It becomes restricted increasingly to negative meanings. The patient only responds to contents which symbolise loss or danger. The friendly, inviting forces of existence vanish, giving place to hostile and repellent ones. There is nothing that is harmless, natural or obvious. The world has narrowed to an artificial uniformity, a rigid, strictly regulated unchangeability. The patient is always in action but nothing is achieved. 'There is restless exertion without a break; he is always trying to cope with an enemy who is always behind him.' Existence becomes for him a move towards non-existence in the images of 'dirt or faeces, poison or fire, all that is ugly, impure or corpse-like'—and a futile defence against such a move. The countenance of the world has contracted to sheer hostility. But this world ceases to be a world as things undergo increasing derealisation. They no longer *are*, they only have meanings, and negative ones at that. There is a loss of solidity, richness and form, and hence of reality; the world is no more. The patient however is seized by a frightful feeling of being driven, because the whole apparatus of measures which must be taken if the patient is to do what he wants grows more and more complicated. The counter-compulsions and the auxiliary structures grow endlessly and increase the impossibility of reaching the desired goal. The patient is now never finished, but only stops through exhaustion. Since the patient knows the absurdity of what she does, but cannot stop doing it, she shies away from onlookers. 'Few doctors can have seen a patient like H. H., who goes through the most fantastic manipulations for hours when drying his limbs, or practices endless puppet-like compulsions. E. Sp. in the same way will lock herself in when she stands in the middle of her room in the evening, and carries on into the early morning with her repetitive compulsions, half senseless with exhaustion, gesticulating into the air and imitating the never-completed task of washing her stockings.'

¹ v. Gebssattel, 'Die Welt der Zwangskranken', *Mschtr. Psychiatr.*, vol. 99 (1938), p. 10.

v. Gebssattel compares the world of the *anankasts* with that of the *paranoics*. Both live in worlds that have lost their candour, both see meanings everywhere in meaningless occurrences. No accident can be treated any more as mere chance. There are only intentions. Both show us indirectly how much we need a world that does not take any notice of us but to which we yet belong. The obsessional patient however knows that the meanings that come to him are nonsensical. For the paranoic patient the meaning of the phenomena is integral with its reality. For the anankast there is still left a glimmer of former reality with its characteristics of harmless forthrightness. He cannot attain to this but he can still glimpse it through the 'Walpurgis' night of his magic meanings. The paranoic retains a measure of trust and naturalness in his delusional world, and a portion of certainty and conviction which has no analogue in the feverish restlessness of the anankast. Even that dreadful disorder, schizophrenia, with its delusions, might seem a respite in face of the restless chase of the wideawake mind, knowing otherwise yet helpless in the grip of its obsession. The obsessional patient in his small corner of compelling magical performance seems to see the whole world vanishing from him, with all his senses alive and intact to tell him so.

The world of the obsessional patient has two basic characteristics: It is a transformation of everything into threat, fear, formlessness, uncleanness, rot and death; and it is such a world only because of a magic meaning which supplies the content of the compulsive phenomena, but which is wholly negative: the magic is compelling, but the mind sees it as altogether absurd.

(c) *The worlds of patients with 'flight-of-ideas'*

L. Binswanger has tried to understand these worlds as if they were meaningful wholes.¹

There is a mood for a 'joyful existence', a basic attitude of 'bounding life' which makes the world look flat, not only this but it grows distant and faint for the patient and gives to his rapid, always distractible grasp of what is near and far, an absorption in the moment, a haste and confusion of movement, a ceaseless series of distractions. His world is pliant and variegated, bright and rosy. All that is left for curiosity and activity is a chatter of words and a play with speech. According to Binswanger there is, all the same, a specific pattern in this particular world that gives it a meaning as a whole. It has grown into a peculiar world of its own, conditioned by the spirit which illuminates it from within; this vital experience brings about immense vigour, the melting of boundaries, wholesale intrusions and the crowding together of things, an ineffective busyness, a general flitting, a press of talk and grandiloquent speech; in short, the whole behaviour of the manic state.

Let us compare these various attempts to understand the meaningful structure of such worlds. From this point of view the illumination of the *flight of ideas* seems only to catch at something quite superficial. Here we are not dealing with any real transformation of a person's world, but with an

¹ L. Binswanger, *Über Ideenflucht* (Zurich, 1933).

altered state, in which, it is true, a temporary transformation does take place; this transformation, however, does not contribute anything essential in respect of the whole it represents (which can only be grasped in the form of the subjective experience of the state, and as a change in the flow of the person's psychic life). Analysis of the world of the *obsessional patient* seems more productive; it has brought out very clearly an integration of a very peculiar kind. The enquiry into the *schizophrenic worlds* takes us furthest into fundamentals, but here it is only the problem that has grown in significance, the actual answers are sparse.

SECTION THREE

THE PSYCHE OBJECTIFIED IN KNOWLEDGE AND ACHIEVEMENT

(PSYCHOLOGY OF CREATIVITY—WERKPSYCHOLOGIE)

Psychic life is perpetually engaged in the process of making itself objective. It externalises itself through the drive to activity, the drive to express, to represent and communicate. Finally comes the pure mental drive, the wish to see clearly what is, what I am and what these other basic drives have brought about. This final effort to objectify might also be expressed as follows: What has become objective should now be comprehended and patterned into a general objectivity. I want to know what I know and understand what it is I have understood.

The basic phenomenon of mind is that it arises on psychological ground but is not something psychic in itself; it is an objective meaning, a world which others share. The individual acquires a mind solely through sharing in the general mind which is historically transmitted and at any given moment is defined for him in a contemporary form. The general or objective mind is currently present in social habits, ideas and communal norms, in language and in the achievements of science, poetry and art. It is also present in all our institutions.

This objective mind is substantially valid and cannot fall sick. But the individual can fall sick in the way in which he partakes in it and reproduces it. Moreover almost all normal and abnormal psychic events imprint themselves somehow on the objective mind according to the way in which it appears to the individual. But if mind in itself cannot fall ill how is the individual seen to be sick in this respect? By reason of *deficiencies*, losses, distortions and inversions and everything contrary to normal in the realisation of his part in mind; also by reason of *a specific kind of productivity*, which indicates sickness not so much in its results but in its source (Van Gogh's pictures, Hölderlin's later hymns); lastly by reason of the *positive significance which patients give to these deficiencies and abnormalities*. The essence of being human and of being a sick human

shows itself in the way in which the individual appropriates structures of the mind to his own use and modifies them.

A further basic phenomenon of mind is that only that exists for the psyche which acquires objective mental form, but whatever has acquired this form at once acquires a specific reality which impresses itself upon the psyche. Words, once formed, are like something insurmountable, and the psyche is at once confined by the mind through which it grows real.

Lastly, it is a basic phenomenon of mind that it can only become real if some psyche receives or reproduces it. The genuineness of this mental reality is inseparable from the authenticity of the psychic events that mediate it. But since it is through structure, modes of speech and diverse forms of activity and behaviour that mind becomes objective, automatisms of speech, conventional activity and gesture may substitute for the genuineness of authentic reproduction. Genuine symbols vanish into supposedly known contents of superstition; rationalisation supplants the authentic source. Both these factors play a significant part in psychic illness. On the one hand we find a maximum of mechanical and automatic behaviour and on the other a disturbing vigour of experience which overwhelms the psyche. The most extreme possibilities are realised in the illness.

We will now glance at the mental productivity of patients, which is a huge problem and we do no more than touch upon it briefly.

§ I. INDIVIDUAL INSTANCES OF CREATIVE WORK

(a) *Speech* (cp. pp. 185 ff.).

Communication between rational beings and with their own selves is conducted by means of speech. Speech is a precondition for thinking (speechless thought only occurs as a passing phase within spoken thought, otherwise it remains as indistinct and broken as the thinking of apes).

Speech is the most universal of human 'works'. It is the very first and it is present everywhere and conditions everything. It exists in a great many forms as the given tongue of a particular human group or nation and it is always in the process of a constant slow transformation. The individual speaks by taking part in the common achievement.¹

We have observed speech as performance and are now concerned with it as an achievement.

(1) *Speech as expression.* Where the speech apparatus is normal, speech apart from its content is psychic expression: as, for instance, shrieking, shouting, whispering in every possible nuance of tone, as we can observe in any disturbed ward; or it may be in the form of monotonous, expressionless speech or speech heightened in tone and lively. It may show itself in the rhythm, in nonsensical emphases, in normal syntax or in syntax that cuts across sense; or

¹ O. Jespersen, *Die Sprache, ihre Natur, Entwicklung u. Entstehung* (Heidelberg, 1925). An excellent book but there is an immense literature on this subject.

in the general manner, such as the imitation of infantile speech (agrammatism) in hysterical states, etc.¹

(2) *The question of the autonomy of speech.* Disturbances in the speech-apparatus of a neurological character are to be distinguished from the transformations in speech due to psychic changes while the speech apparatus itself remains intact. A vast number of phenomena appear to lie between these two (psychotic speech-disturbances—see pp. 191 ff.), and belong properly to neither. They suggest that there is such a thing as autonomy of speech. In this connection we notice peculiar speech-structures and it is difficult to see their derivation; it is just as if speech developed a quality of independence, was producing on its own or having a disorder of its own. It is not an independence of the speech-apparatus but of mentation which appears in pure form in speech. The transformation of the individual and of his experience of mental productivity appears not as something secondary in his speech but primarily as speech. Speech may be called a tool and in this sense mind and tools are not in opposition but mutually shape each other; in the marginal case however they fuse into one; something purely linguistic. Later this becomes a factor in mental achievement which may leave an imprint on literature. The excellent work of Mette² draws our attention to this in a very fruitful way.

(3) *Formation of new words and private language.* The formation of new words³ has long been noticed as an abnormality of speech. Some patients only produce one or two such words, but others produce so many that they seem to have produced a private language of their own, though it remains unintelligible to us. We can group these new word-formations according to how they originate: 1. New words are formed quite *intentionally* to describe feelings or things for which customary speech has not yet found words. These self-structured ‘technical terms’ (*termini technici*) are to some extent quite original and the etymology is incomprehensible. 2. New words are formed *unintentionally*, particularly in acute states, are then used secondarily to denote something and get taken over into the chronic state. A patient of Pfersdorff described certain of his hallucinatory phenomena as ‘sensuous weapons’ (*sinnliche Gewehre*). The patient is asked, ‘What does this mean?’ and he says, ‘The words come to me like that, there is no explanation.’ In acute psychoses we also find that recognised words have been given a different meaning:

A patient says: I used some words as I said before to express ideas quite different from what they customarily expressed—they had acquired a different meaning for me: for example, ‘scabby’, which I used quite comfortably for ‘brave and plucky’; ‘Gohn’, the argot word for ‘muck-raker’, was used for a woman, rather like the student’s ‘char’. Ideas pressed thickly and I could not find exactly the right word for them, so I babbled inventively, like small children do, and created terms to my own taste such as ‘Wuttas’ for ‘pigeons’ (Forel).

¹ Isserlin, *Allg. Z. Psychiatr.*, vol. 75 (1919), p. 1.

² A. Mette, *Über Beziehungen zwischen Spracheigentümlichkeiten Schizophrener und dichterischer Produktion* (Dessau, 1928).

³ Galant, *Arch. Psychiatr. (D)*, vol. 61 (1919), p. 12.

3. Words of new formation come to the patient in the form of '*hallucinatory content*'. The patients themselves, as in the foregoing cases, are often surprised at these strange and alien words. Schreber heard in this way the whole 'basic language' of his 'rays'. He always emphasised that until he heard the words they had been quite unknown to him. 4. *Articulate sounds* are produced, to which the patients themselves probably attach no meaning. In fact there is no longer a speech-structure, as all meaning seems to have lapsed. An example would be the verbal remnants which one tries to catch in demented paralytics. One patient during his last few weeks of life could only produce the one word 'misabuck' on every occasion.

New word-formations are the main element in the private language of schizophrenics:¹

Tuczak observed the development of such a language as a kind of game due to delight in translation and a certain facility for playing with words. It was done quite consciously without any need to express delusional experiences. Pride in this secret achievement and pleasure in success were the only motives: 'just listen how nicely it sounds!' Many different principles were involved in the word-formation but the words were then established and one could notice the not inconsiderable memory performance involved. There was undoubtedly creative ability. The syntax remained German and it was only the vocabulary that had been reconstructed.

(b) Patients' written productions²

Patients who commit themselves to literary creation corresponding to their level of education often show us plenty of rational content mixed up with phenomena of expression, displayed in the language and writing. In rare cases there is a remarkable productivity of original speech. We can distinguish the following different types of writing: 1. Language and style are in good order and the writing shows normal sequence of thought. *Only the content* is abnormal; the patients report on their terrible experiences, try to clarify them and set forth their delusional ideas. Such writing in spite of the intense affect is sensible and controlled. The description by patients with insight after they have recovered from their psychoses also comes into this category. We find in this group a number of valuable self-descriptions. 2. The second group of writings comes from persons suffering from *abnormal personality development* (querulants etc.). The writer elaborates his delusion-like ideas in a natural manner and in a thoroughly coherent way but extravagantly, fantastically, contentiously and fanatically. No self-description of morbid experiences occurs—and indeed such personalities have not had them—but they direct their attack upon mental hospitals, the authorities, doctors or they elaborate their ideas as inventors, explorers, etc. Most published writings of patients belong to this group. 3. More rarely we find writings, where the manner is very

¹ Tuczak, 'Analyse einer Katatonikersprache', *Z. Neur.*, vol. 72, p. 279. Jessner, 'Eine in der Psychose entstandene Kunstsprache', *Arch. Psychiatr. (D)*, vol. 94 (1931), p. 382.

² A. Behr, *Schriftstellerische Tätigkeit in der Paranoia* (Leipzig, 1905). Sikorski, *Arch. Psychiatr. (D)*, vol. 38, p. 259.

bizarre, and the style high-flown and striking, though for the most part we can understand them. The patients do not report their experiences, persecutions and other personal facts, but *develop theories*, new *cosmic systems*, new religions, new interpretations of the Bible, or of universal problems, etc. The form and the content indicate that they originate from patients suffering from a schizophrenic process. The presentation often will show the main delusion of the author (he is the Messiah, he is an inventor).¹ 4. Transitional types of writing develop from the above, and we get scripts that are thoroughly *confused*. Arrangement vanishes, the thoughts grow disconnected; there is a series of bizarre, unintelligible thought-formations.² In the end everything becomes incomprehensible: hieroglyphics are written, single syllables, there are ornamentations, and colours are used to characterise external events. 5. Finally we get the poetry of undoubted psychotics. Gaupp³ published the case of a paranoic patient, who portrayed his own fate in a play concerning the sick King Ludwig of Bavaria; this dramatic work was an act of liberation for him and the only thing that had any value while he was in the hospital; he found his own nature again in the person of his dramatic subject. K. Schneider⁴ published some verses of a young schizophrenic, which express the gruelling change taking place in his person and in his world. The most magnificent and the most disturbing examples are the later poems of Hölderlin.

(c) Drawing, Art and Handicraft

We have grouped together defects in performance, the art of schizophrenics and the drawings of neurotic patients:

1. *Defects of performance.* These indicate organic neurological disturbance, poor education or insufficient training. As such they obstruct psychic expression and the communication of intention, but in themselves they have no positive significance as achievement. We encounter them as a lack of skill (the individual cannot draw a straight line), lack of education (the individual has not got the first elements of the technique of drawing); or as a disturbance of motor function and dexterity through some organic illness (signs of ataxia, tremor, etc.), or a disturbance of elementary psychic functions, such as registration, concentration, which leads to scribbles, fragmented shapes and lines rather than what could be called drawing (organic disorders, paralysis in particular). The same sort of defects appear in all the unsuccessful articles which patients make, and which can be seen in any clinical museum.⁵

2. *Schizophrenic art.*⁶ We can only identify with certainty the cruder

¹ Swedenberg is an example; also Brandenberg, 'Und es ward Licht', in Behr, p. 381. Panucz, 'Tagebuchblätter eines Schizophrenen', *Z. Neur.*, vol. 123 (1930), p. 299.

² Example—Gehrmann, *Körper, Gehirn, Seele, Gott* (Berlin, 1893).

³ Gaupp, *Z. Neur.*, vol. 69, p. 182. ⁴ Schneider, *Z. Neur.*, vol. 48, p. 391.

⁵ Lenz, 'Richtungsänderung der künstlerischen Leistung bei Hirnstammerkrankungen', *Z. Neur.*, vol. 170 (1940), p. 98. (Defects of performance and change of performance.)

⁶ Nearly all clinics and institutions have such a collection. Owing to Prinzhorn, the psychiatric clinic in Heidelberg has a number of schizophrenic productions of all kinds.

schizophrenic signs. They give the paintings and drawings a very characteristic appearance; meaningless repetition of the same line or of one and the same object, without any unity of construction, a scrawl that is all but 'methodical', a fine exactness which is no more than verbigeration in the pictorial field. It is all very similar to the involuntary 'doodling' normal people will do in moments of concentrated attention or during a lecture.

Schizophrenic art may be a real expression of the schizophrenic psyche and represent the world of schizophrenic thought that has developed in the patient, but we only get this when there is a certain level of technical skill and where the schizophrenic signs have not swamped the whole picture.¹ *Content* is characteristic; mythical figures, strange birds, grotesque and misshapen forms of people and animals, a bold and ruthless emphasis on sexual characteristics, usually the genitalia; in addition there is an urgency to present some universal whole, a world-picture, the essence of things. Occasionally complicated machines are designed depicting the source of the hallucinatory physical influences. Perhaps even more important is the *form* of the picture. Taking it as a whole we try to find out whether it has any meaning for the patient as a whole or whether it is only a collection of miscellaneous elements. Where in fact is his point of unity? The following are some characteristic signs: a certain pedantry, exactness, laboriousness; a striving for violent effects; stereotyped curves; making everything in a circle; or there are angular lines which give all the pictures an air of similarity. When we try to understand the effect of the drawings on their author and talk to him about it we find the simplest thing is symbolically important and a rich fantasy woven around it.

It cannot be denied that when the patients are gifted people suffering from process schizophrenia their drawings and paintings have a considerable impact on normal people, by reason of their primitive force, vivid expression, weird urgency and strange significance.

If patients are well off and not too ill to be restrained, they may really achieve the most remarkable productions such as those artistic efforts which Goethe saw belonging to Count Pallagonia and the Lodge at Lemgo.² The latter was a house where the owner who had been a lifetime building it had filled it to overflowing with carvings of his own and had covered everything with fantastic structures and countless repetitions so that there was not a single clear space or empty corner left.

¹ Prinzhorn, 'Das bildnerische Schaffen des Geisteskranken', *Z. Neur.*, vol. 52 (1919), p. 307. (A historical survey of psychotic art). Morgenthaler, *Ein Geisteskranker als Künstler* (Bern and Leipzig, 1921). Prinzhorn, *Bildnerei der Geisteskranken* (Berlin, Springer, 1922) (standard book on the subject, well illustrated). It also gives good summary of points for analysis: urge to make—drive to play—drive to decorate—tendency to make diagrams—tendency to arrange—desire to symbolise. A detailed report on ten schizophrenic pictures. Points of similarity, childhood drawings, unsophisticated drawings, drawings of primitives, of ancient cultures, folk-art, spiritualistic drawings. Jaspers, *Strindberg u. van Gogh* (Leipzig, Ernst Bircher, 1922; 2nd edn., Berlin, 1926).

² Fischer, 'Über die Plastiken des Ften. Pallagonia', *Z. Neur.*, vol. 78 (1922), p. 356. Weygandt, *Z. Neur.*, vol. 101 (1926), p. 857. Kreyenberg, 'Über das Junkerhaus', *Z. Neur.*, vol. 114 (1928), p. 152.

3. *Drawings of neurotic patients.* C. G. Jung introduced the method of letting patients draw and of giving particular attention to their 'psychic pictures', their plan of the cosmos or their basic conception of existence. He takes the Indian mandalas as an analogy.¹ These 'psychic pictures' should help us to penetrate into unconscious psychic life. Apart from the conscious use of symbolism and myth, psychoanalytic interpretation finds in them a way to elucidate the unconscious.

§ 2. THE TOTAL MENTAL ACHIEVEMENT—THE PATIENTS' GENERAL OUTLOOK—'WELTANSCHAUUNG'

We have tried to give as vivid a description as possible of the patient's existence in his own personal world. He himself cannot describe the shape of the world in which he lives, the factual whole of his world, and indeed he does not know it himself. Actions and behaviour all show what he thinks is the meaning of a situation and its effective possibilities or in what way it strikes him as obvious and unquestionable. We have to try and put everything together if we are to get even a partial glimpse of the patient's actual world. This is difficult because we can scarcely abandon our own limited worlds. Every step in understanding, however, increases our knowledge and also expands our own existence or suggests such an expansion. Object-awareness, the existing forms of which were described in the section on phenomenology, is always related in content to complex unities which give the momentary content of experience its meaning, function and significant living context. The content is, as it were, steeped in a number of worlds which perhaps are never fully known in their totality but only show themselves indirectly in the way the ideas move and form and the many images and thoughts emerge.

Under favourable circumstances an individual can *become aware of his personal world in a systematic way*. He makes a poem about it or a work of art; he may breed a philosophy or elaborate ideas about the universe. What the patient tells us and what he puts there for us to see is the foundation for any subsequent representation of how he regards the world that has grown in his consciousness. Instead of coming indirectly to the conclusion that we are investigating only the configuration of a world, we have to grasp at the totality of a mind as it objectifies itself in its own way. So far we have barely begun to do this:

From the point of view of method this field offers unlimited scope. But patients do not often offer us anything empirically objective to investigate. There have been certain important historical phenomena and by a lucky chance we may get something from our patients. The methods for knowledge in this field are only acquired through a training in the humanities. We will make two brief points:

Nietzsche conceived all knowledge of the world as 'interpretation' (Auslegen). Our understanding of the world is an interpretation and our understanding of some

¹ Heyer, *Der Organismus der Seele* (München, 1932).

alien world is an interpretation of an interpretation (cp. my book *Nietzsche*, Berlin, 1936, pp. 255 ff.). In understanding the world therefore we not only find an absolute objectivity of the true world but an element of movement for which (from the point of view of the observer of different worlds) the idea of the one, real, true world acts as a marginal concept of which he himself can never take possession.

Each man's world is already a special one. This special world which the individual knows as his own and has so far confronted is always something less than his real world, which remains obscure, all-embracing, an over-reaching whole (see my *Psychologie der Weltanschauungen*, Berlin, 1919, Aufl. 3, 1925).

Analysis of the patients' worlds as they have come to know them is only in its beginning and we group the few attempts that have been made as follows:

(a) *Realisation of extremes*

There is a particular interest in those realisations of mental possibilities which can be called neither healthy nor sick in themselves and are certainly not psychological in character, though they are something that the patient experiences. Thus *nihilism* and *scepticism* are only complete in psychosis. Nihilistic delusion in melancholia gives us the prototype. The world does not exist any more, the patient himself does not exist; he only appears to live and he must live like this for ever. He has no feelings and he cares for nothing. At the beginning of a schizophrenic process, complete scepticism is not just blandly conceived but is experienced as a desperate affair.¹ There are also classic realisations of *mystical* experiences in hysteria and revelations of a metaphysical-mythical character in the initial stages of schizophrenia.²

(b) *Patients' specific outlooks (Weltanschauungen)*

We may ask what is the special factor which allows a philosophic knowledge of Being to spring up from the schizophrenic base. We may also ask to what extent are these philosophic possibilities merely a caricature. The mind has its historical aspect and is tied to its culture; it has racial characteristics and is bound to tradition. As such it is no subject-matter for psychopathology but something intelligible in its own right, something eternal in time. As a reality of temporal existence, however, it is bound up with the empirical reality of the individual and as such can be explored. The conditions for mental productivity and the actual realisation of this are accessible to our investigation.

Journeys of the soul into the Other World, the transcendental geography of lands beyond our senses, form a universal lore. But it is only in patients that we find it all decisively confirmed in the form of a lively, vivid experience. Even today we can observe such events occurring in the psychoses with an impressive wealth of detail and intellectual depth.

The 'cosmic experience' is characteristic of schizophrenic experience. The

¹ Cp. my own work, 'Schicksal u. Psychose', *Z. Neur.*, vol. 14 (1913), pp. 213 ff., 253 ff.

² This is shown magnificently in the work of Hölderlin and van Gogh. Cf. my 'Strindberg und van Gogh' (Bern. 1922), 2nd. edn. (Berlin, 1926).

end of the world is here, the 'twilight of the gods'. A mighty revolution is at hand in which the patient plays the major role. He is the centre of all that is coming to pass. He has immense tasks to perform, vast powers. Fabulous distant influences, attractions and obstructions are at work. 'Everything' is always involved: all the peoples of the earth, all men, all the Gods, etc. The whole of human history is experienced at once. The patient lives through infinite millennia. The instant is an eternity to him. He sweeps through space with immense speed, to conduct mighty battles; he walks safely by the abyss. Here are a few examples from self-descriptions:

I have said that I had countless visions connected with my ideas of the end of the world. These were both horrible and magnificent. I will think of a few of them. In one I was going down in a lift into the depths of the earth, and I went down as it were back through the whole history of man and the earth. In the upper strata there were still woods in leaf; as I got lower it grew dark and black. On leaving the lift I came to a huge graveyard and found among others the place where the inhabitants of Leipzig lay and the grave of my wife. Sitting in the lift again I progressed to point 3. I was afraid to enter point 1, which marked the absolute origin of mankind. As I travelled back, the lift-shaft collapsed behind me endangering a 'sun-god' who lived in it. In this connection it seemed there were two lift-shafts, perhaps corresponding to the division of the realm of god into two (?), then the news came that the second shaft had collapsed; all was lost. Another time I traversed the whole earth from Lake Ladoga to Brazil and built there a sort of castle and a wall with the keeper's help for the protection of god's kingdom against the inflowing yellow tide. I related this to the danger of syphilitic infection. On yet another occasion I had the feeling that I was being pulled up to heaven and saw the whole earth under me, a picture of incomparable splendour and beauty stretched out under the blue dome.

Wetzel¹ gives an account of the experience of the end of the world as felt by schizophrenics:

The end of the world is experienced as a transition to something new, vaster, and is felt as a terrible annihilation. Despairing agony and blissful revelation occur in one and the same patient. At first everything seems queer, uncanny and significant. Catastrophe is impending; the deluge is here. A unique catastrophe approaches. It is Good Friday; something comes over the world; the last Judgment, the breaking of the seven seals of the Book of Revelation. God comes into the world. The time of the first Christians is here. Time wheels back. The last riddle of all is being solved. Patients are exposed to all these terrifying and magnificent experiences without showing it to anyone. The feeling of being quite alone is unspeakably frightening and patients implore not to be left to themselves, or alone in the desert, the frozen cold or in the snow (although it is the middle of summer).

In contrast to the experiences of delirium, these typical cases of schizophrenic experience display clear consciousness, a relatively sound memory and

¹ A. Wetzel, *Z. Neur.*, vol. 78 (1922), p. 403.

good perception, if the attention can be attracted by something and is not entirely chained by the content of the experience. Patients can be doubly orientated, to the psychotic experience and to reality. However, such typical cases do not seem particularly common.

The schizophrenic world of acute psychosis with its double orientation is something quite different from the world of the chronic states. This can grow into a system of ideas which for the patients carry memories of unforgettable occurrences in the acute state, and take deep effect. However in the end the double orientation vanishes.

A delusional system with a typical world outlook of its own then develops on the basis of the transformed self, on the experience of superhuman powers and emanations, as well as of shattering dissolution, of hidden significance and altered mood. Hilfiker has described this as follows:¹

The self is identified with the All. The patient is not just someone else (Christ, Napoleon, etc.) but simply the All. His own life is experienced as the life of the whole world, his strength is world-sustaining and world-vitalising. He is the seat of this supra-personal power. The patients talk of an automatic power, of primary substance, of seed, fertility, magnetic powers. Their death would be the death of the world; if they die, everyone else dies. Three different patients said: 'If you do not keep in touch with me, you will perish.'—'Once I am dead, you will all lose your minds.'—'If you can't find a substitute for me, everything is lost.' Patients feel they have a magic influence on nature: 'When my eyes are bright blue, the sky gets blue'—'all the clocks of the world feel my pulse'—'my eyes and the sun are the same.'

One of Hilfiker's patients said: 'Only one peasant in the whole of Europe can support himself, and that man is I . . . if I look at or walk over a piece of wasteland, it becomes good land . . . my body bears fruit . . . it is a world-body . . .' He, his wife and his son—three human lives . . . are the first seers and listeners; they are the three international peoples related to soil, water and sun, and correspond to the sun, moon and evening star . . . 'the warmer we are, the more productive the sun becomes . . . No state can support itself. If the world grows poor, they must come and fetch me; they have to have someone to support the world; the world must be represented or the world will disappear.'

(c) Patients' own observations of a philosophical character

This group includes descriptions that note the modes in which the patients' general world-outlook appears and try to discover the particular modulation or colouring or even their identification with normal attitudes. Mayer-Gross tried to do this and showed how a remarkable form of jesting and joking, irony and humour appears in schizophrenic behaviour.² Gerhard Kloos took these observations further and deeper.³ Many patients have shown powers of scientific reasoning and a certain freakish philosophy and efforts have been

¹ Hilfiker, 'Die schizophrene Ichauflösung im All', *Allg. Z. Psychiatr.*, vol. 87 (1927), p. 439.

² Mayer-Gross, *Z. Neur.*, vol. 69, p. 322.

³ G. Kloos, 'Über den Witz der Schizophrenie', *Z. Neur.*, vol. 172 (1941), p. 536.

made to unravel them. For instance a patient devised a numerical system for 'solving life's problems'.¹

Newspaper accounts of deaths, accidents, etc., were an occasion for him to prove that they had to happen. He devised combinations of figures from the names, circumstances, etc., which he said showed that what the papers reported as accident had in fact been inevitable. 'When everything is said and done the Trinity pre-determines all that actually exists.' This unintentional parody of scientific method shows the mechanical nature of the reasoning; this was also to be seen in the other expressive phenomena, such as the pedantic arrangement of the material, the severely regulated handwriting, pointed and affected lettering, endless repetition and a general over-schematisation.

We can also find in the background of delusions of invention a philosophical attempt at preservation through the application of the reasoning powers; this is particularly seen in the repeated constructions of a 'perpetuum mobile'.²

¹ Pauncz, *Z. Neur.*, vol. 123 (1930), p. 299.

² Tramer, *Technisches Schaffen Geisteskranker* (München, 1926).

PART II
MEANINGFUL PSYCHIC CONNECTIONS

PART II

MEANINGFUL PSYCHIC CONNECTIONS

(PSYCHOLOGY OF MEANING—VERSTEHENDE PSYCHOLOGIE)

In Part I we studied individual psychic phenomena. These were either patients' *subjective experiences*, which could be vividly represented by us (Phenomenology) or phenomena which could be grasped *objectively* in the form of observable performances, somatic symptoms, or meaningful phenomena found in expressive gesture and in personal worlds and creations (objective psychopathology). In Part I we were mainly interested in describing the facts as they presented themselves to us, but the question constantly intruded as to what might be the source of this or that phenomenon and with what else it might be connected. Up to now a great deal of our material has only allowed description, but in the following Parts II and III an attempt will be made to show what is our present knowledge in regard to connections.

In doing so we shall assume the same theoretical distinction as has been made between subjective psychopathology (phenomenology) and objective psychopathology. 1. We sink ourselves into the psychic situation and *understand genetically by empathy* how one psychic event emerges from another. 2. We find by repeated experience that a number of phenomena are regularly linked together, and on this basis *we explain causally*. Understanding the emergence of psychic events from each other has also been termed '*psychological explanation*', but this term is justifiably disliked by scientifically minded investigators, who are solely concerned with what can be perceived by the senses and with causal explanation, and who have reason to protest should '*psychological explanation*' ever seem to be taken as a substitute for their own efforts. Meaningful psychic connections have also been called '*internal causality*', indicating the unbridgeable gulf between genuine connections of external causality and psychic connections which can only be called causal by analogy. These latter will be dealt with here in Part II; causal connections will be discussed in Part III. But first the main difference between the two and their mutual relation needs to be clarified from the viewpoint of our methodology.¹

¹ 'Understanding is a fundamental human activity that from time immemorial has proceeded on its own methodical, conscious and scholarly way.' Cp. Joachim Wach, *Das Verstehen*, 3 vols. (Tübingen, 1926–33); Droysen distinguished the methods of natural science from those of history and called the one explanation and the other understanding respectively (*Historik*, 1867). Dilthey distinguished descriptive, analytical psychology from explanatory psychology. Spranger spoke of psychology as one of the humanities and I myself spoke of a *psychology of meaningful phenomena*. This last term has won the day. The work of Max Weber was mostly responsible for my deliberate use of understanding as a method which would be in keeping with our great cultural traditions. I was also influenced by Roscher and Kries, etc., in Schmöllers' *Jahrbüchern*, vols. 27, 29,

(a) *Understanding and explaining*

We only try to grasp one kind of connection in the natural sciences, that is causal connection. By observation of events, by experiment and the collection of numerous examples, we attempt to formulate *rules*. At a higher level we establish *laws* and in physics and chemistry we have to a certain extent reached the ideal, which is the expression of causal laws in mathematical equations. We pursue a similar aim in psychopathology. We come across *particular causal connections*, though as yet we do not know how to generalise from them (the connection, for instance, between diseases of the eye and hallucination). We also find *general rules* (the rules, for instance, of constant heredity; disorders that belong to the group of manic-depressive psychoses appear in one family whereas disorders of the dementia-præcox group occur very rarely in such families and vice-versa). But it is rare for us to find any *laws* (as, for instance, there is no General Paralysis without syphilis), nor can we ever formulate causal equations in the manner of chemistry and physics. This would presuppose a complete quantification of the events observed and since these are psychic events, which by their very nature have to remain qualitative, such quantification would as a matter of principle remain impossible without losing the actual object of the enquiry.

In the natural sciences we find causal connections *only* but in psychology our bent for knowledge is satisfied with the comprehension of quite a different sort of connection. Psychic events 'emerge' out of each other in a way which we understand. Attacked people become angry and spring to the defence, cheated persons grow suspicious. The way in which such an emergence takes place is understood by us, *our understanding is genetic*. Thus we understand

30 (1903-6), reprinted in *Gesammelte Aufsätze zur Wissenschaftslehre* (Tübingen, 1922). My ideas were then carried further by Dilthey (*Ideen über eine beschreibende u. zergliedernde Psychologie*, Berliner Akademie, S. ber. 1894, together with Ebbinghaus' criticism in *Z. Psycholog.*, vol. 9) and by Simmel (*Probleme der Geschichtsphilosophie*).

My article of 1912 ('Kausale u. verständliche Zusammenhänge zwischen Schicksal u. Psychose bei der Dementia præcox', *Z. Neur.*, vol. 14, p. 158), and this present book (1913) were greeted as something radically new, although all I had done was to link psychiatric reality with the traditional humanities. Looking back now, it seems astonishing that these had been so forgotten and grown so alien to psychiatry. In this way within the confines of psychopathology there grew a methodical comprehension of something which had always been present, but which was fading out of existence and which appeared in striking reverse, 'through the looking-glass' as it were, in Freud's psychoanalysis—a misunderstanding of itself. The way was clear for scientific consciousness to lay hold on human reality and on man's mental estate, his psychoses included, but there was an immediate need to differentiate the *various modes of understanding*, clarify them and embody them in all the *factual content* available to us.

Since then, a whole literature has arisen on this topic in both psychology and psychopathology: L. Binswanger, *Internat. Z. Psychoanal.* (O), vol. 1 (1913) *Z. Neur.*, vol. 26, p. 107; Gruhle, *Z. Neur.*, vol. 28; Kretschmer, *Z. Neur.*, vol. 57; van der Hopp, *Z. Neur.*, vol. 68; Kurt Schneider, *Z. Neur.*, vol. 75; Isserlin, *Z. Neur.*, vol. 101; Stransky, *Mschr. Psychiatr.*, vol. 52; Bumke, *Zbl. Neurol.*, vol. 41; Kronfeld, *Zbl. Neurol.*, vol. 28; Störring, *Arch. Psychol.* (D), vol. 58; W. Blumenfeld, *Jb. Philol.* vol. 3 (1927); Walter Schweizer, *Erklären u. Verstehen in der Psychologie* (Bern, 1927); G. Roffenstein, *Das Problem des psychologischen Verstehens* (Stuttgart, 1926); finally, Kronfeld, *Das Wesen der psychiatrischen Erkenntnis* (Berlin, 1920); Binswanger, *Einführung in die Probleme der allgemeinen Psychologie* (Berlin, 1922).

psychic reactions to experience, we understand the development of passion, the growth of an error, the content of delusion and dream; we understand the effects of suggestion, an abnormal personality in its own context or the inner necessities of someone's life. Finally, we understand how the patient sees himself and how this mode of self-understanding becomes a factor in his psychic development.

(b) *Concrete reality and the self-evidence of understanding (Understanding and Interpretation)*

The evidence for genetic understanding is something ultimate. When Nietzsche shows how an awareness of one's weakness, wretchedness and suffering gives rise to moral demands and religions of redemption, because in this roundabout way the psyche can gratify its will to power in spite of its weakness, we experience the force of his argument and are convinced. It strikes us as something self-evident which cannot be broken down any further. The psychology of meaningful phenomena is built up entirely on this sort of convincing experience of impersonal, independent and understandable connections. Such conviction is gained *on the occasion* of confronting human personality; it is not acquired inductively *through repetition of experience*. It carries its own power of conviction and it is a precondition of the psychology of meaningful phenomena that we accept this kind of evidence just as acceptance of the reality of perception and of causality is the precondition of the natural sciences.

The self-evidence of a meaningful connection does not prove that in a particular case that connection is *really there* nor even that it occurs in reality at all. Nietzsche convincingly and comprehensibly connected weakness and morality and applied this to the particular event of the origin of Christianity, but the particular application could be wrong in spite of the correctness of the general (ideally typical) understanding of that connection. In any given case the judgment of whether a meaningful connection is real does not rest on its self-evident character alone. It depends primarily *on the tangible facts* (that is, on the verbal contents, cultural factors, people's acts, ways of life, and expressive gestures) in terms of which the connection is understood, and which provide the objective data. All such objective data, however, are always incomplete and our understanding of *any particular, real event* has to remain more or less an *interpretation* which only in a few cases reaches any relatively high degree of complete and convincing objectivity. We understand only so far as such understanding is suggested to us by the objective data of the individual case, that is, by the patients' expressive movements, acts, speech and self-description, etc. It is true that we can find immediate meaning in a psychic connection quite detached from concrete reality, but we can only assume the reality of such a connection to the extent that the objective data will allow. The fewer these are, the less forcefully do they compel our understanding; we interpret more and understand less. The position will be clarified if we compare

these *immediately understood connections* with the *rules of causality* in respect of their differing relationship to *concrete reality*. The rules of causality are obtained inductively and culminate in theories about what lies at the root of the given reality. Particular cases are then subsumed under them. Genetically understandable connections, however, are ideal, typical connections; they are self-evident and not inductively obtained. They do not lead to theories but are a measure for any particular event, whereby it may be recognised as more or less meaningful. Because we note the *frequency* of a meaningful connection this does not mean that the meaningful connection becomes a rule. This would be a real mistake. Frequency in no way enlarges the evidence for the connection. Induction only establishes the frequency, not the reality of the connection itself. For example, the frequency of the connection between the high price of food and theft is both understandable and established statistically. But the frequency of the understandable connection between autumn and suicide is not confirmed by the suicide-curve, which shows a peak in the spring. This does not mean that the understandable connection is wrong since one actual case can furnish us with the occasion to establish such a connection. The fact of frequency adds nothing to the evidence thus gained and the establishment of frequency serves a different purpose. A poet, for instance, might present convincing connections that we understand immediately though they have never yet occurred. They have not been realised yet but contain their own evidence in the sense of being ideally typical. It is easy to fall into this trap of stating some meaningful connection as concretely real when it only offers evidence of this general kind. Jung, for example, says 'it is a well-known fact that it is easy to see where there is a connection and where there is not', but in the case of real people we know that the exact opposite may be the truth.

(c) *Rational and empathic understanding*

Genetic understanding has many modes and certain essential distinctions need to be preserved. For instance, thoughts may be understandable because they emerge from each other according to the rules of logic and here the connections are understood rationally (that is, we understand what is said). But where we understand how certain thoughts rise from moods, wishes or fears, we are understanding the connections in the true psychological sense, that is by empathy (we understand the speaker). Rational understanding always leads to a statement that the psychic content was simply a rational connection, understandable without the help of any psychology. Empathic understanding, on the other hand, always leads directly into the psychic connection itself. Rational understanding is merely an aid to psychology, empathic understanding brings us to psychology itself. From this we can see how there are obvious differences in the modes of understanding and later on we shall have to make yet other indispensable distinctions. But for the present we shall continue to speak of psychological understanding as a whole.

(d) *Understanding is limited and explanation unlimited*

It is a mistake to suggest that the psyche is the field for understanding while the physical world is the field for causal explanation. Every concrete event—whether of a physical or psychic nature—is open to causal explanation in principle, and psychic processes too may be subjected to such explanation. There is no limit to the discovery of causes and with every psychic event we always look for cause and effect. *But with understanding there are limits everywhere.* The existence of special psychic dispositions (*Anlagen*), the rules governing the acquisition and loss of memory-traces, the total psychic constitution in its sequence of different age-levels and everything else that may be termed the substratum of the psyche, all constitute limits to our understanding. Each limitation is a fresh *stimulus* to formulate the problem of cause anew.

In thinking about causes in psychology we need *elements* which we can take as cause or effect, e.g. a bodily event as cause, an hallucination as an effect. Every concept in phenomenology and the psychology of meaningful phenomena becomes drawn into the domain of causal thinking to serve as an element of causal explanation. The units of phenomenology (e.g. hallucinations, modes of perception, etc.) are explained by bodily events. Complex meaningful connections in their turn are considered as units (e.g. a manic syndrome plus all its contents can be regarded as the effect of a cerebral process or of some emotional trauma such as the death of an intimate). Even that entirety of meaningful connections which we term the personality of an individual may be considered causally as a unit or element and its original causes investigated from the point of view of heredity, for example.

When searching for causes we are always forced to think of something *extra-conscious* that underlies the phenomenological elements or meaningful connections. We find ourselves constrained to use concepts such as extra-conscious disposition (*Anlage*), psychic constitution and extra-conscious mechanism. These concepts, however, cannot be expanded into comprehensive psychological theories and we can use them only as working hypotheses in so far as they prove themselves useful for our enquiries.

Every act of understanding in respect of *concrete* psychic events points to a *causal* connection as a matter of course. But this connection only becomes accessible to us in the first place through understanding. So long as there are no other data than those provided by the understanding to help us establish the empirical facts, it is useless to speculate further and construe the connection by extra-conscious facts (see the chapter on theories). If we had these other data, important causal connections could be discovered simply as the result of empirical research. On the other hand, we are wrong if we say that psychic causal connections can be fully *echoed* by empathy and that therefore we can discover causal mechanisms by such empathy. Speculative elaboration of extra-conscious mechanisms through empathic understanding is a sheer waste of time and the literature is far too full of such attempts. Understanding by itself does not lead to any causal explanation except in indirect fashion, when it happens to come up against the *ununderstandable*.

(e) Understanding and unconscious events

Extra-conscious mechanisms therefore are construed as something additional to conscious psychic life. They are extra-conscious in principle and not verifiable. They remain purely theoretical constructs which we use to penetrate into the extra-conscious sphere, while phenomenology and the psychopathology of meaning remain concerned with *consciousness*. It is never wholly clear, however, where, from these latter points of view, the frontiers of consciousness are. Both continually expand beyond the immediate frontiers and penetrate deeper. Phenomenology finds itself describing hitherto unnoticed modes of psychic experience, while the psychology of meaningful phenomena grasps psychic connections that were previously unobserved (e.g. Nietzsche's conception of moral attitudes as reaction-formations against awareness of weakness and misery). Every psychologist experiences how his own psychic life is gradually illuminated, how he grows more aware of what had previously gone unnoticed in himself, and also how his own last frontier is somehow never reached. This unawareness, which is turned into awareness by phenomenology and the psychology of meaningful phenomena, this unnoticed content which becomes conscious in this way, must not be confused with what is genuinely unconscious. This is in principle extra-conscious and something of which we can never become aware at all. We can actually experience something of which we are unaware, in the sense that we have so far not noticed or regarded it, but we cannot experience this in the sense that it is *extra-conscious*. It would be as well to keep the term *extra-conscious* for the latter type of unconscious event and speak of *what we are generally unaware* in respect of the former.

(f) Pseudo-understanding

Psychology traditionally takes on the task of bringing into consciousness material of which we are unaware. Evidence for such insight has always rested on the fact that, circumstances being favourable, other people could notice the same things, provided they had undergone the same experiences. Certain events, however, cannot be understood in this way. They do not seem to be genuine experiences that have been subsequently brought to notice, yet we believe that in some sense they are understandable. For instance, Charcot and Möbius draw attention to the fact that the distribution of sensory-motor signs in hysteria coincided with the patient's crude and mistaken anatomical notions, and thus the signs became meaningful. But it could not be proved that such notions did in fact give rise to the disturbance, except when there had been direct suggestion. The signs were understood only *as if* some conscious event had determined them. It remains an open question whether in these cases such an event could be the source inasmuch as the actual, unnoticed psychic event is never demonstrated, or whether this is just an apt but fictitious characterisation of certain symptoms. Freud described these '*as-if-understood*'

phenomena in considerable number and compares his activity with that of an archaeologist who builds up his interpretations from fragments of human works. The great difference is that the archaeologist interprets what has once actually existed whereas in the case of this 'as if' or pseudo-understanding the real existence of what is said to be understood remains entirely undetermined.

The psychology of meaningful phenomena is thus faced with great possibilities of expansion in that it is bringing *unnoticed* material into consciousness. It has to remain doubtful whether this fiction of pseudo-understanding can also penetrate into *extra-conscious material*. We can make no general statement regarding the usefulness of characterising certain phenomena 'as if' they were understood; the matter can only be decided in the individual case.

(g) *Modes of comprehensive understanding (cultural, existential and metaphysical)*

We repeat the differentiations which we have made so far:

1. *Phenomenological understanding* and the *understanding of expression*: the former is our inner representation of patients' experiences, gained with the help of their self-description. The latter is our direct perception of meaning in an individual's movements, involuntary gestures and physical form. 2. *Static and genetic understanding*: the former grasps particular psychic qualities and states as individually experienced (phenomenology); the latter grasps the emergence of one psychic event from another, the whole moving psychic context of motive, contrasting effect and dialectical opposite (the psychology of meaningful phenomena). 3. *Genetic understanding and explanation*: The former is the inner, subjective, direct grasp of psychic connectedness, so far as it can ever be grasped in this way; the latter is objective demonstration of connections, effects and ruling principles, which cannot be understood by empathy and are only explicable in terms of cause and effect. 4. *Rational and empathic understanding*: the former is not really psychological understanding at all. It is a purely cognitive understanding of rational content, common to all (e.g.: we can understand the logical structure of a delusional system of a world in which an individual lies submerged). The latter—empathic understanding—is the proper psychological understanding of the psyche itself. 5. *Understanding and interpretation*. We speak of understanding when what has been understood has been fully expressed in some movement, utterance or act. We speak of interpretation when in a given case sparse clues allow us to apply with a reasonable degree of probability certain meaningful connections that we have come to understand from elsewhere.

The above differentiations are really sufficient for our present purpose, which is to clarify the perception of empirical facts. In practice, however, understanding is constantly in touch with *something more comprehensive in which all such acts of understanding lie embedded*. We will, therefore, indicate those main areas over which our understanding moves, over and beyond what has been discussed so far.

(a) *Cultural understanding*. It is not only the logical content which has to be understood in an objective, non-psychological sense, but all the other mental content, the pattern of ideas, the images, symbols, ideas of obligation,

ideals, etc. We do not understand a person merely by isolating out a number of such contents, but the degree to which the psychologist is at home with them will limit and condition his psychological understanding. This kind of understanding is a cultural not a psychological understanding, but the psyche only becomes accessible to us if in this sense we understand the element in which it lives, the things that are visible to it, the things which it accepts and allows to take their effect.

(b) *Existential understanding.* In the act of understanding psychic connections, we come up against the limits set by the ununderstandable. *In one sense* we may see this as the extra-conscious, the limit of the understandable. As the body that carries us we have to accept it in all its causal connections, as matter we have to shape it and as material possibility we have to grasp it and where it fails this has simply to be endured. *In another sense* what cannot be understood is also the source of the understandable and it thus goes beyond the understandable; it is a self-illuminating process, something becoming understandable, if only we can lay hold of it out of the unconditioned absolute of Existence itself. Therefore, in relation to the ununderstandable, where this is a limiting factor that can be causally explored, psychological understanding becomes an *empirical psychology*. But in relation to the ununderstandable as a phenomenon of possible Existence, it becomes the philosophical illumination of Existence itself. Empirical psychology affirms how something is and how it happens; the illumination of Existence through what may be possible makes its appeal to Man himself. Both have radically different meanings, but psychological understanding contains them both, linked inseparably together. From this rises an almost insurmountable ambiguity. In both instances the act of understanding presupposes and implies something that cannot be understood; this baffling element, however, is twofold and heterogeneous. Without the one aspect (the 'givenness' of causality) the understandable would cease to exist and without the other (Existence being itself) there would be no content.

The ununderstandable discloses itself to *causal enquiry* as instinctual drives, biological somatic facts and supposed specific extra-conscious mechanisms. The ununderstandable is as much present in all normal life as it is in morbid states and processes, in a deviant form. The ununderstandable *from the existential aspect* presents itself as a freedom, which discloses itself in free decisions, in a grasp of absolute meanings, and in that basic experience where the marginal situation rises from the empirical situation—that marginal point where we are roused from ordinary existence into an autonomous self-hood.

The illumination of Existence itself brings concepts into being, which lose their meaning altogether if a misguided psychological opinion then treats them as available modes of concrete existence and therefore as relative. The field of empirical research has no freedom nor does it contain anything of that liberating challenge offered by the philosophical illumination of Existence proper: the challenge of validity, awareness of the absolute, of marginal situations, ultimate decisions, responsibility, and of oneself as an original

source. Through the psychology of meaningful phenomena, existential illumination comes into contact with this something that goes beyond understanding, with the reality proper that lies in the possibilities of autonomous self-hood through the processes of memory, attention and revelation. If we treat this illumination as some kind of psychological theory of general application, we have confused and misstated its nature; so too, if actions, behavioural modes, instinctual drives and people themselves are classified in psychological categories of existential illumination, and treated for the once in this respect as natural facts.

(c) *Metaphysical understanding.* Psychological understanding is linked with empirical experience and free, existential achievement. Metaphysical understanding reaches after a meaning into which all the other limited meanings can be taken up and absorbed. Metaphysical understanding interprets the empirical facts and the free achievement as the language of unconditioned Being.

This interpretation is not a mere device of reason, something futile, but the illumination of fundamental experiences with the help of symbol and idea. As we look at the inanimate world, the cosmos, the landscape, we experience something we call 'soul' or 'psyche'. When faced with what is living, we proceed to grasp a number of purposeful connections and then advance from that to a vague perception of a Life that embraces all things and in the sequence of its forms realises itself as a fathomless meaning. As with nature, so it is with man—and we are confronted by him in all his actuality and freedom. He is not only an empirical reality to us but under the scrutiny of our metaphysical understanding, he, like everything else that is real, becomes a meaning we cannot verify. He is not only meaningful like a tree or a tiger but meaningful in his own unique way as a human being. This metaphysical experience of him is not a matter for the science of psychopathology but the latter can help in clarifying facts that will refine the experience: for instance, the fact that extreme psychotic states offer us a human parable, and that they seem to contain inverted and distorted attempts to realise and elaborate marginal situations, which are common to us all. There is also the fact that patients see into depths which do not so much belong to their illness as to themselves as individuals with their own historical truth. Finally there is the fact that in psychotic reality we find an abundance of content representing fundamental problems of philosophy: nothingness, total destruction, formlessness, death. Here the extremest of human possibilities actually breaks through the ordinary boundaries of our sheltered, calm, ordered and smooth existence. The philosopher in us cannot but be fascinated by this extraordinary reality and feel its challenge.

Digression into understanding and appraisal: all potential meaning implies an unresolved tension, in the intellectual field between truth and falsehood, in the field of existence between empirical event and freedom and in the metaphysical field between what inspires faith and what arouses dread (between the love and wrath of God). In understanding (and this includes psychological understanding) we experience this

tension constantly through the basic phenomenon that our understanding is also an appraisal. Meaningful human activity is in itself an expression of values and everything understandable carries for us an immediate positive or negative colouring: everything understandable has a constituent potentiality of worth. In contrast we do not value the ununderstandable as such but only as the means and condition for our understanding; we disapprove of a memory disorder which we understand as a purposeful suppression but we simply assess the physiological mechanism of memory as a tool.

The scientific attitude suspends all value-judgment in order to arrive at knowledge. But though this is possible when attempting causal explanation it is not possible with empathic understanding, at least not exactly in the same sense. We can, however, make an analogous claim for impartiality when we try to know what we have understood. We may lay claim to impartiality when we have shown an understanding that is fair, many-sided, open and critically conscious of its limitations. Love and hate bring values which are indeed the pacemakers of understanding but their suspension brings us a clarity of understanding that amounts to knowledge.

In understanding a concrete case we inevitably appear to make an appraisal and to fail in scientific understanding because with human beings every meaningful connection as such is immediately judged negatively or positively. This is due to the fact that the understandable as such implies some evaluation. To understand correctly is to appraise; to appraise correctly is finally to understand. Hence in all understanding there lies on the one hand a finding of fact which can be free of appraisal and on the other a challenge to appraise which calls out value-judgments. Correct understanding is hard to come by and rare, so our appraisal of others is usually false and depends on chance and emotional impulse. Every man likes to be judged favourably so that a favourable appraisal tends to make him feel understood. Thus in everyday language understanding and positive appraisal have become identical. Where people have been negatively judged—particularly in situations that expose them—they will consider themselves particularly hard to understand and will nearly always see themselves as persons misunderstood.

It is true there is the idea of objective appraisal, that is, of understanding and correct appraisal compellingly linked together. The establishment of understanding would then be the final true appraisal. But this is only a theoretical coincidence. Understanding can be linked equally with contrary value-judgments (thus Nietzsche continued to understand Socrates but sometimes he evaluated him positively, sometimes negatively). So long as we merely understand, the understandable becomes contradictory in itself, ambiguous and a source of ambivalent behaviour, the more fully it is grasped.

(h) How what can be understood psychologically moves midway between meaningful objectivity and what cannot be understood

At the point where our psychological understanding comes to a halt, we find something which is not itself psychologically understandable but a precondition for such understanding. Let us summarise:

In depicting connections that can be understood genetically, we always find: (1) we have presupposed a *mental content* which is not a psychological matter and which can be understood without the help of psychology; (2) we

have perceived an *expression*, which brings an inward meaning to light; and (3) we have represented a direct *experience* which phenomenologically is irreducible and can only be statically produced as a datum.

We can have no psychological understanding without empathy into the *content* (symbols, forms, images, ideas) and without seeing the *expression* and sharing the *experienced phenomena*. All these spheres of meaningful objective facts and subjective experience form the matter for understanding. Only in so far as they exist can understanding take place. They come into a context through the comprehension of our genetic understanding.

These subjective and objective findings are not, however, the only province of psychological understanding. On the contrary: (1) it is hardly possible to talk about contents without thinking of the psychological reality for which they exist; and (2) we can hardly scrutinise an expression without understanding the motive at work; and finally (3) we can hardly describe anything phenomenologically without immediately coming upon meaningful connections.

Psychological understanding operates where there is a totality of complex facts. It also meets with the *ununderstandable* in the form of extra-conscious mechanisms or of Existence itself. When understanding wishes to investigate causes, an extra-conscious bodily mechanism is inevitably implied and inversely it is impossible to talk of extra-conscious mechanisms without presupposing something that can be understood or has been understood and that evokes at its own limits the idea of some such mechanisms. When understanding wishes to grasp and illumine Existence as possibility and so call men back to themselves, it touches on a source of freedom in Existence itself without which everything understandable would lose its foundations, lack personal reference and become ineffective and void. Existence itself, however, can only manifest itself in an understandable phenomenon and only so can it attain its own self-realisation.

The understanding psychologist proceeds as follows: he starts from a comprehensive intuition of meaning. He then makes an analysis: expression, psychic content, phenomena on the one hand, extra-conscious mechanisms on the other, while existential potentialities are detected as an empirically unexplorable base. As a result of this analysis of facts and meanings he gains an enriched understanding of all the connections. In the given case the results will be scrutinised, the procedure repeated and insight steadily increased by the collection of objective data interwoven with fresh intuitions of the whole, which lead in their turn to a fresh analysis.

Thus our psychological understanding lies as it were *midway* between the objective facts, the phenomena of experience and the implied extra-conscious mechanisms on the one hand and the spontaneous freedom of Existence itself on the other. We might deny the object of psychological understanding altogether and maintain that phenomena, psychic contents, expression, extra-conscious mechanisms are all subjects for empirical research alone, while the

possibilities of Existence itself are purely a matter for philosophy. But let us try to manage with such a division of the field! Most of our psychological seeing and thinking would disappear and it would become impossible to speak of the facts and fundamentals of the Human Being without bringing back the psychology of meaningful phenomena once more. But this meaningful psychology is always in balance between these two realms and we can never speak of it in isolation. It is related to them both and if there is to be a complete presentation they cannot be separated.

Thus the psychology of meaningful phenomena never comes to any point of rest within itself. If it does, it has either become an empirical psychology, busy on the comprehension of phenomena, expression, content and extra-conscious mechanisms, or it has become the philosophical illumination of Existence itself.

Psychological understanding only serves psychopathology in so far as it makes something visible to our experience and fosters our observation. As I understand, I find myself asking what are these facts I am looking at and what am I indicating? When do I reach the limit of my understanding? The midway status of psychological understanding has to be constantly re-established by objectifying the psychic phenomena and discovering the limit of this understanding.

This intermediate status of our understanding throws some light on the old question of the psyche in its relation to mind and body. We see the mind as meaningful material content, to which the psyche relates itself and by which it is itself moved. We see the body as the psyche's existence. We never seem to grasp the psyche itself but either explore it as something physical or try to understand it as content. But just as the whole realm of the corporeal cannot be exhausted by the various physical phenomena which are biologically explorable—indeed, this extends right up to the body–psyche unity of expressive phenomena—so too the reality of the mind is linked to the psyche, inextricably bound to it and carried along by it.

Our view of concrete reality would be unnecessarily limited if we simply conceived the psyche as bodily expression and grasped it thus exactly, finding it here whole and complete, the psyche itself, with nothing to mediate it. Expression is only one of the dimensions in which the psyche is apparent and it is not an enclosed unit but can be understood only in connection with what does not become expression.

We conceive the psyche as the objective correlate to the method of understanding. The psyche appears to recede and in its place we are occupied with its foreground (phenomena, expression, psychic content) and with conditioning factors (the body and Existence itself). What psychological understanding gives us is the bond that holds together all that we can understand and all that belongs to it which we cannot understand.

The midway position of the psyche makes it impossible for genetic understanding to be self-contained and round itself off in what is thought to

be a decisive knowledge of the whole. Every act of understanding is a mode of apperception. It throws a beam of light into human reality. It is not the method which makes mankind accessible as individuals nor as a whole. All psychology of meaningful phenomena is therefore incomplete.

(i) *The function of understanding in psychopathology*

There are two main undertakings. We try first to *extend our understanding* to unusual and remote connections which at first sight perhaps seem incomprehensible (for example, sexual perversion, instinctual cruelty, etc.). Secondly, we try to discover universal and in themselves understandable connections in those psychic states where *abnormal mechanisms* appear as the conditioning factor (for example, hysterical reactions). In the first instance, it is a matter of understanding something that is felt to be pathological or unique but in any case alien from everything understandable; the emphasis lies on the special nature of the understanding. In the second instance, it is a matter of recognising the abnormal realisation of connections which are for the most part quite understandable in themselves and by no means unusual. Here emphasis lies on the *abnormal extra-conscious mechanisms*. These, however, become accessible to us only when we set out to understand.

Two chapters have been devoted to the above. The one deals with the 'what' of meaningful connections. They themselves provide the main theme and here the abnormality lies in the nature of what needs to be understood. The other deals with the 'how' of meaningful connections and the way in which they reach realisation through extra-conscious mechanisms. Here the abnormality lies in the mechanisms themselves. They cannot be understood as such and form the ground of the peculiar manifestation of what in itself needs to be understood.

The subsequent chapters deal with the two basic properties of what is understandable. These are: (1) All that is understandable, understands itself; it is in particular an operation of self-reflection, for example the attitude of the patient to his illness; (2) Everything understandable has its own coherence within the individual. The *concrete total of meaningful or understandable connections* constitutes what we call the personality or character of a person. This forms the subject-matter of the final chapter.

To ensure clarity of discussion on the subject of the understandable, we will recapitulate as follows: In the psychology of meaningful phenomena, the application of directly perceived, understandable connections to an individual case never leads to deductive proof but only to probabilities. Psychological understanding cannot be used mechanically as a sort of generalised knowledge but a fresh, personal intuition is needed on every occasion. 'Interpretation is a science only in principle, in its application it is always an art' (Bleuler).

CHAPTER V

MEANINGFUL CONNECTIONS

§ I. THE SOURCES OF OUR ABILITY TO UNDERSTAND AND THE TASK OF THE PSYCHOPATHOLOGY OF MEANINGFUL CONNECTIONS

We all know a great many psychic connections which we have learnt from experience (not only through repetition but through having understood one real case which opened our eyes). We make use of these connections in our analysis of psychopathic personality and of those psychoses which are still open to partial 'psychological explanation'. The richer we are in such meaningful insights, the more subtle and correct will our analyses be when we apply 'psychological explanation' in a given case. Neither in normal psychology nor in psychopathology has there been any attempt to elaborate the psychology of meaningful phenomena in any systematic way, perhaps because it has been thought impossible or too difficult to do this. Such meaningful connections as we all know and as constantly conveyed by our language lose all their force if we try to give them a general formulation. Anything really meaningful tends to have a concrete form and generalisation destroys it. But we expect systematic knowledge in science and if we cannot systematise meaning we can at least order our methods according to *principles of understanding*. First, however, we should remind ourselves of those sources on which the richness, flexibility and depth of our understanding depend.

In the case of every investigator it is a matter of his human stature as to what he understands and how far this understanding reaches. Myths are works of creative understanding and they have been creatively understood by all great poets and artists. Only through a lifelong study of poets such as Shakespeare, Goethe, the ancient dramatists and such moderns as Dostoevsky, Balzac, etc., do we arrive at the required intuition, and gain a sufficient store of images and symbols and the ability to exercise an understanding imagination necessary to guide the concrete understanding of the moment. We are sensitised by reflection over the whole range of the humanities. If the investigator has the basic features clear this will ensure that he has some real measure of understanding and can frame certain possibilities. As an investigator into meaning I am conditioned by the sources of my understanding, by such confirmation as I find and by my own problems. These all decide whether I remain tied to banal simplifications and rational schemata or whether I endeavour to comprehend men in their most complex manifestations. It is fair to say to the investigator of meaning: 'Tell me where you got your psychology from, and I will tell you who you are'. Only a close association with poetry and human reality at its greatest will provide the horizons within which the most

simple everyday occurrence can become interesting and vital. The levels reached by the one who would understand and by the object of his understanding will decide whether orientation is towards the ordinary or the extraordinary, the plain and uncomplicated or the complex and manifold.

Besides the world of meaningful myth and poetic image, there is a whole literature of intense thinking on the matter of understanding, based on *Plato*, *Aristotle* and later the *Stoics*. But it was *Augustine* who first elaborated psychological understanding for the Western world. After him there were a number of attempts in aphoristic form, mainly among the French: *Montaigne*, *La Bruyère*, *La Rochefoucauld*, *Vauvenargues*, *Chamfort*. Magnificent and towering above them all was *Pascal*. Only *Hegel* produced a system: 'The Phenomenology of the Mind', while *Kierkegaard* and *Nietzsche*¹ stand out unique as the greatest of all psychologists interested in meaning.

Basic patterns of human life underlie all our understanding and at the back of our minds we are more or less clearly aware of what man is and can be. Every psychopathologist visualises these patterns to himself but does not give validity to any single one. He tries them all out and sees what his concrete observations are and how his potential experience can be widened.

Psychopathology is not called on to develop and present all manner of meaningful connections in their totality. The realm of meaning is unbounded and we are protected from any apparent subordination to rigidly schematised thinking, simple or complex, if we remain fully aware of this and fortify ourselves by interweaving the heritage of the past with our own life experiences. The true problem for psychopathology is that meaningful reality which specific extra-conscious mechanisms, normal or abnormal, have brought into being.

Psychopathology, however, is obviously called upon to give a searching presentation of *rare connections with abnormal meaning* as they appear in individual, concrete cases. This is something outside the natural sciences and causal explanation and as such is not often attempted, certainly not in any thoroughgoing way. The tendency to accept only the causal knowledge of the natural sciences has obscured the sovereignty of any such investigation and has falsified objective enquiry by the introduction of 'psychological explanation', much as, in the natural sciences, pure understanding tends to get falsified by the use of theoretical constructs. Valuable contributions have been made in the fields of sexual perversion by the expert examination of Court cases and by good psychiatric case-histories. In psychopathology it may well be the task of special psychiatry to describe personality disorders and make us aware of singular meaningful connections (in the instinctual life, in the scale of values and in behaviour), but there are also a number of *common* meaningful connections which are the subject of relatively frequent observation and form part of the ordinary equipment of everyday practical understanding.

¹ Cp. my lectures 'Vernunft u. Existenz' (Groningen, 1935). Re Nietzsche, see my book *Nietzsche, Einführung in das Verständnis seines Philosophierens* (Berlin, 1936).

Note on the examples given of meaningful connections: There is an infinite world of meaning and in this chapter we can only indicate a few possibilities. During the last decades certain basic modes of understanding have grown into our everyday practice in rather haphazard fashion. We do not need to select arbitrarily a number of meaningful connections from the valuable literature mentioned above, but in psychopathology we have to be aware of our methods and of the viewpoints that have general acceptance among the psychiatrists and psychotherapists of today. These current points of view indicate the ways of understanding that are most acceptable today. They may not be universally valid nor so for ever but they are appropriate for our own particular world. All understanding presupposes *some picture of the individual and his personal world* at the same time as it enlarges this, and so it is with our contemporary understanding. The following seem to me material among the presuppositions that underlie our present picture of man: the impoverishment of the possibilities of inner experience compared with earlier times; the determination to correct this poverty by adhering to tradition; a knowledge of radical conflicts; a frankness of basic attitude and irreligion, inducing a tendency to believe in systems of faith-healing and certain passionately adopted symbols.

In what follows we present some contemporary viewpoints but the principle remains that we need to be acquainted with the great historical traditions of understanding as a background for our everyday, practical understanding. These should never be forgotten as original sources and as standards of measurement when contemporary experiment tends to crowd into the foreground of our awareness.

We present examples of meaningful connections from three aspects: (1) *Meaningful content*—instinctual drives are the sources of a subject's movement, which takes place within *an individual relationship to the world*. This movement becomes meaningful to itself in life through the use of *symbols* (we discuss instinct-psychology, psychology of the real, the psychology of symbols); (2) *The basic forms of the meaningful*—the individual's movement takes shape as an *opposition of forces* with accompanying tensions, reversals, reconciliations and critical decisions. The movement is *reciprocal* (we discuss the psychology of opposites, the psychology of reciprocity); (3) *Self-reflection* as a basic phenomenon of all meaningfulness (we discuss the psychology of self-reflection).

These three aspects of understanding (content, form and self-reflection) converge into one coherent meaningful whole. They are not a set of mutually exclusive and diverse elements but each one illuminates the whole from its own point of view. Therefore our psychological understanding if it is to be complete is constrained by each one of them to include the rest.

§ 2. CONNECTIONS WITH A MEANINGFUL CONTENT

(a) *Instinctual drives, their psychic manifestations and transformations*

All experiencing contains an element of being driven. There is something instinctual in everything we do and suffer, in everything we would bring about, enjoy or angrily avoid; it is the same whether we pursue something, grasp it, hold on to it and affirm it or whether we fly from it, avoid, by-pass or destroy it.¹

(1) *Concept of Drive.* The question ‘what is a drive?’ may be answered in several ways: drives are *instincts which we experience*, that is, functions carried out as the result of an urge without conscious awareness of content or aim but in such a way that complex purposeful activity finally reaches its end by being moved towards it. Drives are *physical wants*, e.g. hunger, thirst, need for sleep; that is, urges which reach their target directly provided the means are there. Drives are *a form of creative activity* shown, for example, in bodily movements that develop and manifest the bodily essence or in some way express and represent it (urge for expression, urge for representation); or they are shown in directed effort (urge for knowledge, creative urge). Drives are *motivated acts*, that is, impulses which are conscious of their aim and reach it intentionally using the available means to a purpose.

Any such dissection of the whole state of being driven, which is a unity in itself, always reflects some *attempt at interpretation*. We have then to ask which point of view governs the interpretation. Thus the above classification was according to the purposes objectively achieved (instincts); according to physical urges (drives); according to what is creatively produced (creative urges); according to the ideas, subjective goals and purposes present (motivated action). Such classification has only *relative* meaning. For instance the ‘sexual drive’ contains all these categories in itself: it is an instinct manifesting itself as an inborn function which fertilises without conscious awareness; it is a physical want or need (tumescence and detumescence); it shows erotic creativeness and motivates actions which will realise erotic ideas.

We can make a further differentiation of the whole state of ‘being driven’ from yet another point of view and ask whether the *motive of the urge is to gain pleasure* (by pleasure in this context we always mean physical pleasure) or whether the content provides the goal, to achieve which displeasure, pain and suffering are accepted, or whether displeasure itself can motivate the drive. *Pleasure* is an experience of harmonious biological function, of general wholesomeness and success, of a capacity to linger over things; pleasure also lies in psychic equilibrium and well-being. Drives, however, are not aiming just at such pleasure, but are *beyond pleasure and pain*. We cannot describe their essential nature except approximately through an attempt to classify them from a number of different aspects.

¹ Nietzsche: *Triebpsychologie*. See my *Nietzsche*, pp. 113–15.

There are still other points of view which we may follow, and we can differentiate according to certain broader aspects of meaningfulness which we are about to discuss. Thus we may take *the relationship of the individual to his environment*, in which case drives are conceived as stemming from the primary defencelessness of existence, in particular of man in his world. *In order to survive* he has the drive for power and self-assertion. He has gregarious drives (social feelings) for *the survival of the species*. If these two are mistakenly turned into absolutes, all drives become reduced to these basic drives and the highest aims are interpreted as merely devious ways whereby the basic drives achieve their elementary goals. Or we may take *symbols as meaningful content* and interpret them as a means, a language, a deception in the process of the self-realisation of the drive. Finally, we may take *the dialectical tension* which psychic movement creates. In this case we direct our attention to the conflicts that spring from resistance to a drive. We ask what resists and what is resisted. We understand the movement of self-control and discover what is irresistible and how it may grow to what is uncontrollable, always however for the time being, never absolutely so.

But, whatever our classification, there is a basic element of something given in all human drive. It cannot be understood as meaningful in any way, but from it all understanding of meaning has to start. At the same time there is a psychic impulse which drives towards definition through content. Understanding the drives and how they manifest themselves throws light on something which is itself a process of continuous self-illumination.

(2) *Classification of drives:* The contents of drives are as manifold as life itself. Every drive contains an urge and hence a movement which is moved on as it were by the force of something which is experienced (a symbol—according to Klages), something felt in the urge itself, unaccompanied by any specific idea or thought. Drives can therefore be distinguished from each other by their content, and enumeration of this would be as endless as that of the content of feelings. The important thing is whether classification can penetrate the elementary properties of drive and there have been repeated and various attempts to make some kind of catalogue.

Drives are polarised in some of the following possible ways: Drives arising out of a surplus of energy may be contrasted with those arising out of a deficit, e.g. the need to discharge energy as against the need to regain it. Then there are drives that can be aroused at any time as against drives which are essentially periodic, which are gratified and then arise anew. Some drives represent a continual need which can only be gratified repeatedly and are incapable of further development. They can be satisfied completely but only for the time being. In contrast, other drives change each time they are satisfied; they grow, develop and are never satisfied completely. The hunger does not diminish but increases with every gratification.

Freud distinguishes drives according to those opposites which he regards as the most profound—the drive to live and the drive to die. The *drive to die* is a drive to destroy which can be directed outwards (aggressive drive) or inwards against the self.

It is a drive to return to the inorganic. The drive for food has something in common with the drive to destroy because it destroys what is eaten. The *drive to live* (*Eros*) is differentiated into the *ego-drive* and the *sexual-drive*. The *ego-drives* are drives for self-preservation (drive for food, acquisitive drive, defensive drives and gregarious drives) and for self-expansion (drives for power and importance, the drive for knowledge and creative drives). The *sexual drive* includes the drive for the preservation of the species, care for the generations.¹

In the following classification drives are divided into three levels of drive:

Group 1. Somatic, sensory drives. Sexual drive, hunger, thirst—need for sleep, drive for activity—pleasure in sucking, in taking food, in anal and urethral excretion.²

In this group the basic polarity is that of *need* and *satisfaction*. All the drives have some bodily correlate. The drives are positive only with no other positive drive opposing. The negative would be disgust or aversion.

Group 2. Vital drives. They have no definite localisation in the body but are directed out towards human existence as a whole. They are:

(a) *Vital drives for existence.* The will to power—will to submit; the urge to self-assertion—urge to surrender; self-will—social drive (herd instinct); courage—fear (aggressive anger—retreat for help); self-importance—urge to humility; love—hate.

In this group the drives fall into pairs, each drive with its counter-drive. The *preservation* and *intensification of life* seems to be of objective significance in them all but only at the price of conflict which makes at any time the exact opposite possible—the destruction of life, whether of oneself or another and ultimately perhaps the urge for universal destruction. The polarity of drive and counter-drive will often produce an amazing dialectic, bringing about conversion of the opposites, one into the other . . .

(b) *Vital psychic drives.* Curiosity, protection of the young, the drive to wander, to find ease and comfort, the will to possess.

In this group the drives are defined by their particular content at any time.

(c) *Vital creative drives.* The urge to express, to demonstrate, make tools, work and create.

Group 3. Drives of the human spirit. Drives to comprehend and give oneself to a state of being which manifests itself as an experience of absolute values, whether religious, aesthetic, ethical or pertaining to truth. Philosophy undertakes to examine this world of values and clarify it independently from subjective psychological experience. It is a psychological fact that there is a basic experience of this sort, qualitatively different from that of the two

¹ There are many other classifications: e.g. Klages (*Grundlagen der Charakterkunde* (8th edn., 1936); *Der Geist als Widersacher der Seele*, vol. 2, pp. 566 ff.). Macdougall, *Aufbaukräfte der Seele* (D), (Leipzig, 1937), pp. 76 ff.

² Investigation of this group can only be through physiological examination, e.g. D. Katz, 'Psychologische Probleme des Hungers u. Appetits', *Nervenarzt.*, vol. 1 (1928), p. 345. *Hunger u. Appetit* (Leipzig, 1932).

previous groups and extremely complex and rich and derived from a dedication to these values. It is an instinctive longing for them when they are absent and a sense of delight incomparable to any other pleasure when the longing is fulfilled. It is decisive for any picture we form of people that we should know how this whole group of phenomena affects their lives. Although as a group these drives may sometimes recede to vanishing point they are never quite absent in any man.

The common factor in this group is the *drive for immortality*, not in terms of temporal duration but in the sense of participating in some temporal form in a pattern of Being that cuts across Time.¹

The material of these three groupings is of such heterogeneous meaning that we may well hesitate to talk in terms of drive in every case. And yet any such grouping has to separate what in reality is linked. Taking this classification as a *hierarchy of drives* we see that each preceding group can realise itself without the others but not vice-versa. It is characteristic for man alone that his whole instinctual life is pervaded by the drives of the last group. Nothing in man is simply identical with what we find in animals, nothing can be carried out simply and naïvely (Man, says Aristotle, can only be more or less than an animal). Inversely, however, man cannot, as it were, participate in nothing but purely intellectual or spiritual drives. A tinge of sensory-somatic drive is always present but to deduce from this that higher drives are nothing but a veiled form of basic ones would be a mistake. 'To be involved' is not 'to be origin'. The universality of the effects of sexual drive does not mean that this is always the determining, let alone the only, power of the psyche. Suppose we propose the more modest thesis that the mind is powerless, all power comes from the lower levels, or in other words that our deepest experiences and strongest impulses always originate at the lowest levels of our existence—this thesis of Schiller (hunger and love (sexuality) preserve humanity so that only those ideas can realise themselves that win the support of the natural drives) is by no means unequivocal. Such a thesis may perhaps hold for the mass-events of history but by no means certainly so for all times. It may help us, it is true, to understand how spiritual, or ethical, motives are often advanced or kept in the foreground of consciousness when essential and vital drives are *de facto* in sole charge. But this does not exclude authentic spiritual and intellectual drives from ruling the lower levels of drive, utilising them as tools and as a source of energy. We cannot doubt the primary quality of every movement of our impulses but their interaction and collision presents us with a fundamental problem of human existence. Once we see that this is so, we can no longer believe in any final and unequivocal classification of drives within a single and uniform hierarchy.

(3) *Abnormal drives.* There is a countless host of these. We find perverse tastes, like the pica of pregnant and hysterical women who develop cravings

¹ See Münsterberg, Scheler, Rickert, etc., for Values and their classification. Recent work: S. Behn, *Philosophie der Werte als Grundwissenschaft der pädagogischen Zieltheorie* (München, 1930).

for sand or vinegar, etc. We also find insatiable hunger, or an abnormally increased thirst which can become an addiction.¹ There is the drive for any kind of emotion at any cost, for excessive gesture and expression, the desire for inactivity, countless persistent drives to wander, get drunk, etc. All require particular analysis, which is the province of special psychiatry. Perverse sexual and other instinctual activities, usually correlated with the type of sexuality, are one of the main topics for investigation. We find an urge to suffer and pleasure found in pain, suffered or inflicted. The drive to be cruel is so widespread that it might almost pass for normal. Nietzsche saw it so and took orgies of cruelty as a basic factor in human affairs. When related to sexuality, such drives are called sadism (infliction of pain on others) and masochism (suffering pain) where the inflicted pain is the condition for sexual pleasure. But sexual frigidity is also linked with a drive to torture and with a lust for power, showing itself as a delight in inflicting pain. Moralistic attitudes towards others may often be a manifestation of the drive for power and the drive to torture ('right' sounds very like 'racked', said Nietzsche). Those who have gained importance in the history of culture are markedly surrounded by the specific atmosphere of abnormal instinctual states, of passionate hate, sado-masochistic pleasure, sexually frigid cruelty and a craving for domination in love, etc. It is important to know of the many and limitless transformations of these abnormal instinctual states if we are to understand some of the cultural movements of history, for instance, the link between asceticism, lust for mastery, cruelty (particularly in the Middle Ages) and fanaticism in almost all its forms. History obscures all this. It is not something which is talked about and handed on. Often it can be inferred only from concrete experiences accessible to the doctor but now and again accidentally preserved documents and records may give us a powerful illustration. But understanding will also show us the effects of healthy instinctual states and can trace the clear atmosphere of passions free from perversions and cultural transformations of this sort. Of the two, it almost seems that the healthy passion is the rarer.²

We can observe the power these instinctual perversions exercise over the whole of a person's life. If we try to understand, we are always faced with ambiguity: is a particular abnormal instinctual disposition the origin of a personality change or is an abnormal personality the condition of the possible abnormal manifestations? From the point of view of psychological understanding both seem to be the case. In outstanding personalities a most abnormal

¹ H. Marx, *Innere Sekretion*, pp. 420 ff. (*Handbuch der inneren Medizin*, von Bergmann, Staehelin, Salle ((Berlin, 1941), vol. 6, part I)).

² The literature on abnormal sexuality is immense. For nineteenth-century description see v. Krafft-Ebing, *Psychopathia sexualis* (Stuttgart, 1886), 14th edn., 1912. Havelock Ellis, H. Rohleder, *Vorlesungen über Geschlechtstrieb u. Geschlechtsleben der Menschen* (Berlin, 1900), 2nd edn., 1907. I. Bloch, *Das sexuelleben unserer Zeit* (Berlin, 1906). A. Moll, *Handbuch der Sexualwissenschaften*. Recent psychological enquiry, e.g. v. Gebssattel, 'Über Fetischismus', *Nervenarzt*, vol. 2, p. 8. Kronfeld, 'Über psychische Impotenz', *Nervenarzt*, vol. 2, p. 521. Hans Binder, 'Das Verlangen nach Geschlechtsumwandlungen', *Z. Neur.*, vol. 143 (1932), p. 83. A. Paunez, 'Der Learkomplex, die Kehrseits des Oedipus-complexes', *Z. Neur.*, vol. 143 (1932), p. 294.

instinctual disposition may be balanced by humane qualities which render it factually ineffective (as with Wilhelm von Humboldt). In other cases we have the impression that abnormal drives retain their power and perhaps originate in the personality, which is therefore defenceless against them. Ruinous consequences thus appear—instinctual disposition and personality are equally involved—so that the individual is unable to build a life with others. Or we find a number of intermediary stages where as a result of perverted drives a person is in ceaseless struggle with himself and stands tortured by an unsurmountable division in his existence. In the last resort the decisive thing is the personality into which the abnormality is absorbed and from which it springs, either evaporating, as it were, in the personality's pure ether or stamping itself indelibly upon it.

The following is a classification of the ways in which abnormal drives can be understood:

(aa) *As disintegration of the higher levels of drive.* As the higher levels vanish, drives at the lower levels gain uninhibited outlet and increase in importance within the psychic life as a whole. We may observe, for instance, the ravenous hunger of dementes. In terms of *personality* this is a devastation of the psyche.

(bb) *As dissociation between the levels of drive.* Different levels of drive split away instead of cohering and mutually limiting each other as clearly differentiated parts of one whole. Drives at each level are realised to the exclusion of the others, the sensual purely sensually, ideal ones purely ideally. The ravenous eating of certain neurotics is of this kind. More common is a splitting-off of sexuality and the isolation of this essential drive without any integration of it into the whole psychic destiny. Heyer speaks of those who 'forget the loving surrender to Eros by reducing it to banal sexual gratification'. All natural drives have something of the psyche in them, but the isolated drive is characterised by violence and soullessness. In terms of *personality* the effect is recklessness, heartlessness and malice.

(cc) *As inversion of the relation between lower and higher levels of drive.* Lower-level drives fulfil themselves in their own appropriate way by being free to lend themselves to some deep and indivisible unity, e.g. the sexual drive in love. Love manifests itself in the sexual drive as one of its forms. But the lower-level drives may realise themselves in the shape of higher-level drives by perversion so that the higher drives are not really there, except as a mask, as, for example, when religious feelings are experienced as sensual gratification or dedication to God as lust.

If we call this higher-level mask a 'symbol' and state that the sexual drive finds realisation in such 'symbols' we have to admit that such 'symbolic' gratification does exist. But it is not universal and when it occurs it is always the sign of an abnormal psyche. It is the direct inclusion of sensual drive in a non-corporeal form (the drive, so to speak, empties the form as it takes possession) instead of a sublimation in which the drive is there but transformed into a part

of the whole. This direct inclusion of the sensual element changes the very nature of the non-corporeal, turns it into a means, into dead matter, disguise and deception. In terms of *personality* the effect is that of dishonesty and hypocrisy.

(dd) *As fixation of drive.* Perversion rises through the accidents of our first experiences. Gratification remains tied to the form and object once experienced, but this does not happen simply through the force of simultaneous association with that former experience. If so, such phenomena would have to belong to human experience in general. The conditioning factor is rather something else, which we believe to have found when we suppose a hypothetical 'arrest at an infantile level' of the psyche as a whole.

For example: Fetichism is a perversion in which the objects of sexual attraction may be shoes, fur coats, underwear, girls' pigtails, etc. v. Gebssattel studied shoe-fetichism. The shoe for the patient was not just an object, but a living thing which he addressed, cuddled, as a child cuddles a doll. The fetish formation corresponds to an auto-erotic state of development arrested at an infantile level. The shoe-fetichist is 'incapable of letting his love and sexuality reach beyond himself. He cannot bring them together into any real consonance with the realisation of another living "Thou". Created in flight from other personalities and the other sex, the fetish becomes a substitute for the other "Thou" as well as for the other's body. The fetichist in the course of his development becomes fixed in the maternal/paternal love relationship and never grows out of it.'

Psychoanalysts interpret neurotic attention to food and digestion as an infantile attitude, coprophilia as well and other manifestations of anal-eroticism. They understand scrupulous cleanliness and anxious orderliness and other features of the 'anal-erotic' person in the same terms.

The *personality* reveals the effect of these fixations as an inner lack of freedom, as inhibition and a general impoverishment of feeling.

(ee) *Transformation of drive into craving.* Drives are not yet cravings. Craving as compared with drive is not only stronger and more difficult to overcome but it is experienced as something alien and compelling. Craving springs from an abnormal and intolerable state which it is supposed will be alleviated by satisfaction of the craving. Drives can turn into cravings. How does a craving arise? Firstly, through knowing. Reflection on sexuality can itself create a craving even though the drives themselves are not particularly strong. Secondly, a chance intake of intoxicants may lead to withdrawal phenomena (addictive cravings in the narrower sense are those due to intoxicants). Thirdly, there is a certain peculiar and increased sense of emptiness into which people may fall repeatedly through disposition or situation, and in order to escape from it they surrender to a craving. Thus v. Gebssattel remarks 'every sort of human interest can degenerate into a craving' in that it may be put into the service of this emptiness, whether it be work, collecting things, striving for power, indulging in sentimental feelings, making a cult of beauty, etc. Instead of a growing personal life, all that happens is a repetitive craving

for the same thing. The dissatisfaction felt is only gratified for the moment, it is never removed. It returns at once and demands unreflecting repetition without any growing continuity of content.

All perversions are cravings (v. Gebssattel). They are more compelling than normal drives. The urgent desire for intoxicants is a craving. In this case there is a physiological emptiness produced in the person, for instance when morphine has been given for medical reasons and its effects cease. It needs a certain self-discipline to overcome this state. If however this whole sense of emptiness is an integral part of the personality and precedes the craving altogether, both factors combine, the physiological state and the urge to banish the emptiness in intoxication. We may say that all alcoholics, morphinists, etc., who are addicts, carry with them a basic, psychic readiness and that they can replace one craving with another but can never become radically free from any because the cause of the craving cannot be abolished.

(4) *Psychic developments due to transformation of drive.* Not all impulses arise from a basic drive. On the contrary we have to differentiate between primary drives and those drives which are only disguises, substitute activities or only apparent instinctual drives. In this case the meaningful connection is as follows: our real environment often impairs the gratification of instinct and this will happen sometimes to every one. Every instinctual gratification brings some kind of pleasure, and every impediment arouses displeasure. Where reality denies true instinctual gratification, the psyche will seek such gratification by a number of devious and unnoticed ways, although in principle we are always capable of noticing when this moment arises. Since real gratification is impossible, success is obtained through a deception. From this arise the host of our illusionary gratifications, the unnoticed dishonesty of human nature. Here are a few examples from this really inexhaustible field:

(aa) One possibility is that we simply exclude *concrete reality* from our consciousness. We believe that what we wish is real and what we do not wish is unreal. The majority of human judgments are distorted in this way. With one group of psychoses—the so-called reactive psychoses—we gain the impression that the psychosis achieves *a flight from reality*—a reality that has become unbearable.

(bb) Another possibility is that the *ungratified drive takes another object as a symbol* and gains a different, slighter but nevertheless acceptable gratification. The objects of the above third group of drives are very often turned into symbols by ungratified drives belonging to the first and second group. The drives of the third group are then not really experienced, but only apparently so. This becomes obvious in the different character of the subjective experience and also by the fact that as soon as a possibility for real instinctual gratification arises the false enthusiasm for the other values vanishes.

(cc) Similarly, there can be a translation of values, a '*falsification of value-scales*' (Nietzsche) whereby underprivileged people make their reality bearable. Poor, weak, impotent individuals turn weakness into a strength, e.g. in the

formation of certain moral values, to make their existence tolerable. Nietzsche understood such a shift in values as the product of *resentment* at the positive values of others who were rich, privileged and strong. Scheler¹ has made an excellent analysis of the relevant connections and shows the deceptiveness of these changes in values.

Another falsification which is the direct opposite of that springing from resentment is the *attachment of value to social status* (Legitimitätswertung). The individual for whom things go well, who is fortunate in his birth and belongs to the ruling classes, tends not to ascribe this to luck but to his own innate superiority and natural merit. The privileged position is not seen in the first place as a challenge but simply as the individual's due. In addition to everything else underprivileged people have to bear, he maintains that their suppression is right because they are inferiors. Full of self-regard, he takes affluence, power and superiority as a sign of aristocratic nobility, and health, strength and good spirits as a sign of his ultimate worth. He does not let himself see the accidental nature of his own position and the roots of ruin in all this. He cannot stand modesty, humility or any knowledge of the realities which bought him all his advantages. He wants to avoid any threat of fall and decline and to escape the responsibilities of his position. He therefore makes use of the rightness of his status as a protective screen so that he can be free of his obligations and enjoy his possessions in peace. Thus suppressor and suppressed alike may both falsify their scales of value in a complementary manner, just as a sense of the realities, truthfulness and openmindedness are possible for them both.

(b) *The Individual in the World*

The basic human situation is that each one stands in the world as an individual, a finite being, dependent but always with a possibility for activity within certain changing but none the less constricting bounds. Living is an encounter with a world which we call concrete reality. To live involves struggle, impact, creation. It means breaking against the world, adapting to it, learning and getting to know it.

1. *The concept of situation.* All life takes place in its own particular surroundings. In abstract physiological terms we say stimulus causes reaction. In real life, the situation releases activity, and gives birth to performance and experience; it may evoke them in some way or put them forward as something that has to be done. Social studies investigate the human situation as it derives from the objective relationships of social life. The psychology of meaningful phenomena investigates individual attitudes to typical situations. It objectifies the way in which coincidence, opportunity and destiny come to us through the situation itself and how we grasp or lose them. Situations have urgency, their sequence is changeable and unfixed, and mankind can contrive them. We use

¹ Max Scheler, 'Über Ressentiment u. moralischen Werturteil', *Z. Pathopsychol.*, vol. 1 (1912), p. 268.

the term 'marginal situations' for the ultimate situations like death, guilt, and inevitable struggle, which determine the whole of life unavoidably, though they go hidden and unheeded in our everyday existence. The human experience, appropriation and conquest of these marginal situations remain the final sources of what we really are and of what we can become.

2. *Concrete reality.* What concrete reality is cannot be maintained with any objective certainty but it depends to a certain degree on *beliefs which the community generally accept*. In trying to understand someone, we have to keep apart what he accepts as concrete reality and what we ourselves know it to be. Hence because concrete reality has no absolutes all understanding exists, as it were, in suspense.

Concrete reality is *nature*, in particular our body and our physical and mental abilities. Concrete reality is the *social order* which indicates what the individual must expect in any social situation from certain acts or modes of behaviour. *Other individuals* are also concrete reality and communication with them creates the familiar, supporting foundations of our life.

Man is driven towards concrete reality to fulfil his existence in bodily soundness and skilful performance or in social privilege and responsibility or perhaps in the only way in which he can truly realise himself, in the bond of close and genuine relationships. But such fulfilment does not just come automatically to him on its own.

3. *Self-sufficiency and dependency.* As humans, we tend to imagine some sort of ideal being that is self-contained and self-sufficient and content in itself without needing to receive anything from without because there are endless riches to be derived from itself. But if we want to become such a being we have first to learn the drastic lesson that in everything we are dependent. As vital beings we have needs that can only be satisfied from without. We have to live in society, and play a part there in order to get our share of the goods necessary for life. We have to live with others, surrendering to them while preserving ourselves, giving and taking in mutual relationship. We have to live, loving and hating, or we will grow empty and void in our solitude. We have to live in exchange with each other, and continually create afresh from what we learn, hear, understand and appropriate, if we are to partake in the human spirit to which we would have no access without our fellows.

There are limitations, inhibitions and collisions in all our external contacts, whether with nature or with man, with society or with the individual. Life is realisation through the processes of creation and adaptation, through struggles and resignations, compromise and fresh efforts at integration. In such realisation the polarities between preserving our own space and surrendering it to others become a unified whole and there is no dispersal into mutually exclusive opposites.

But we cannot avoid *conflict*, conflict with society, other individuals and with oneself. Conflicts may be sources of defeat, lost life and a limitation of our potentiality but they may also lead to greater depth of living and the birth

of more far-reaching unities, which flourish in the tensions that engender them.

All finite life has a double character. It *reacts* to situations, facts and people and in its reactions it also becomes *active and creative* in the concrete reality of the confronting situation. Action and reaction are wrongly conceived as opposed and it is a mistake to imagine the possibility of an absolute creativity engaged in objectless activity. It is equally wrong to take reaction as the fundamental feature of life.

In the course of time the modes of activity and reactivity and of their admixture (with one or other pole predominating) take up a certain pattern of distribution in any one individual as with others, and thus a group-type is formed. As extreme examples we find: a *contemplative, closed inwardness* that devotes itself to quiet being and passes its life untested, unproven, in a continuity of looking and remembering. On the other hand there is the *activity of the extravert*, that accepts no finality of being but always wants to make a change, and prove itself in so doing, passing its days in conquest, creation and organisation.

4. *Typical basic relationships of the individual to reality.* The above-described ways of existence in concrete reality are never pursued without meeting resistance. Success is never complete. There is a constantly moving relationship between activity and reactivity and this can be meaningfully construed in terms of typical contrasts:

(aa) Kretschmer¹ confined the relationships between the self and outer world—that is the individual's style of life—to the following possibilities:

1. A simple sthenic or asthenic relationship

Sthenic: feelings of superiority over the world, of strength and power to act. Tendencies to excessive self-assurance, recklessness and aggressiveness.

Asthenic: feelings of inferiority, weakness, passivity. Tendencies to underestimate the self, give way and be uncertain in one's behaviour.

2. An internally contradictory, expansive or sensitive relationship.

Expansive: Sthenic/asthenic polarity. Hence hidden feelings of insufficiency, overcompensation, touchy self-consciousness, readiness to take offence or feel injured. Tendencies to paranoid and querulant behaviour.

Sensitive: Asthenic/sthenic polarity. Hence ambitiousness, vulnerable self-esteem, sudden strong feelings of insufficiency, uncertainty about life, self-torture, scrupulous conscience with little cause, feelings of moral reproach. Tendencies to ideas of reference.

3. *Intermediate life-styles:* conciliatory, practical and adaptable, in harmony with one's milieu. No contrast felt between the self and the outer world.

¹ Bumke's *Handbuch der Geisteskrankheiten*, vol. I, pp. 686 ff.

(bb) To complement this typology of temperament, the content of the person's life-style can be classified according to his attitude to reality, and the meaning this acquires for him in the course of time. The contrasting polarities are as follows: Either his work, performance and life in general draw validity for him from *some continuing whole* or he finds every activity a game, an *adventure, an experiment*. In the former case we find the following of some task or calling, carried on historically by successive generations. The work of the past is a tangible whole which comes to life again daily in the individual's own activity. The farmer is such a type and knows himself to be a disappearing link in the service of his farm and acts accordingly. But in the latter case, we have the game of the adventurer, where everything is in pieces. There is no meaningful sequence of activity, the moment is supreme. His world is without plan, completeness or grace. The adventurer in his reality gives us a symbol of the impossibility of perfect fulfilment.

Both these contrasting polarities express a basic attitude to reality and in each case the reality is felt as radically different. For the one, reality signifies an enduring existence in an historical sequence of work, family and further development; for the other, reality has no foundation and signifies an eternal gamble and defeat.

5. *Denial of reality through self-deception.* It is difficult to expose ourselves fully to reality. Reality exacts constant self-denials, continuous effort and painful experiences and insights. There is therefore a strong urge to withdraw from reality. Life always finds a possible way to circumvent it, screen it off or find some substitute and this is accompanied by the momentary pleasure of easy gratification but it is always at the price of loss of health or life. In a host of individual situations, as indeed throughout his whole life, man is constantly faced with this choice of either penetrating or denying reality. The following are some of the ways in which withdrawal from reality seems to offer substitutes, gratification and satisfaction.

(aa) *In place of the denied reality*, the object of gratification becomes one's own *self-created contents*. Montaigne wrote: 'Plutarch says of people who waste their feelings on guinea-pigs and pet dogs, that the love element in all of us, if deprived of any adequate object, will seek out something trivial and false rather than let itself stay unengaged. So the psyche in its passions prefers to deceive itself or even in spite of itself invent some nonsensical object rather than give up all drive or aim. . . . What would we not hold on to, rightly or wrongly, so as to have something on which to vent our wrath?' Objects are then not taken as such but as symbols for something else.

We escape from reality with the help of *fantasies*. These conjure up easily and lavishly all that in reality would be so hardly and sparsely achieved. Fantasies are related to wishes which arise from the inhibitions and deprivations of individual existence and they bring us relief though they have no concrete reality. Bleuler calls this self-incapsulation in an isolated world '*autistic thinking*'. The contents of fantasy longing may be, for example, one's

lost childhood, foreign lands, spiritual homelands, but the crucial point is the tendency to turn away from present conflicts and obligations. It is an aspect of metaphysics and poetry that they rob man of his real personal part in Existence itself in favour of a dissipation of his powers in fantasy, and this was most profoundly comprehended by Kierkegaard.

(bb) At first these modes of unreal subjective gratification are only a sort of game we play, but they can lead to a *subjective realisation of their contents*. A transformation occurs which must be due to some underlying abnormal mechanism which we no longer understand. Here belong the hysterical realisations (in all kinds of bodily and physical phenomena), elaborate lying in which the person convinces himself (*pseudologia phantastica*) and the construction of delusion-like worlds in schizophrenic processes.

(cc) Transformations of this sort do not often occur in normal, understandable psychic life, but once the game of fancy has started, it frequently leads to *self-deception*. The self-deception can be corrected but we see it at work in the understandable forgetting of painful things or obligations, the subconscious relief of illusionary misinterpretations, of which we are certainly subjectively aware, and in temporary excursions into hysterical behaviour. The contrast to such behaviour is the striving for reality, truthfulness and authenticity. The person wants to have a transparent vision of what he really is in his concrete reality. Such an effort returns him to the world if defiance has not led him to the utter clarity of negation and isolation.

The behaviour of neurotics and psychotics, criminals¹ and eccentrics has been understood as a form of self-deception, a self-surrender to a fictitious existence, which has arisen from an urge to get away from reality. Seclusion of the self comes to mean falsity because self-deception and self-constriction inevitably follow. Seclusion from reality as given is indeed a seclusion from the very basis of being which manifests itself through reality. And 'sin is separation from God'. Falsity of this sort has been thought to be a universal human trait; like Ibsen, we look for the 'life-lie' which everyone needs and acknowledge Goethe's saying that no one ever reaches such insight into truth and reality as would take away the conditions of his own existence. Others limit this world of radical self-deception to a particular group of persons who suffer from personality disorders (psychopaths) and define personality-disorder (psychopathy) as 'a suffering from self-deceptions necessary for life' (Klages). Any reasonable psychologist will guard against generalising in either direction. We try to understand our problems but we do not expect any final answers.

The struggle is real. We see that we are threatened, that the situation makes demands. Flight, attack or defence are all weapons we can use. But the whole procedure may become obscure. Unbearable reality tends to get veiled. We do not accept the threat nor the demand that we should fight or endure it. Our defence becomes an avoidance in self-deception. We have no clear intention

¹ Andreas Bjerre, *Zur Psychologie des Mordes* (Heidelberg, 1925).

but make an instinctive arrangement to get away from the demands of the situation, perhaps through illness or some misfortune or suffering. Both the situation and its demands and the meaning of our own attitude are hidden from conscious scrutiny. In addition to the deliberate deception of others or substituting for it, we find self-deception and a distortion of reality. The person's consciousness can no longer accord with his unconscious.

6. Marginal situations. Man is always in one situation or another, and all these situations are finally resolved into marginal situations, that is, certain impassable, unchangeable situations that belong to our human existence as such. In these situations mere human existence founders and awakens to Existence itself.¹ Empirical psychology can throw no light on these marginal frontiers nor on what an individual can become when confronted with them, whether he conceals them from himself or lays himself open to them. But the psychopathologist interested in meaning must be aware of all this because the personality disorders (the psychopathies and neuroses) and the psychoses are veritable sources of human possibility, not only deviations from a healthy norm. The abnormal happening and experience is very often a manifestation of something that is a strictly human concern. The psychopathologist who confines himself to mere observation and objective phenomena cannot perceive this; he can only do this within the bond of human fellowship where one person shares his destiny with another.

Neurosis (personality disorder) has been conceived as failure in the marginal situations of life. The goal of therapy has then been visualised as a self-realisation or as a self-transformation of the individual through the marginal situation, in which he is revealed to himself and affirms himself in the world as it is.² This conception is valid so far as its philosophical truth is also valid for the neurotic person. The practical philosophy of becoming truthful also has a therapeutic effect. But we should remember that avoidance of marginal situations does not in itself create illness. We see it carried out quite successfully in a perfectly healthy dishonesty and cowardice, without any abnormal phenomena.

(c) *Symbols as the content of ultimate knowledge*

To understand the individual, we need to understand what he knows, what objective contents exist in his consciousness. The crucial point, however, is not so much what he knows but what this means to him, that is, how was his knowledge acquired and what are its necessary effects? The nature of an individual is determined by what he experiences, sees and is confronted with as his own concrete reality. Most of all it is determined by his concrete certainty of this reality. What sort of God he has sums up the man.

i. *Ultimate knowledge.* The knowledge which belongs solely to the indi-

¹ 'Über Grenzsituationen', see my *Philosophie*, vol. 2, pp. 201 ff.

² Johanna Dürck, 'Die Existenzformen von Bemächtigung u. Verneidung', *Zbl. Psychother.*, vol. 12, p. 223.

vidual and which *conditions* the certainty of his knowledge or is the *precondition* of any other knowledge he may gain, we have termed ultimate knowledge. Another term is the 'a priori'. As such, it is the *general 'a priori'* of universal consciousness in the categories of understanding. As regards ideas, it is the 'a priori' of the intellect; as regards practical drives and forms of reaction, it is the 'a priori' of human existence. *Historically* it is the 'a priori' of the person, present in his own world as part of his tradition, as a momentary figure in time, as an incarnation of the universal, which has meaning and import, not as a universal but as an infinite particular.

Ultimate knowledge resides in the prevailing types of intuition, in the types of seeing and conceiving primary phenomena and facts, in the modes of individual and group existence, in the various tasks and callings and the dominant values and tendencies. Symbols play an important part within it and are all-pervasive.

2. *Concept of the symbol and its significance in real life.* Kant states: 'every object must be concrete before we can grasp it. Symbols help us to grasp things by analogy. For example, monarchy may be represented as a body with a soul and dictatorship as a machine. There is no similarity between actual object and image but they have the common principle of making us think about both and their inner causality. Now if "reflection on an object of direct apperception is transferred to an entirely different concept which can never be directly apperceived", then we have the symbol. In symbols we behold all that our reason thinks without there being any corresponding concrete apperception for the thought. What is beheld in the symbol proper is *only* accessible in symbolic form; the object of the symbol never shows itself directly as concrete experience. "Thus knowledge of God is purely symbolic." To take the symbols, for example, of God's will, love and might in a direct fashion, only lands us in anthropomorphism, and if we ignore the intuition in the symbols we shall slide into Deism.'¹

Symbols that do not contain a concrete reality become non-committal aesthetic contents. They are only fully symbols if they express reality. Human thinking is prone to take this symbolic reality as if it were the reality of direct apperception, so that symbols tend either to become objects of superstition (where their concreteness is mistaken for reality) or to pass as unreal (mere metaphors or symbols when measured by concrete reality itself). To live deeply rooted in symbols is to live in a reality which as yet we do not know but can appreciate in its symbolic form. Symbols therefore are infinite, accessible to infinite interpretation and inexhaustible, but they are never reality itself as an object which we could know and possess.²

It is true that ultimate knowledge has categories to *structure* it and ideas that form *complex unities* but the *reality* that lays hold of us in it takes a

¹ Kant, *Kritik der Urteilskraft*, Section 59.

² Fr. Th. Vischer, *Das Symbol in 'Kritischen Gängen'*. His conception is an aesthetic one, and the reality-content vanishes.

symbolic form. This means that ultimate knowledge is not a well-developed intellectual knowledge but lies in apperceptions and images that carry infinite meanings and bring to us the language of reality. Their presence, as it were, protects us, helps us to reassure ourselves and brings us peace. Even the logically systematised knowledge of the philosophically educated person comes at last to the determining symbol. Even systems of ideas are like symbols in their complex unities and when they carry a real awareness mean more than is seen in them by reason. All basic philosophic concepts are, not so much definitions, but rather comprehensive symbolic apperceptions, which not even the most detailed of rational systems can fully explain.

Symbols are an historical ‘*a priori*’ but their truth impresses us as something eternal in time. They order themselves in an infinite succession. They come to light in myths, philosophy and theology. They appear in the play of the imagination, flourish uncommitted in aesthetics, compel with absolute power in extreme situations and are the hidden guide of every full-bodied, meaningful life.

Everything in the world can become a symbol. The basic forms of life, the universe and of all that happens, the elements, the basic facts of our existence, types of real things, human ideals and counter-ideals. Every one of them can be turned into a symbol according to what we value. If seen simply as objects, they cease to be symbols, even when one signifies the other (e.g. the machine signifying the dictatorship) provided both are seen on equal terms, explaining each other as ends in themselves. Where symbols become carriers of infinite meaning, of something inaccessible except through the symbol, they become as it were ‘creatures with souls’, attracting us to themselves, inspiring us, delighting us, making us shrink but always absorbing us. They leave their imprint on us in so far as they leave us free, but should they become lasting objects of superstition they keep us fettered.

In common usage the word ‘symbol’ has many meanings. In its widest sense it is used merely as a sign, as a metaphor or simile, as some schematic abbreviation for what we see in the world, as anything significant. We must always ask ‘a symbol of what?’. If the answer refers to some other concrete object then we are not dealing with a genuine symbol. The genuine symbol contains the ‘of what’ within itself and there is no actual object referred to, except perhaps in the form of some transcendental philosophic concept.

In the psychology of meaningful phenomena we need to differentiate carefully between a symbol as a *carrier of meanings that have a personal validity*, springing from the person’s life-history, a kind of surrogate structure as it were, and a symbol as a *carrier of a comprehensive meaning, the bearer of an immanent transcendence*. Jung conceived the first as arising from the personal unconscious, and the latter as from the collective unconscious.

3. *The possibility of understanding symbols.* Can one understand symbols? Other people’s symbols, not one’s own, can only be seen as they appear from without. We cannot understand them from within, from the very heart of their

reality. The symbol must incorporate one's own life if the meaning is to be fully understood. Our own symbols can be illumined, and translated into metaphysical ideas and in the process much is brought out of the dark into a rich unfolding. While they remain part of our life and we live in them they can be understood. Formal understanding of symbols, on the other hand, can only reach as far as an aesthetic appreciation, the special excitation of feeling by a tentative play with exotic material, while the true seriousness of reality is lacking. Symbolic knowledge amounts to more than thinking in images.

Psychological understanding of symbols moves among perilous *ambiguities*. We study symbols in myths and religions, dreams and psychoses, in daydreams and in the personality-disorders (psychopathic states). We get to know about them but only from without and our own beliefs are not involved. On the other hand, in the course of such scientific study we get bent on the truth of the symbols themselves; we would like to heal through communicating our knowledge of symbols; we want to bring them to life ourselves, and invite participation in them. There is a confusing interweaving between knowledge of symbols as historical and psychological facts—seen from outside even when we have some inner representation of them in ourselves—and knowledge of symbolic truth. The two meanings get inextricably mixed.

4. *The historical study of symbols.* The exploration of symbols is usually confined to myths, fairy-tales and sagas. Research into Greek mythology seems to have been the main source especially since the Romantic period (Creuser). The most productive authors have been O. Müller, Welcker, Nägelsbach, Rohde.¹ Schelling's² imposing and comprehensive study still has interest in spite of gross mistakes in detail, but among all these interpreters, Bachofen³ remains the one who had inspiration, as it were, in spite of his collector's zeal and solid approach.

Nowadays it is Klages⁴ and Jung⁵ who have become known as the interpreters of symbols. What Burckhardt termed 'archaic images' ('urtümliche Bilder'), Klages termed 'images' and Jung 'archetypes'. But there are certain essential differences between Klages and Jung. Klages' interpretation has a fascinating vividness. His presentation of the symbols of poetry and art remains as perhaps the really lasting contribution in all his great work, in

¹ Otfried Müller, *Prolegomena zu einer wissenschaftlichen Mythologie* (Göttingen, 1825) *Die Dorier* (Breslau, 1844); F. G. Welcker, *Griechische Götterlehre* (Göttingen, 1857); C. F. Nägelsbach, *Homerische Theologie* (Nürnberg, 1840); *Nachhomerische Theologie* (Nürnberg, 1857). Erwin Rohde, *Psyche* (1893), 4th edn., 1907.

² Schelling, *Philosophie der Mythologie u. Offenbarung* (Werke, 2 Abt., Stuttgart, pp. 1856 ff.). In particular vol. 1 of the *Vorlesungen*, pp. 1–10—'Über die Geschichte der Mythologie'.

³ J. J. Bachofen, *Die Auswahl 'Der Mythus von Orient u. Occident'* (München, 1926). Historical introduction by A. Baeumler. Selection by Rud. Marx in Kröner's *Taschenausgabe*.

⁴ Ludwig Klages, *Der Geist als Widersacher der Seele* (Leipzig, 1929).

⁵ C. G. Jung, *Wandlungen u. Symbole der Libido* (Leipzig and Vienna, 1912). *Seelenprobleme der Gegenwart* (Zürich, 1931). Über die Archetypen des kollektiven Unbewussten, *Eranosjahrbuch* (Zürich, 1935). On Jung himself: Die kulturelle Bedeutung der komplexen Psychologie, *Festschrift zum 60 Geburtstag* (Berlin, 1935).

which he brings forward rather doubtful evidence for the development of a strange, precritical philosophy through a synthesis of rationalism and gnosticism. Jung on the contrary lacks the impressive vividness of Klages and his work has nothing like the same weight. He is the deft master of all the means of interpretation but the inspiration is missing. Klages has inspiration, in as much as he is the true successor of Bachofen, whose work he rediscovered. Jung's expositions become tiring and irritating because of many undialectical contradictions. As the reader emerges from many of Klages' pages, he is struck by a winged quality which is lacking from the work of Jung who favours a worldly scepticism. The present day is poor in symbols and both these men are anxious to discover primary reality. Jung's efforts strike me as a fruitless new start through the exploitation of what is old, while Klages' attempt, as he appears to have felt himself, seems a rather hopeless recollection of the lost depths of history.

Jung's theories have gained esteem among psychotherapists, and even outside these circles there has been some enthusiastic agreement. The eminent Indologist, H. Zimmer, speaks of 'the magical, soul-guiding function of Jung's teaching'. 'It has discovered in the underworld of our being the eternal source, the ancient murmurings. The Myth which peoples and their poets have spun for our understanding is thus restored to its home in these unplumbed depths from which all its forms arise.' 'C. J. Jung's art of dream interpretation throws a remarkable light upon the dark world of myth and fairy-tale'. Each should look for himself and see what he can find. But for myself, I cannot be convinced that such judgments are correct.

5. The possible function of symbol-exploration. Symbols have a certain role in modern public life but they tend to be few. Compared with earlier times, life nowadays is extraordinarily poor in symbols. Yet it is a fact that symbols appear in great number in dreams, daydreams, psychoses and personality disorders (psychopathic states); whether they do so as by-play or in all seriousness cannot be determined. In psychopathology, symbols have become a favourite object of attention for psychotherapists because in psychotherapy symbols become important. There are three reasons for this: firstly, they give us an insight into what are the dominating preoccupations of the individual; secondly, unnoticed symbols can be evoked, fostered and brought into consciousness; and thirdly, symbols can be used to give indirect guidance to the patient. This at least appears to be so, although all these three procedures have been doubted by some. But if symbols do have this importance—hard to overestimate—then their exploration becomes of extreme consequence.

(aa) Recognition of symbolic material. Psychotherapists began by letting patients tell their dreams. Similar contents were also found in psychotic experiences, fantasies and delusions. Lastly it was discovered that an otherwise unregarded world emerged in the dreams of everyone. These findings became significant, in as much as parallels could be drawn between them and universal myths, in the same way as ethnologists had already found parallels between myths all over the globe, giving rise to the hypothesis of 'elemental human

ideas' (*Elementargedanken*—Bastian).¹ These were thought to arise spontaneously everywhere without any spread of ideas through communication. Similarly psychotherapists assumed something universal to humanity and not only could it be discovered by ethnologists and mythologists but it could be found in dreams, personality disorders (neuroses) and psychoses. It was necessary, therefore, to have some general acquaintance with the myths of the world as they appeared in religion, in fairy-tale and legend and in the poetic imagination.

(bb) *Recognition of symbolic connections.* Symbols may be analysed from three different aspects: *philosophically* as to their truth (Plato, Plotinus, Schelling); *historically*, as to their development in concrete reality; *psychologically*, as to their origin in the individual psyche and their effect upon it, in accordance with the general rule or as a variation. These three approaches involve questions of very different significance. All three equally demand an understanding of the content, it is true, but questions regarding the *eternal truth* of the symbols pursue a goal independent from those regarding the *universality of symbols as concrete historical phenomena*, and both sets of questions are quite independent from the question of symbols as *cause and effect*, even though all three sets of questions are found constantly intertwined in any exploration of the symbols themselves.

i. *Systematisation of symbols.* We now comprehend that the human being lives in symbols all the time. They are his dominating reality and since this symbolic existence is part of the basic structure of human life, our aim is to grasp these symbols in all their particularity, collect them in all their diversity, survey them carefully and bring them into some kind of order. We have two different standpoints at our disposal. We may either approach them as strange, exotic forms which, even if we cannot understand them, we would at least like to know from the outside. Or we may see them as a unique world of symbolic truth from which, to our detriment, we have grown alienated to a great extent but which we might recapture. This would give us a vast world of constantly moving images which represent the truth of primary types. We should then seek for the basic elements as unchanging elements in our human awareness of reality. The systematisation of symbols will not then appear to us as a classification of certain peculiar fantasies but a ground-plan of truth. The development of possible symbolic content means that a space is opened up in which the individual can become a substantial self. Bereft of symbols, his impoverished psyche would, as it were, freeze into nothing, and, left with reason alone, he would make but a futile bustle in a world that has somehow grown empty.

When the collection and classification of symbols from the purely external point of view (morphology of symbols) has been distinguished from the inward construction of symbolic truth as a whole (philosophy of symbols), we find that both can serve each other though the one does not complement the other. If we confuse the two, we discredit them both.

¹ Richard Andrée, *Ethnographische Parallele u. Vergleiche*, p. 1878. N.D. 1889.

Heyer undertook a classification of symbols.¹ We may follow him (see p. 245) as he presents his 'circle of life', moving through the different psychic levels from vegetative through the animal to the spirit, and we may see how they are rooted in myth and symbol. We may feel convinced that his classification provides a stimulating picture though from a very special point of view which both philosophy and psychology would find extremely questionable. But we must not let ourselves be misled by Heyer's first-class writing and the heady atmosphere of ideas that stem from the world of Goethe and others and have very little to do with the matter in hand.

2. *The laws of symbols.* When observing *subjective visual images* we cannot but be astonished by the way figures, landscapes, people we have never seen, suddenly emerge out of nothing. The same thing happens in dreams. In a way we cannot really measure, our unconscious life gives form to something that is presented to consciousness later as finished and complete. This final product is a content and has meaning. In so far as we find no meaningful connections and see only an aggregate of random, meaningless fragments, we talk of chance but the demand for meaningful understanding always spurs us on to look for some rule or connection.

We should indeed find such a connection provided we are not dealing with irrelevant fragments and chance groupings but with contents that emerge from unconsciousness with at least the partial significance of symbols. In attempting to interpret any factually experienced content symbolically we make two basic discoveries: *firstly*, interpretation is unlimited, there is no end to it and the ramifications of meaning go on for ever.

Jung writes: 'Once we examine the types in relation to other archetypal forms, there are so many far-reaching symbolic-historical connections that we are driven to the conclusion that the multiformity and opalescence of the basic psychic elements defeat our ordinary human powers of imagination.'

Secondly, interpretation becomes itself an experience, a continuation of a symbolism in which there is a continually growing content which throws light upon itself, a productive process. In the translation of symbols, we reach no *terra firma*.

In the course of interpretation it becomes clear whether the symbols of the dream or fantasy stand in any kind of relation to waking life, that is, whether their meaning has any influence on waking life or dominates it altogether. We can hardly doubt that symbols play a leading role in all waking life. They display themselves with effect; they not only play around life but determine its course and this fact has been explained by Jung who calls upon 'living dispositions and systems of reaction' that rule our lives unseen, unregarded and for this reason, all the more powerful. 'There are no inborn images but there are inborn possibilities of images, and these set limits to even the most daring imagination.' The philosophical '*a priori*' becomes here, speaking psychologically, the effective structure of the archetypes. 'On the one hand they pro-

¹ G. R. Heyer, *Organismus der Seele* (München, 1932).

vide a powerful, instinctive bias, and on the other we may conceive them as the most effective help for instinctive adjustment.'

The archetypes of Jung have multiple meaning and as such they are not true symbols. For Jung they are universal and stand for all those forces which bring into being the specific forms, images, ideas and modes of apprehension in which the world and mankind appear to me, in which I fantasy and dream, in which I build my beliefs and in which I find the certainty of my Being. Thus among the archetypes we also find authentic symbols, and that is when transcendent contents of Being itself define for me the meaning and significance of people and things in the world; that is, when my attitude to these is decided not by any particular purpose or interest, vital antipathy or sympathy, but by something in them which transcends them. Symbols may either be the clear voices of Being itself, transcendence objectified, or they may simply be products of the human psyche (mere images or ideas), and it is in this latter sense that they tend to be of importance in psychological discussions. This leads to a confusing ambiguity: Do symbols offer us an *ultimate truth* or should we see through them and treat them simply as semblances? It is the same if we try to clarify the basic principle that *in symbols I am confronted with something that also contains myself*. Is the process of becoming one's true self a self-illumination, whereby in understanding symbols we understand the real truth? Or is this commerce with symbols just a struggle with our own shadows and it is precisely in understanding the symbols as semblance only that we become our true selves?

In Jung's work the following basic phenomenon plays an important part: Throughout life there is a constant division within us. Our relationship with objects is a relationship with ourselves, especially when we think we are dealing with something that is certainly not us. I hate and love my own possibilities present in the other, in criminals, adventurers, heroes and saints, gods and devils. I ascribe to the object what lies dormant in myself. I master this or become its victim by fighting it outside myself or making it my own by hating or loving it. The same circumstances prevail in the individual psyche as Hegel saw in the universe. I become what my opponent is. I am more or less transformed into that which I fight against.

Jung argues: The system of adaptation, through which at any one time we keep contact with the world, is the 'persona'. We either retain control of these systems, which are formed by the archetypes, or we fall captive to them by identifying with them or becoming obsessed by them. The 'shadow' on the other hand is the sum total of the inferior functions, which are always with us, just as no one can ever be in the light without throwing a shadow. The shadow draws its form from the archetypes. The man who is possessed by his shadow, that is, who lives beneath himself, stands in his own shadow. He gets unconsciously caught in a trap of his own devising when there is nothing in reality to make him stumble. The archetypes form his world into successive situations of failure, misfortune and lack of achievement.

3. The origin of symbols. From the empirical study of symbols we learn of the *parallels* that exist in the symbols of different peoples. We have to conclude

that there is something which is universally human, something which humanity shares. We also find *definite types of symbols*, which are limited to a number of parallel cultures and are not universal. Finally we come across *certain unique, historical symbols*, which belong to particular peoples. Thus symbols expressing the most general polarities are to be found everywhere (male and female, waxing and waning, rhythm and recurrence, elementary natural phenomena), and in this way we can discover the basic symbols of the human race, existing timelessly in the unconscious, quite apart from human history and tradition. But we never discover Apollo and Artemis, for instance, in this way. They belong to history, and are unique and irreplaceable. They cannot be found even in the depths of the unconscious and are accessible through cultural tradition alone. Between these two extremes lie those special symbolic forms which are not universal but belong to a wide range of cultures. In conclusion, there are a number of peculiar contents, not found everywhere but yet in so many places that they cannot be strictly historical and in spite of their oddity seem of a general character: for example, the cephalopods (Kopffüssler).

Symbols only affect life in their particular, historically unique, form. They have universality of structure and content, it is true, but in itself this is ineffective. There is however another view which holds to the contrary, that effectiveness lies *just in* that *universal* characteristic which disguises itself under the many historical variations.

Schelling held to the first view. He had a magnificent vision of the peoples of the earth and their myths coinciding in origin. The Babylonian Tower of Babel bore witness to the dispersion of the unified human race into peoples, who as they groped their way were at the mercy of their myths. There were as many myths as there were peoples. Every myth creates its people, just as all peoples create their myths. ‘The general principles of myth-formation took on specific shapes from the very start.’

Jung takes the opposite view: He distinguishes a collective unconscious from the personal unconscious that grows out of the life-history. The collective unconscious is the universal biological and psychological basis of human life. It exerts its influence on everyone, though it is deeply hidden. Yet he conceives this universal element as ‘the mighty cultural heritage of human development’ and again as ‘the residue of all human experience right back to its most obscure beginnings’.

Jung construes the collective unconscious as a domain of archaic images which are the truest thoughts of mankind. This again does not avoid ambiguity. On the one hand the construct implies an objective knowledge, based on research, of earlier times and of the hidden dispositions of men (*Anlagen*); on the other hand it calls for participation in these substantial truths for one’s own good.

He writes as follows: ‘The most archaic images are the oldest, most universal and profoundest thoughts of mankind. They are as much feelings as ideas and indeed they even have something like their own independent life, something perhaps like their own particular soul, as may be seen clearly in all those gnostic systems which

accept as a basic tenet the existence of a perceiving unconscious as a source of knowledge. St. Paul's image of the angels, archangels, principalities and powers, the Gnostic's archons and aeons, the heavenly hierarchies of Dionysius Areopagitica, all stem from the relative sovereignty of the archetypes.⁷ These contain all that man could think of as most beautiful and magnificent as well as all the wickedness and devilry of which he is capable.

These historical-cum-psychological theses are very questionable, quite apart from their supposed bearing on truth. At first glance there are surprising analogies to be drawn between the myths of almost all races and between these myths and the contents of dream and psychosis. But they are insufficient to provide us with a convincing construct of a universal and fundamental human unconscious, fully stored with content. Looking at these analogies more closely we find they are superficial and confined to general categories. It is precisely their effective content which is missing. For example, the point of similarity in dying and rising gods (Osiris is killed, Dionysius torn to pieces, Christ crucified) does not constitute their essential nature. The analogy throws light on what is inessential.

(cc) *Awakening of latent contents.* The psychotherapist in his exploration of symbols is impelled by a wish to find the symbolic truth and participate in it. He runs a considerable risk here of being confused and deceived.

1. The occurrence of symbols in dreams, fantasies and psychoses is a psychological phenomenon which needs to be differentiated as such from the existential significance of symbols in the sensible, waking state. If we take dream-experience as a starting-point for *interpretations of human life which are to be existentially effective*, are truth and well-being thereby enhanced? Perhaps so, but can it not easily happen that what matters in earnest is then deflected on to a shifting play of feeling and supposed statements of what is only supposedly so?

2. Self-fulfilment comes from the success or failure of some particular, historical solution of the great problems of the human order. For the person who loses this capacity for self-fulfilment in the course of his life, myths and poetic images lose their meaning also. If he becomes aware of this deficit, the withering seed of human possibility may reach out for the air in which it may breathe and grow. In this case *breathing space may be given through some idea of the basic human possibilities* from Homer to Shakespeare and Goethe and as the old, eternal myths preserve them. The individual may not be untouched by these yet they still do not represent *his own original reality*.

3. Where historical and psychological knowledge is treated as if it could provide effective symbols for suffering people, *superstition* may be the result, a credulous belief which attempts in a limited fashion to fixate symbols that are themselves indefinite, constantly in motion and not to be grasped objectively. Deeply rooted traditions are turned inside out in the process and misused for therapeutic purposes (they become a sort of measuring-rod for happiness and health). Where this is so, the symbols are symbols no longer.

4. The individual may find in symbols a language for something which would otherwise never be objective to him or have any influence on him. Once these symbols are evoked from his unconscious, the question arises as to *what historical factor*

needs to be added to give form to the awakening symbol and bring it to self-awareness. Whoever tries to answer this question can only *prophesy*. He cannot be didactic, he can only proclaim. He cannot hold up any helping mirror nor ask helpful questions, but he can proffer something material. The scientist and philosopher may think this goes beyond human power and possibility. We stay confronting the symbols with wondering respect as a whole world of hidden truth. Science and philosophy carry us only so far as the frontier where our understanding tries to approach the symbols, not in a general way but in their individual and historically concrete form; here we listen for the echo in ourselves which may help us to understand whatever comes to meet us in the other person.

5. Over against *this whole world of symbols* we have within ourselves a primary resource whereby this whole world is made *relative*. We are liberated from our bondage to symbols by self-reflection. This protects us from credulity, which is a constant threat to us, and carries us through and beyond all symbols, making it possible for us to form a new and deeper bond, that of Existence itself now linked with an imageless transcendence that speaks to us in the absolute of goodness and in the miracle of receiving oneself as a gift in the spontaneity of freedom. It shows itself in the uncommitted certainty with which we find our way through inward acts and outward behaviour, once the directness of reason has discovered for us the choices and decisions of Existence itself.

§ 3. BASIC PATTERNS OF MEANING

(a) *Opposing tendencies in the psyche and the dialectic of its movement*

Psychic life and its contents are polarised in opposites. It is through the opposites, however, that everything is once more re-connected. Image calls forth counter-image, tendencies call forth counter-tendencies and feelings other feelings in contrast. At some point sadness turns spontaneously, or with but little provocation, into cheerfulness. An unacknowledged inclination leads to exaggerated emphasis on an opposite one. Meaningful understanding must always be guided by such opposites, and were we to enumerate them all we should be surveying the whole field of psychology.

1. *Logical, biological, psychological and intellectual opposites.* In order to consider the various opposites we need some general standpoint: we may regard them as the diverse categories of *logic*, as biological and psychological *realities* and *intellectually*, as spiritual possibilities which might realise themselves.

We have to differentiate the *logical categories of mere otherness* or difference (e.g. of colour and tone) from *oppositeness*. Within the latter we have again to differentiate *polarity* (red and green) from *contradiction* (true and false). We are concerned here with a universal form of thinking which cannot proceed without there being 'the one' and 'the other', that is without differentiation and without at least two points of reference. We are also concerned with a form of universal Being as it appears for us (since reason cannot think anything which has not something else external to itself; all Being therefore is polarised for reason as it operates; otherwise it would be unthinkable).

In biology we observe real polarities: inspiration and expiration, the systole and diastole of the heart, assimilation and dissimilation of metabolism, antagonistic functions with their opposing rhythms, wakefulness which finally compels sleep and sleep which in its turn compels waking. In the functional cycles in which inner secretion plays a part, there are polarities in the latter also. (Thyrotoxicosis and myxoedema contrast as opposites and seem to contain something that makes them diverge in opposite directions.) One basic polarity of all living things is the division into male and female and their reunification.

In psychology the polarity of opposites is all-pervasive. We find activity and passivity, consciousness and unconsciousness, pleasure and displeasure, love and hate, self-surrender and self-assertion, all polarities of the psychic states and drives. We find also a will to power and an urge to submit, self-will and social sense (*I* and *We*), an urge towards the light, towards self-direction, responsibility, activity, life; and an urge towards the dark, towards safety, irresponsibility, peace and death. There is also an urge to disrupt order and an urge to conform. There are an infinite number of opposites and polarities which can be developed in this way. In their rich and varied transformations they dominate the psychology of meaningful phenomena and its written productions. All such psychology has to deal with polarities.

Intellectually, polarity leads to the establishment of opposing evaluations: true-false, beautiful-ugly, good-bad, positive-negative. Our mind lays hold on all the blind and accidental polarities, recognises their significance and views them as symbols from the spatial levels of up and down, left and right, for example, up through darkness and light, the biological poles of male and female to the psychological antagonisms of pleasure-displeasure, joy-sadness, upward rise and downward fall. For the mind itself, however, the movements it carries out upon itself are essential. As it makes its way from one pole to the other, it cannot tolerate contradiction and endeavours to overcome all contradictions, unify the polarities and contain them within tensions of ever-widening range.

The mind grows conscious of the fact that all these opposites belong together and it becomes aware of the manner of their connectedness, and all this becomes an immense work of its own doing. Our intellect identifies the infinite transformations of the basic phenomenon wherever it appears, and grasps it, bringing it into being within itself. Opposites do not merely exist but all Being is moved by them. Opposites are bound to each other and thus become the source of constant movement. This movement is termed a *dialectic*. In the face of such movement, there arises the dissatisfaction, or rather the revolt, of reason, which desires to establish things and know what it is presented with in terms of facts. So, too, wherever reality is dialectical in character, terms of definition become universally inappropriate.

2. *Dialectical modes.* In concrete psychic reality, the movement of opposites takes place in three ways: 1. *Reversal* through time without consciousness taking part—inspiration changes into expiration, grief into cheerfulness,

enthusiasm into boredom, love into hate and vice versa. 2. A *battle* of opposites, both opposites are present in the psyche, the one hurling itself against the other. 3. *The self decides* between the opposites, excluding one in favour of the other. Where there is reversal of opposites we are concerned with an *impersonal event*; where there is battle between opposites, we are concerned with *an inner activity* and in the decision between them with a *final choice*. The two latter modes lead to radically different dialectical movements; in the one case there is a *synthesis* of 'this as well as that', in the other a *choice*—'either-or'.

In *synthesis* the opposites are locked in a constructive tension, at any moment there is the possibility of harmonious resolution into some whole which, it is true, must immediately dissolve into fresh movement. As this proceeds, however, it builds up, by holding the opposing polarities together in an increasing complexity and to an ever-widening extent. The whole as a unity of opposites serves as origin and goal and by this movement through the opposites comes to its full realisation. Here the dialectical mode leads to the whole.

With *choice* the matter is quite different. The person faces the 'either-or' and has to decide what he is and what he wants. The ground of validity and responsibility is won with the absoluteness of a decision that excludes all other possibilities. The contradictions of human existence and of what is possible in our world have a final character. We are not honest if we try to escape them by hiding them from oneself even if the most admirable harmony is achieved thereby. There is the moment of truth where one's action is good or bad and where a total, all-embracing attitude which excludes all opposites, becomes impossible. This dialectical mode leads to the frontiers of decision.

Both modes carry a special risk for the psyche. Aiming at *the whole*, looking only at this and feeling only this, the psyche may without noticing lose its ground, be enticed into pleasing generalities and, using the dialectic of 'this as well as that' grow characterless, unreliable and sophisticated. On the other hand where the psyche endeavours to reach *the sure ground of decision* through the sacrifice of one of the opposites, it may become unnatural, psychically impoverished, enjoying a lifeless one-sided quiet. It may moreover become a victim of what has been sacrificed or excluded (in short, repressed) which returns unnoticed as it were and overpowers the psyche from the rear.

These two dialectical modes have *positive* aspects. To see 'this as well as that' offers *a middle way* where opposites may be linked together for the construction of further wholes. The 'either-or' *alternatives of decision* offer an absolute validity. These two modes also have *negative* aspects. We find featurelessness in the one and restrictiveness in the other, each having a certain falsity of its own. In considering these aspects we discover that we cannot set the positive aspect of the one against the negative aspect of the other but keep both the positives in mutual contradiction.

What then is the psyche to do in the face of these two basic dialectical possibilities? Does it have to support the one against the other? Or is there

some further possible synthesis of the synthesis and antithesis (of maintaining the whole and of choosing alternatives)?

It is fundamentally characteristic of our temporal human situation that we cannot accomplish such a synthesis. This means that in life we select and realise our destiny from among the chances and risks of historical events, while all correct resolutions disappear at the frontiers of tragedy and in the presence of other transcending possibilities.

Dialectical transformation is a universal and basic form of thought, and is in contrast with rational understanding, which it uses and surpasses. It is indispensable for the understanding of the psyche and bestows a satisfactory quality of its own on our conception of human situations, human facts and movements.¹

*3. Application of the dialectic of opposites to psychopathological understanding.*² We formulate the following as a measure for psychiatrically healthy people: There is normally a full integration of the opposites that arise in the psyche, either through a clear, decisive *choice* or through some comprehensive *synthesis*. In abnormal circumstances one of these tendencies becomes independent without the other ever asserting itself, or else integration just does not occur. Or it is just the counter-tendency that gains a special independence. Measures such as these can be applied to the analysis of meaning in the neuroses and psychoses.

(aa) In *schizophrenia* we can find examples of the *drastic realisation of one tendency without its counter-tendency*: automatic response to a command, echolalia and echopraxia, patients put out their tongue when asked, even though they know they are going to be pricked. They imitate senseless movements and repeat parrot-fashion. We also find examples of *the failure to unify*: a simultaneous positive and negative affect in relation to the same object, which Bleuler called 'ambivalence'.³ In normal life this will lead either to direct choice or some kind of constructive synthesis. Schizophrenic patients, however, can love and hate simultaneously in an undifferentiated and unconnected way, or consider something both right and wrong so that, for instance, though they are correctly orientated, they will continue to adhere to a delusion-like orientation with the utmost conviction. We further find examples of *an independence of the counter-tendency*: negativism, where the patients oppose everything or do the direct opposite of what is asked. They go to the lavatory but use the floor. When supposed to eat they refuse, but gladly take other patients' food away from them. In classical cases the patient goes backward when asked

¹ The philosophy of Hegel and of his learned followers (in diluted form) expands the complexity of such 'dialectical' possibilities, going far beyond psychology though including it. Hegel's 'Phänomenologie des Geistes' is almost inexhaustible.

² Re the psychology of opposites, examples are given by Th. Lipps: *Vom Fühlen. Wollen u. Denken* (Leipzig, 1907), 2nd edn. For psychopathology see Bleuler, Gross, Freud, *Psychiatr. neur. Wschr.*, 1903, I; 1906, II; 1910, I. *Jb. Psychoanal.*, vol. 2, p. 3. Bleuler, *Dementia Praecox oder Gruppe der Schizophrenien* (1911), pp. 43, 158 ff., 405.

³ E. Roenau, 'Ambivalenz u. Entgegnung von E. Bleuler', *Z. Neur.*, vol. 157 (1936), pp. 153, 166.

to go forward. One patient, when out in the garden in pouring rain, asserted that a hot sun was shining. Kraepelin interpreted certain stuporous states in this way. He observed the beginning of movements and retardation caused by these counter-drives which he distinguished from the simple inhibition of psychic events with accompanying motor manifestation. Sometimes voices tell the patient the opposite of what is intended. They call 'Bravo' for instance, signifying that the patient should not have done this or that.

(bb) In the neuroses, we interpret the inability to stop or finish as a failure to unify and choose; for example, the incapacity to decide. Psychotherapy in particular will show this dialectic of *tension and release*, which is found at all levels, from the biological to the psychological and intellectual, from the muscles via the will up to the person's basic philosophy. What in the physiological sphere leads naturally and rhymically to equilibrium, becomes in the psychic sphere a change from a mere event to a definite undertaking. The undertaking, it is true, is only discharged when vital events successfully carry the necessary movement, but the struggling, self-driving human effort is also a necessary part, that inner activity through which alone the individual becomes what he is. Physiologically, we find spasm and flaccidity, with health being neither. In the psyche we find rigidity and flabbiness, wilfulness and irresolution, and clear, candid purpose which is not a party to either. The polarities of tension and release, inevitable for the mastery of every kind of opposite, give rise to movements which either deviate into rigidity or flabbiness, or change over from tension through release into a temporarily successful synthesis which creates further new tensions.

4. *Fixation of psychopathological concepts as opposing absolutes.* On studying the efforts of characterology and meaningful psychology we cannot but notice the prevailing importance of opposites. Even the most modest contrast, once it has become conscious, gains a compelling force. Almost unavoidably one keeps yielding to the temptation of taking it as an essential with which the deepest energies are allied. But if we use this to help us comprehend psychic life in its entirety, we only rob the contrast of its distinctness and increase its ambiguity. Apparently it may throw light in all sorts of directions but it tends to grow commonplace and in the end, in spite of its continual applicability, it comes to denote nothing more than some generalised opposition.

A number of diverse opposites that have been generalised in this way offer us an analogy: for instance, the contrast between object-cathexis and narcissism (Freud), extraversion and intraversion (Jung), objectivity and subjectivity (Künkel).

Basically, in generalising a contrast, we do one of two things. We either perceive *two possibilities of equal worth but polarised* (intraversion-extraversion) usually with a recognised connectedness between the two poles, or we contrast *something valued with something that devalues it* (life-bestowing and life-destroying) as in the case of sensual drives and the repressing morality of the mind (Freud) or Klages' psyche and spirit (which he sees as an adversary of

the psyche). Again, a *universal, reconciling, pandaemonic point of view* stands in contrast with a *daemonic dualism of God and Devil*.

We believe we can detect the error which occurs when opposites are made absolutes. Hence it seems to us that our understanding may make use of every opposite in one way or another, if we take it in its own proper polarity and that some serviceable meaning may be given to it, however limited this may be. But we cannot map out opposites in their totality so as to understand the whole range of human existence. Understandable meaning is tied to the polarity of opposites, but the deeper we grasp this the more we are pointed on into the non-understandable, extra-conscious ground of life and the non-understandable, historical absolute of Existence itself.

(b) *The reciprocity of Life and Meaning*

Dialectic is the form in which a basic aspect of meaningful connections becomes accessible to us, namely, that these connections are not a simple sequence of events but show a constant reciprocity, a repercussion on motivation, a progression of expanding or diminishing cycles of movement.

Affect is expressed in gesture and bearing. Both these have repercussion on the affect, increase it, differentiate it and let it develop. An obscure drive may come to light in action, productivity or idea. Only in this way does it gather in strength and definition and reach its realisation. The individual defends himself against inner impulses which he rejects. They thereby grow stronger. Or he ignores them and gives them little rein and they weaken.

Such reciprocal movements as these appear not only in *the psyche by itself* but also as it *develops in its own milieu*. The resistance of things evokes the human will. As man lays his impress on things, they in turn mould him. So events in their course bring quantitative increase and qualitative change.

Authentic becoming, living and acting all need to form a whole, to round themselves as they build. Mere sequences of events, mere willing and persisting in one direction only, bring limitation, rigidity and end destructively. If we wish to understand, we must be able to stay suspended and learn to leave the firm grounds of unequivocal definition. At the same time we must take our leap into the reciprocity of life. We have mistaken its meaning if we forgo any risk and insist on one and not the other, insist on having and not losing, asserting and not submitting, and will only live not die. Indeed we must always accept the opposite, risk it, let it become a thorn of distress and include it as a factor in all our movements. Anything that merely is without an opposite means fixation, loss of all otherness and soon an end to all that has already become lifelessly fixated. But when we expose ourselves to the reciprocal dialectic of movement and risk, life expands its meaning. Any intention that moves in one direction only, any fixation of reason, is only an instant—an indispensable instant—in the whole system of circling movements. From these it derives its meaning, and by these it is measured and they are also the condition for its realisation. Our ideas, everything that is comprehensive, human

life, intellect and Existence itself all take this circular course and as the moving cycles are broken asunder, fresh ones form.

We may compare *meaningful human existence* with *biological existence*. Even in biological events we need to grasp this reciprocity. For example, there is the reciprocity of endocrinal-neurological relationships (H. Marx). The simple antagonism of endocrines with opposing effects is insufficient. It is the totality of the reciprocity that takes living effect. Purposeful intensification of one isolated factor introduces something that takes different effect according to the various reciprocities, as constituted in any one individual. Hence room for the unpredictable is quite extensive. Prediction depends on how far one knows the whole set of reciprocities. Another example: the functions of neuromuscular and sensory events only become comprehensible within the total internal and external situation of the living organism (the Gestalt-kreis: v. Weizäcker). Meaningful life also fulfils itself in reciprocal movement in a comparable way but there is one difference. We are dealing with conscious and unconscious events. Unconscious events may be carriers of the complementary part of the reciprocal event or take effect as a primary source of freedom, which, though it never becomes a conscious intention or an object for empirical investigation, is itself a determining factor. The specific inner tension, the recoil back on itself again, the mutual reinforcement or release—the ‘mysterious paths of the inner reversals’ (Nietzsche)—are the incalculable elements within the meaningful totality of psychic movements.

They are the acts which determine our life from early childhood onwards. A small boy who had only just started to speak saw his baby brother on his mother’s lap where he felt he ought to be. He was startled, hesitated, his eyes filled with tears. Suddenly he went to his mother, stroked her and said: ‘I do love him too’. He remained after that a reliable and loving brother.

Biological events only provide an analogy for what is meaningful. In the field of the meaningful, we discover risk, fear of making the inescapable leap (always into the reciprocity of the whole), choice and creation. In the biological sphere on the other hand there only is the cycle of reciprocal events which, though perhaps not mechanical, is nonetheless automatic and unfree.

Cycles of meaning are *static* when they are configurations of complex expression, personality and achievement taken as a whole. The cycles which we are now discussing are *movements*. These meaningful reciprocal movements are of two opposing kinds, those that drive life upwards or those that drive it to destruction. All meaningful life, it is true, remains within their confines but it can either develop within them or use them to annihilate itself. An individual can thus try to overcome resistances by means which can also defeat him. He can fight against something in such a way that he only strengthens his opponent. He may want to gain in status but so long as he concentrates on this alone and not on the actual matters which he must deal with if his goal is to be reached, his behaviour is likely to lose him his own self-respect and that of

others. His isolated wish for status will then grow and he will prod it on into new, futile and even more disastrous behaviour. For this sort of circular behaviour psychotherapists tend to use the term 'circles of bedevilment' (*Teufelskreise*)—Künkel. A 'vicious circle' is formed instead of one of the genuine, constructive cycles of life. The meaningful behaviour then becomes a kind of thrashing about which only forces the victim down into the quicksand of his own devising. Thus we may pair the creative cycle with the destructive one, and liberating and expanding cycles with those that inhibit and restrict.

There are a number of cycles in which disturbances are self-aggravated. Fear adds to fear and grows out of fear until it reaches an extreme pitch. Excitement is fought and increases. An affect overflows as it is surrendered to and verbalised. Anger grows in raving; obstinacy grows more and more obstinate. Inversely, a suppressed drive will grow and man, by suppressing his sexuality, sexualises himself.

Such cycles grow into something neurotic because of *mechanisms* that *split apart* what normally remains integrated and isolate what normally has its place in the whole. In this way the unconscious becomes inaccessible to consciousness. What is repressed gains increasing independence from the repressing impulse, and the self experiences defeat by something else which is still at the same time a part of itself.

§ 4. SELF-REFLECTION

We can say: all that an individual does, knows, desires, and produces will indicate how he understands himself in the world. What we have termed the 'psychology of meaningful connections' is then an understanding of *his* understanding. But it is a basic human characteristic that man as man understands his own understanding and gains a knowledge of himself. Self-reflection is an inseparable element in the understandable human psyche. It was therefore already implied in the connections we discussed above, which were understandable in content and form. Self-reflection may be halted at the start: action in the world and knowledge of things may then be largely unconscious, and carried out without any self-reflection. But it is only the stirrings and possibility of self-reflection that make psychic activity human.

The psychology of meaningful connections must understand self-reflection, which it practices itself. As practitioners of this psychology we either achieve for another what he has not yet achieved by his own self-reflection or else we understand his self-reflection, share and expand it.

(a) *Reflection and the unconscious*

Self-reflection has its place in the comprehensive relationship of the conscious and the unconscious. We will first consider all that is included in the term '*Reflection*'. Reflection means growing illumination, which comes about from the separation of what is related.

The *clarification* of psychic life begins with a *separation of subject and*

object (Self and Object). The things we feel, experience, and strive for, grow clear to us as *ideas* or *images*. We can only expect illumination when there is an object, a form, something thinkable, in short when there is some objectivisation. Separation gives rise to further reflection: I turn back again on myself by directing reflection upon myself (self-reflection); I reflect on each content, each image and symbol to which as mere objects I have been bound in the first place without any full awareness, and I ask *what are they?* From this point awareness grows unchecked up to the final awareness of awareness itself. Lastly, *I reflect on the division into subject and object as it takes place within the whole*, that is, by a philosophical transcendence, I make myself aware of what this division means to me in terms of a manifestation of Being.

Each act of reflection throws light on something which up to then had been unconscious and obscure and with this comes *release*; release from the obscure bondage of the undifferentiated, from the given thus-ness of the self (*Sosein*), from the power of uncritically accepted symbols and from the absolute reality of the objective world. Each release ‘from something’ begs the question ‘*release for what?*’. When I grasp an object, I win freedom from an obscure bondage to the undifferentiated. It is a relief that at last I know what up to then I have only felt. If I know what happens to me, I have taken the first step to freedom in contrast to being blindly overpowered. Out of the given thus-ness of the self, as I might conceive it if I turn myself into an object, I emerge freed by self-reflection for the task of becoming myself. Instead of a determined finality, I gain potentiality. Instead of bondage to symbols I gain through knowledge of them the freedom to transform them. Imprisoned as I am in the supposed absoluteness of existing objects, my awareness of existence as mere appearance enables me to transcend them into objectless Being itself, but there is no illumination except by way of the totality of objective possibilities.

Each liberation implies *risk*. Each release brought by reflection cuts *the ground from our feet*, takes away substance, earth and world, unless with every step towards freedom there remains an ever-changing bond that extends with the extending freedom. In all the objectification one must also feel the all-embracing darkness at its source, and in the course of one’s own individuation accept and incorporate everything one finds oneself to be in one’s given existence. So, too, in our conquest of the imprisoning symbols, our life must be borne along by the symbolic nature of the whole and in the very act of transcendence we must also merge ourselves deliberately into the world as it exists. The hovering flight of freedom loses touch with its ground completely unless we confine it somehow. Wings need the wind’s resistance.

In psychological terms, this losing touch with the ground can be formulated as the *extinction of the unconscious*, upon which, after all is said and done, I live my life in all its varying stages of consciousness. The drives of life, its matter and content, come to me continually from the unconscious. I meet the unconscious constantly in everything that enables my performance, from my everyday automatic activities to my creative and original thinking and to the

decisions which form the very substance of my freedom. Illumination at its highest rests on the darkness of the unconscious. All clarification implies a *something* that grows clear.

Our life is not a simple bi-polarity of intention (reason, will) and that which is unconscious. There is rather a complex *hierarchy of changing relationships* between consciousness and what is unconscious, and this pervades the whole of our psychic and intellectual existence. There is never the one without the other or else there follows psychic catastrophe, destruction or decline. The bright power of the Will which operates in the clarity of knowledge is still unconscious in its core. In so far as it is continuous realisation, it is a step forward in the never-ending illumination of man. It does not abolish the kingdom of the unconscious but rather uses its own consciousness to give such a kingdom infinite extent.

(b) *Self-reflection as a spur to the psychic dialectic*

If we give the term '*mere happening*' to whatever occurs to us without our being aware of its significance, and keep the term '*experience*' for what is felt to be a significant happening, self-reflection then becomes an indispensable element in experience, since there is no awareness of significance without self-reflection.

Yet self-reflection is something essentially different from knowledge. 'To know that one knows' is not the same thing as knowledge itself. Knowledge requires an object which will continue to exist and be available. But self-reflection is that kind of knowing which makes itself the object and changes itself at the same time. It never reaches, therefore, the quiet stability of a knowledge of something which continues to be as it is, that something 'which I am' but remains with us as a continually prodding spur.

To change our metaphor, self-reflection acts like a ferment, whereby something merely given is turned into something accepted, mere happening into history, and the sequence of a life into a biography. If we are to understand self-reflection, it means we must try to grasp its nature in its structure.

(c) *The structure of self-reflection*

The structure of self-reflection is hierarchical. Isolated, wholly unequivocal self-reflection does not exist.¹

1. *Self-observation.* I notice events in myself which are my modes of perceiving, remembering, feeling, etc. I track down what is there in all the fleeting, elusive phenomena. There is a distance between myself and what I observe as an external object in myself, and this I take into account. My attitude is neutral as with any datum.

2. *Self-understanding.* I ascribe what happens in me to motives and connections and try to throw some light on this. In so far as this self-review is no more than observation, it can indicate a host of possibilities. But meaningful

¹ Cp. my *Nietzsche*, pp. 111–13, 335–8, for the attitude of the self to the self.

interpretation of myself is also endless and always relative. In the last resort I neither know what I am nor what moves me nor which motives are the decisive ones. Everything at all possible I can recognise within myself somewhere, hidden perhaps, but still a possibility. The mere wanting to know robs all self-understanding of its ground.

3. *Self-revelation.* Passive self-understanding provides the medium for actual self-revelation. This occurs through profound involvement with an activity which philosophy despises as a form of inner behaviour, the absoluteness of decision; in psychology such activity eludes definition though the crises of self-understanding with all their obscurities and inversions are accessible enough. Kierkegaard remains unsurpassed in the art of making this revelation tangible through the use of conceptual constructs in the medium of understanding.¹ The following are a few points of interest to the psycho-pathologist.

If we are mere spectators, revelation does not come to us. I am only revealed to myself by an inner activity which also transforms me. Apparent revelation, unembarrassed exposures of the inward self, lavish self-confessions, endless introspection and self-description, revelling in the observation of inner events, usually cover a lurking attempt at concealment with no intention to reveal the self. Revelation is not an objective event, like a scientific finding, but rather a form of inward behaviour, a grasp of the self, a self-election, a self-appropriation. Uninhibited expressions of what is supposed to be the brutal truth are only pseudo-honesty; the fixed nature of the assertion already carries falsity. The honesty of revelation is as humble as it is deep and it is simple as well as effective.

Revelation comes in being oneself. Being oneself is never the same as being an object. What I myself actually am is never anything that can be unambiguously recognised and defined as an object. The basic relationship in being an object is the causal relationship. The basic relationship in being oneself is the relationship of the self to the self, the process of absorption, inner activity and self-determination.

If we desire final knowledge in the field of self-understanding, we have made a completely wrong start. The absoluteness of existential decision manifests itself in the midst of the unlimited flow of possible interpretation. What is existentially in order is only in the balance for knowledge. It may be that whatever is done is certain for the moment but it then becomes open for further interpretation. The unifying source and the line of its direction, which emerges through the phenomena and carries them further, is unknown to us, and we cannot know it because it is precisely this directing source which mobilises and furthers all our knowledge. It manifests itself in our knowledge and not on its behalf.

¹ Cp. my *Psychologie der Weltanschauungen* (pp. 419–32) 3rd edn.—where I refer to passages in Kierkegaard's works.

(d) *Examples of the effect of self-reflection*¹

From the philosophical point of view self-reflection takes a variety of paths and has many contents; we will not follow these up here but merely give a few illustrative examples of interest to psychopathology:

1. *The connection between intended and unintended events.* One of the major polarities in the psyche is that of intentional act and unintentional becoming, intention (activity) and occurrence (passivity). Intention is the purposefulness that springs from reflection. But the whole wealth and variety of psychic life and content depend on dispositions (*Anlagen*) that lie outside intention (talent, drive, affectivity, impressionability, etc.). Intention can only delimit, select, mobilise or inhibit. Without intention, the psyche would grow and develop in an aimless and unconscious manner just like non-psychic life. Intention, without all that wealth of content to mobilise or restrain, can achieve nothing. It would, as it were, only tick over like an idle machine.²

Intention spreads its influence far beyond conscious events, though there are great differences in individuals. For instance, a person can wake up or fall asleep at a given time intentionally.

The will may intentionally influence the body in three ways: (1) by the direct influence of intention: e.g. movements to restrain the expression of pain or the simulation of a paralysis; (2) by the indirect influence of intention: e.g. we put ourselves into a sorry state so that we cry or have palpitations; (3) by the influence of intention without any conscious awareness of how this happens: e.g. through simple imagination or the affective toning of vividly evoked images and attitudes. Here the suggestive effect goes much further than that of direct intention. But it is an autosuggestive operation in itself and needs the intention to evoke and guide it.

Where the reciprocal relationship of intention and occurrence is unbroken, it is a sign of healthy psychic life. As unintentional events begin to gain in autonomy and the will to lose its influence, we begin to be interested in what causes this phenomenon, which is often thought to be a morbid one. Where intention exerts its influence but the psychic dispositions which it seeks to mobilise or restrain are only slight, we talk of an individual who is psychically impoverished. Therefore, that psychic influence on the body which we term 'hysterical' cannot justifiably be called morbid, so long as it is wholly due to intention.

We once had an opportunity to observe a village family engaged in spiritualism: One of the sons introduced the subject of spiritualism from elsewhere. The incredulous members tried it out. Soon one person, then another, found that they could 'do automatic writing'. In the end all of them, except the mother, managed to do

¹ Reflective phenomena are discussed in the section on Phenomenology (pp. 109 ff.), the section on expression (p. 213), and on character (pp. 370 ff.).

² Klages recognised and gave a good description of this psychological polarity. But we cannot follow him in identifying will with intention and purpose. At its greatest, the will is full of content and is itself an original source.

something. They now thought they were in contact with dead friends and relatives and held seances in a room reserved for this purpose. In one such seance we could observe trances in which people danced, seizures where there were broken utterances—sometimes meaningless—and automatic writing. These people thought everything was evoked by the dead. The cries of someone in a seizure were cries of spirits. The phenomena were the same as hysterical phenomena but only appeared when wanted, when people came into the room with the intention of holding a seance. They thought themselves quite healthy since they had no such hysterical phenomena in their ordinary life. Just as intentional falling asleep succeeds more or less according to the individual disposition, so the 'phenomena' in these seances were sometimes more, sometimes less, successful. However, later on several members of this family actually did fall ill with hysteria.

There are two ways in which the reciprocal relationship between intended and unintended events may be disturbed:

(1) Intention feels overpowered or powerless in the face of the unintended occurrence. The healthy person surrenders to the unintended possibilities of his inner life, as they arise. But even if this should amount to ecstasy, he only loses his own influence momentarily. *Domination by what is unintended* is experienced in the numerous morbid phenomena which are conditioned by the original constitution or by the start of a process. Unintended events—automatic instinctual forces—elude intentional control and in spite of changes in situation and intention continue on their own course uninterrupted.

(2) Intention has some influence on the unintended events but fails to steer them in accordance with the intention. Instead it *interferes disturbingly* with their spontaneously purposeful and orderly flow. For instance, it fosters insomnia instead of bringing sleep. Full concentration on a performance hampers its success. If it were unintended and automatic, it would go much better. In such a case people will suffer particularly from 'an agonising apperception of the moment'. Wherever they are, whatever they do, no sooner do they allow their conscious attention to intrude than they get confused and can do nothing that they intend; if they will only let themselves go, they are at their best.

Drives and instincts are not bound simultaneously to the motor reaction, like reflexes. The instinctual certainty shows itself rather in an unconscious choice of the right way to gratify the drive according to the situation. The instinctual drive is disturbed if the natural control of the mechanism fails or if no unequivocal goal is found. Conscious reflection may be responsible in either case. (The same thing may occur even more radically through inversion of the instincts themselves, through associative links or through fixation in infantile attitudes such as we have discussed above.) If conscious reflection should then want to improve things, it only increases the disturbance. Once the *mechanisms of transmission* fail, intention has to carry out what can no longer be instinctually performed: there are intentional movements of expression, forced speech, and torturous gestures and behaviour. Where the half-conscious instinctual goal is no longer unambiguous, conscious intention

can establish the goal but neither instinct nor the transmitting mechanism obey.

Drives and instincts follow a complex course without any help from consciousness and in humans they are under a controlling force which can use intention to set them in motion or restrain them. Moreover, through learning and conscious practice man continually enlarges the realm of automatic events. All our co-ordinated motor activity—and later activities such as writing, riding a bicycle, etc.—is carried out consciously at first and then becomes automatic, and we only reach the peak of our potential performance through a host of automatisms. Complex thought-processes and techniques of observation become automatic in this way and provide us with tools for every occasion. What was once a lengthy performance is now shortened to a moment through the possession of a function that can be completed almost instantaneously. Everything that is instinctive, impulsive or automatic—the whole manifold of unconscious happenings—penetrates right up into the most highly conscious performance. The carrier is always something unconscious. Health consists in a continuing interplay at all levels from reflexes up to clear-cut volitional acts. The healthy person can rely on his instincts. They neither dominate him nor elude him, they are under his control and they themselves direct the impulse to control through a sweeping certainty which can never be sufficiently explained by plain intention or by simply having an idea. Hence they have mobility and plasticity; they are not mechanical and there is nothing fixed or determined about them.

2. Awareness of personality. Reflection produces an awareness of the self as a person. It modulates and colours this awareness and is the source of its self-deceptions.

Fully developed awareness of personality, where the individual is aware of himself as a whole, of his persisting drives, motives and values, is an intermittent awareness and in the last resort is nothing but an idea. Indeed we distinguish if from that *immediate awareness* which can be partly understood as a reaction to the environment of the moment. We have thus an '*impressional-self*'—a particular, momentary shift of personality-awareness, which falls back on the self proper through the impression made on others. Or in a quite general sense there is a '*situational-self*' which will come more or less strongly to the fore according to the individual disposition. Then, if we are thinking of the response to the environment as a response to a lasting milieu, not just a momentary response, we can contrast a '*social-self*' with the personal self proper. But in all these instances awareness of personality is always composed of two inseparable constituents: a *feeling of self-valuation* and the plain awareness of one's own particular *being*.

At all times man not only has to be but has to adopt some *attitude*. Not only does he communicate himself but he also presents himself; that is, *he plays a role* and not always the same one, since this depends on his function, position and situation. The role is not purely formal. The external attitude

begets an inner one, which may be tentative and can become a reality. This playing of roles is a natural gift and so is the capacity to take up some attitude and change it, if necessary.

Psychology cannot answer the question as to *what the individual person really is*. We understand how almost all roles can be separated from the person himself. He stands outside them, they are not he, himself. But what this self then is remains inaccessible to us, a mere point outside. Or else it is—something which cannot be grasped psychologically—his innermost nature which never presents itself, the inward element which never becomes the outer and therefore empirically does not exist. In comparison with this, all awareness of personality is mere foreground.

The situation is different when a person *identifies himself* with his actuality in the world in some finalised act or attitude. Human life is then embedded in an historical record which can either be a matter for psychological observation, in which case it becomes something restricted, fixed and immobile, or it is an instance of truly being one's self, in which case there is a transcendence of everything observable and of all reflection. It is pure, unreflected self-being at the summit of infinite reflection. This does not exist for empirical knowledge, and when there is an instance of it, it becomes apparent through the language of history, not through the language of universals. We are left, therefore, with the ambiguity of all the phenomena through which the individual in the world becomes identical with his empirical reality, that is, they may either signify his decay and decline or his moment of personal fulfilment.

From the psychological point of view, we are impressed by the fact that awareness of the self is linked inextricably with *awareness of one's own body*. The human being is his body and at the same time, in reflecting upon his body, he stands outside it. The fact that he is his body leads to the objective problem of the relationship of body and psyche. The fact that through reflection he is aware of his body as his own and yet as something outside himself is an integral event of his existence. His body is a reality of which he can say: I am it and it is also my instrument. The ambiguity of the physical awareness of the self derives from this double activity of identifying the self with the body—since empirically no separation is possible—and of standing outside it as an unfamiliar object, in no way belonging to the self.

3. *Ultimate (basic) knowledge.* We use the term ‘ultimate knowledge’ for all the presuppositions that invest whatever else we know and give it firm foundation. Ultimate knowledge resides in ideas and images rather than in concepts. It is the awareness of reality as against mere being. Everyone develops in accordance with his ultimate knowledge. The direction he takes in the formation of his self is determined by what he himself knows.

Once there is reflection on this knowledge, it becomes *conceptualised in consciousness*. There are then two possibilities: Either it grows more certain, more logical and more reliably present at any moment, as well as more conclusive. Whereas the effective symbols were inconclusive, free but sure, the

conceptualised knowledge is fixed, firm and dogmatic. Or it becomes a possibility of thought, a potential question. Effective symbols then become its refuge while the conceptualised knowledge loses all hold and pitches over into emptiness.

If we want to understand an individual, it is indispensable that we *participate in this ultimate knowledge of his*, which is hard to glean, hidden as it is behind a confusing mass of words and foreground phenomena. Understanding someone's ideas and trains of thought teaches us to see the fastnesses of his nature which cannot be invaded, his inner sanctuaries and absolutes. It also shows us the real danger of losing hold altogether, when the individual openly and unreservedly asserts his absolute freedom in an historical concreteness that has no general application.

This is the sphere in which it becomes clearly apparent how an individual sees himself and his world. In the last resort he can never know himself but he draws up schemata of himself that depend on what his ideas are at the time. In the ideal case this would include all that is known of psychology and psychopathology. Alternatively he may keep his own Being open and remain exposed to the world of meaning in all its width and depth and possible interpretation.

§ 5. THE BASIC LAWS OF PSYCHOLOGICAL UNDERSTANDING AND OF MEANINGFULNESS

As long as our understanding is limited by the framework of the natural sciences, we find we are involved in contradictions, uncertainties and irritating irrelevancies. This inclines us to push the whole procedure aside as unscientific. But the understanding of meaning demands other methods than those of the natural sciences. What is meaningful has quite different modes of Being from the objects of those sciences. The methods of understanding are governed by certain general basic principles which need explicit formulation if we are to know what goes on in understanding, what cannot be expected from it and where the peculiar satisfaction of knowledge can lie in this field.

Where we follow the method of understanding, what is meaningful possesses *properties* and certain *basic principles* will apply to them. (a) What is meaningful only has empirical reality in so far as it appears in perceivable facts. It is related to this that all *empirical* understanding is an *interpretation*. (b) What is meaningful in the particular instance is part of a connected whole. This whole, the character or personality, determines its meaning and lends it colour. A related principle is that all understanding takes place within 'the hermeneutic round'—that is, we may only understand the particular from the whole but the whole may only be understood via the particular. (c) Everything that is meaningful moves in opposites, and it is related to this that, methodologically, *opposites are equally meaningful*. (d) What is meaningful is bound, as a reality, to extra-conscious mechanisms and rooted in freedom. It

is related to this that all understanding remains *inconclusive*. Although it goes beyond every level so far reached, it comes up finally against the two marginal limits of Nature and Existence itself. Meaning is self-generating and there is an infinite recession of what can be understood. Therefore the understanding related to it is equally inconclusive. (e) The particular, whether an objective fact, an expression, intended content or act or indeed any single psychic phenomenon, loses meaning when isolated but gains meaning in context. It is related to this that all phenomena are open to *unlimited interpretation and reinterpretation*, just at the point where understanding stops. (f) What is meaningful can reveal itself through phenomena or hide itself in them. It is related to this that the process of understanding is either *illumination* or *exposure*.

(a) *Empirical understanding is an interpretation*

'The understood' attains empirical reality only so far as it is manifested in objective, meaningful phenomena of expression, action and creation. The criteria of reality for all meaningful connections lies in these demonstrable phenomena and in those experiences which can be phenomenologically observed. Meaningful connections, it is true, are self-evident. Our psychological imagination—a most desirable precondition in psychopathology—continually designs for us what seem to be convincing patterns as such, yet in the face of psychological reality these are no more than hypotheses that need to be tested. The *scientific* practice of the psychology of meaning is marked by its careful, critical approach, which keeps distinct what is understood empirically from what is understood as a self-evident possibility. Every step in understanding is then linked to objective phenomena, but it is recognised that all understanding nevertheless remains interpretation, however much the certainty of understanding increases with the extent to which phenomena are concordantly interpreted. Another possible way of understanding is always at hand.

The statement—inner and outer are the same (what never becomes external, does not exist internally either)—is valid only for the aspects of the psyche that can be known empirically. Those marginal facts, which existentially might become real as pure inwardness, elude understanding. The inner without the outer manifestation is not a fact that we can demonstrate empirically. But empirical existence is not an absolute. The understandable is an interpreted connection between meaningful facts and as an empirical fact it is only in the foreground of human selfhood.

(b) *Understanding follows 'the hermeneutic round'*

We understand the content of a particular thought or the flinching of the body in fear of a blow. But such isolated understanding is meagre and unspecific. Moreover, the whole nature of an individual pervades even the most isolated outpost of his being, giving it objective context and the complexity of psychic motivation. Understanding therefore will push on from the isolated

particular to the whole and it is only in the light of the whole that the isolated particular reveals its wealth of concrete implications. What is meaningful cannot in fact be isolated. There is no end, therefore, to the collection of our objective facts which provide the starting-point for all understanding. Any one particular starting-point may gain an entirely new meaning through the addition of fresh meaningful facts. We achieve understanding within a *circular movement from particular facts to the whole* that includes them and *back again from the whole* thus reached to the particular significant facts. The circle continually expands itself and tests and changes itself meaningfully in all its parts. A final 'terra firma' is never reached. There is only the whole as it is attained at any time, which bears itself along in the mutual opposition of its parts.

(c) *Opposites are equally meaningful*

We can perhaps understand how a person who is feeling weak and wretched must feel spiteful, hateful, perhaps envious and revengeful, towards people who are better endowed, happy and strong, since psychic poverty is linked with bitterness. But the opposite is just as understandable. The person who feels weak and wretched can be frank about himself, can be unassuming and love what he himself is not, and in the uprush of this love create what he can within his limited possibilities and thus purge his soul in the school of need and pain. We understand how weakness of will may be obstinacy and how the rake may also be a bigot, but the opposite is equally understandable. Therefore when only single elements of such understandable connections appear, we cannot jump to the reality of the rest. We should always look out for possible ambiguities.

The most radical mistakes spring from conclusions drawn as to the reality of what has been understood, whenever these conclusions have been based on the self-evidence of some one-sided understanding. The exclusion of the opposite, without any attempt to follow it up and understand it, means that we manipulate reality in favour of an '*a priori*' understanding that makes an arbitrary selection of the facts, since understanding is achieved but not within any empirical whole. It follows that we shall soon find it possible to understand the exact opposite. These arbitrary reversals of understanding, this sophistry of psychological understanding, is rooted in some confusion over the equal meaningfulness of opposites and thus the necessity arises, if we are to understand the real person, of linking our understanding exactly with the totality of the meaningful objective facts.

(d) *Understanding is inconclusive*

That which is meaningful is itself inconclusive because it borders on the ununderstandable, on what is given, on human existence and on the freedom of Existence itself. *Understanding* must be related to the nature of the meaningful and therefore must itself be inconclusive. (Furthermore it always remains

an interpretation, since even with the fullest possible number of objective meanings, empirical finality is never reached.)

That which is meaningful is *rooted in extra-conscious mechanisms and dispositions*, for instance, in instinctual drives. It has to start, therefore, from something which is not understandable. But the starting-point is a flexible one. With the self-development of what is meaningful, there is an accompanying change in the starting position, so that even when understanding borders on the meaningless, this is not final because once meaning is understood it moves within its own precincts and changes them as it expands them.

Understanding *finds itself on existential freedom*, though freedom cannot be grasped in itself, only in its meaningful effects. Understanding, therefore, in its turn is inconclusive, related as it must be to the inconclusiveness of everything that can be understood in time. Where the freedom of Existence itself is accomplished in time as something historically concrete, the accomplishment cannot be made objective. Hence we cannot get to know it as a fact but it is itself infinite, because as an existential conclusion it is eternity in time. It is no longer any object for psychological understanding.

If understanding is inconclusive, then our predictions of what someone will do or how he will behave are equally so. Yet in fact we make such predictions with considerable certainty. This certainty, however, does not mean that it is necessarily derived from understanding. What has already happened repeatedly is expected to happen again in the future, either it results from the frequency of experience or it is rooted in the existential certainty of communication, the reliance we place on our companions in fate. Such complete certainty is not knowledge. Perhaps it is greater than the certainty that any knowledge can give but it is of a radically different character. It lies beyond all calculation and is not subject to any objective laws nor is it lifeless matter of which knowledge can dispose.

(e) Unlimited interpretation

Myths, dream contents or psychotic contents are all subject to unlimited interpretation. As soon as we believe we can make some definite interpretation, another presents itself. Antiquity was well aware of this endless quality of all symbolic interpretation, and in mythology it has been a principal matter for discussion since the seventeenth century when Bayle emphasised it as a basic fact. It was also noticeable later in the dream-interpretation and psychoanalyses of modern times. This is not by chance nor are we mistaken about it. It lies in the very essence of meaningfulness. The understanding and what is understandable are in constant motion. Even in the self-interpretation of one's own life, though superficially the facts may not seem to change, their meaning changes for us or moves on to other levels and from this viewpoint our earlier understanding may be preserved as something with a preliminary, partial and foreground quality. The same applies to the understanding of myths, dreams and delusional contents. Understanding, therefore, in defining the knowledge it is

aiming at, must not adopt the orientation of the natural sciences nor use their criteria nor must it take over the formal logic of mathematics. The truth which understanding seeks has other criteria, such as vividness, connectedness, depth and complexity. Understanding stays inside the sphere of possibility. It offers itself in a tentative way and remains mere proposition within the cool atmosphere of knowledge that comes from understanding. It does, however, structure the objective meaningful facts, so far as they can be defined as facts, when meaning lies open to unlimited possibilities of interpretation. On the other hand, as empirically accessible material grows, understanding becomes more decisive. Multiplicity does not necessarily imply haphazard uncertainty but can mean a flexible movement within the range of possibility that leads to an increasing certainty of vision.

(f) *To understand is to illuminate and expose*

In practice the psychology of meaningful connections develops a remarkable double function. It may often appear malicious in its exposure of deceptions and beneficial in its affirmations when it throws light on essentials. Both activities belong to it. The malicious aspect often seems to predominate in actual fact. In a mood of scepticism or dislike we think we are always 'seeing through it'. The intended truth of this understanding is the penetration of general dishonesty. There is a mischievous psychology of opposites in which opposites are used simply to turn all that an individual does, says or wants into the opposite of what seems to be his real meaning. Symbolic interpretation is brought into use in order to find the meaning of every drive in some unconscious baseness that has been repressed. The psychology of 'being in the world' narrows the individual down and confines him to his particular environment and, according to this psychology, he knows no escape from it. The psychology of instinct exposes all higher impulses as manifestations of more elementary phenomena hidden within them. The individual who would understand himself gets into a desperate situation within himself—'a self reflected in a hundred mirrors'—and in the end seems to find nothing that is the self. In contrast to this, understanding which illuminates and does not expose involves an attitude which is basically positive. It approaches human nature sympathetically. It tries to visualise, it deepens its observations and watches the living substance grow before its eyes. The psychology which exposes acts reductively and finds 'this is nothing but...' The psychology which illuminates makes us positively conscious of that which is. The psychology which exposes is an unavoidable purgatory in which man has to test and try himself, refine and transform himself. The psychology which illuminates is a mirror in which positive self-awareness and sympathetic observation of the 'other' become a possibility.

(g) *Excursus into psychoanalysis*

Freud's psychoanalysis is, in the first place, a confusing mixture of

psychological theories (see p. 537). In the second place it is a philosophical movement or a creed which has become a vital part of certain people's lives (see p. 773). In the third place it is a psychology of meaningful connections and, as such, we will give it a brief characterisation as follows:

1. *As a cultural, historical phenomenon*, psychoanalysis is a *popular psychology*. What Kierkegaard and Nietzsche had achieved at the highest cultural level was again achieved at a lower level and crudely reversed to correspond with the lowest level of the common man and metropolitan civilisation. Compared with the valid study of psychology it appears as a mass-phenomenon and lends itself, correspondingly, to a massive literature. Practically all the basic ideas and observations stem from Freud himself, and his successors, though they form the bulk of the movement, have hardly added a thing.

It is not correct to say that Freud had 'for the first time and without question introduced the meaningfulness of psychic deviations into medicine . . . as compared with a psychology and psychiatry which had become devoid of psychology . . .' In the first place meaningful understanding of this sort was already in existence, though by 1900 it had retreated into the background. In the second place, psychoanalysis made use of it in a misleading way and this blocked the direct influence on psychopathology of great people such as Kierkegaard and Nietzsche. Psychoanalysis therefore is partly responsible for the general lowering of the cultural level in psychopathology as a whole.

It can be said that psychoanalysis appeared with shattering truthfulness in a hypocritical age. This is only partly correct and again only at a lower cultural level. It unmasked a bourgeois world which lived without faith within the conventions of a society that had definitely relinquished religion and morality 'with "sexus" as its secret god'. But the exposure was no less false than that which it unmasked. Both were bound to sexuality as their supposed absolute.

2. With regard to psychopathology, psychoanalysis has the merit of having intensified *the observation of meaningful connections*. The attention that was paid to small and minute signs and to phenomena which hitherto had been unnoticed or thought unimportant, taught our consciousness to apprehend countless expressive phenomena. Such apprehension expressed itself as interpretation. Gestures, actions, mistakes, modes of speech, forgetting, as well as neurotic symptoms, dream-contents and delusions, all came to mean something other than what they appeared to do at first or what was at first intended. Almost everything became a symbol for something else—according to Freud's teaching a symbol for sexuality.

Here are some examples from Kielholz¹ to illustrate this symbolic understanding of behaviour: a single woman of advanced years stole from the village councillor a young bull and a pair of uniform trousers—symbols for her sexual desires. A soldier steals from his room-mate at night a purse with keys which he kept in his trouser-

¹ Kielholz: 'Symbolische Diebstähle', *Z. Neur.*, vol. 55, p. 304.

pocket. This was after he had competed unsuccessfully with him for a barmaid's favours on the previous evening—a symbol for his wish to rob his comrade of his potency.

The following self-description shows how such 'significant meanings' may be experienced in hashish intoxication: a woman proband tore up a cigarette which was offered her. This act could be interpreted as a mere wilful act but it had a deep significance for her. The cigarette embodied for her the essence of a 'role' which she had to play but resented strongly. 'The cigarette made me become the officer's wife, so I tore it up.' 'The cigarette was not a symbol for the officer's wife but the whole affair itself' (Fränkel and Joel).

Interpretation brings with it a basic feeling of 'getting behind the scenes'. One uncovers, exposes and displays, as it were, the art of cross-examination, a police-technique. Almost the whole of psychoanalytic understanding is dominated by this fundamental, negative attitude of unmasking. With C. G. Jung it grows a little less obvious and in the case of Heyer has almost vanished. With him, it was not there initially and it intruded so little he did not seem to notice it in others.

3. Psychoanalysis caused new and vigorous attention to be paid to *the inner life-history* of individuals. A person becomes what he is because of his earliest experiences. Childhood, infancy, even intra-uterine life, are thought to be decisive for an individual's basic attitudes, drives and essential characteristics. Much of our understanding of what a person has become stems in fact from what has befallen him, from his experiences and disasters. So too we come to understand how he is what he is, how his body and its psychosomatic functions work, what he wants and what is important for him. But here also psychoanalysis made use of certain individually valid observations as a point from which to start its journey into the sphere of early personal histories, which were deductive only and to the uninitiated appeared quite unfounded. To some extent the method is analogous to that of archaeology, where one tries to find some connection between the prehistoric fragments and so rebuild the ancient world. With the psychoanalytic method—as Freud himself knew—there is linked a reduction in scientific requirements. 'If,' said Freud on one occasion 'we can temper the severity of the requirements of historical-psychological investigation, we may be able to clarify problems which have always seemed to merit our attention'. We are thus led into a world of hypotheses which are not only unproven but unprovable. They remain pure speculation and leave any meaningful phenomena far behind. This can be seen particularly in the contents as understood.

4. The *content* of understanding is of very great interest and actually enriches it. The individual's personal contents are thought to become meaningful in terms of what happens to mankind generally, and this is meaningful in its turn in terms of history. Psychoanalysis was wanting to master the whole human realm of original meaningful content by an interpretation of cultural history, the early history of the 'collective unconscious' in particular (Jung),

which was thought to have its effect on man from the dawn of time onwards. Here is an example taken from Freud:

In *Totem und Tabu* (1912) Freud developed a theory of history which he further elaborated towards the end of his life. The following picture emerges: Mankind lived originally in small groups, each under the power of an older male who appropriated the females and punished all younger males, including his own sons, or killed them. This patriarchal system ended in a revolt of the sons, who united against their father, overpowered him and mutually devoured him. The totemistic brother-clan thus replaced the father-clan. In order to live in peace the victorious brothers gave up their claim to the females for whose sake they had killed the father in the first place and imposed exogamy on themselves. Families were then instituted with matriarchal rights.

But ambivalent emotional attitudes on the part of the sons towards the fathers remained in force all through the later development. The father was replaced by a certain animal as totem. This was regarded as an ancestor and protector and was not to be killed. However, once a year all the men in the community gathered for a feast during which the totem animal though venerated on all other occasions was now torn to bits and communally eaten . . . this ritualistic repetition of the father-murder became the beginning of social order, custom and religion.

Following the institution of brother clan, matriarchal rights, exogamy and totemism, a development began, signifying the return of the repressed (analogous to the repressed in the individual human psyche). It is a valid assumption that the psychic precipitation from this early period has become a heritage which only needs to be evoked with every new generation and which is not in any way a new acquisition. The return of the repressed goes through a number of stages. The father once again becomes head of the family though his power is not unlimited as in the original horde. The totem animal is replaced by God. Ideas of a supreme deity appear. The only God is the return of the father of the original horde. The first effect of encounter with what had long been missed and desired was an overpowering one. There was admiration, awe and gratitude. The intoxication of devotion to God is a reaction to the return of the great father, but ancient feelings of hostility also return and are experienced as feelings of guilt. In St. Paul we can see how an understanding of this breaks through —we have slain God the Father and therefore are we wretched. The same thought was concealed in the teaching of original sin. But at the same time there came good tidings. Since one of us has sacrificed his life, our guilt is all absolved. What had to be atoned for by a sacrificial death could only have been murder—that is, the murder of the father. But in the sequel Christianity evolved from a father-religion to a son-religion. However it did not escape the fate of having in some way to put the father aside.

This account shows how Freud himself evolves a rationalistic, psychological ‘myth’ analogous to the formation of imaginative myths. His myth contains less empirical reality than these old myths. It is a product of the ostensible modern loss of faith and, moreover, has the disadvantage that although the content is poor enough and nothing but rational platitude; the empirical scientific value of its absurdity is stressed. But by evoking these ancient myths Freud breathes round his platitudes an air of lost memories,

mysterious and pregnant with foreboding. Thus in an age without faith such thoughts may well have a certain charm for some. One thing only is right in all this, namely, that in prehistory and in the individual's own history inner events probably play a part which continuously eludes empirical research and which external factors alone can never satisfactorily explain.

5. The *limits* of every psychology of meaningful connections must necessarily remain the same for psychoanalysis in so far as the latter is meaningful. Understanding halts first before the reality of the *innateness of empirical characteristics*. These, it is true, are neither finally knowable nor can they be firmly established. But meaningfulness comes to a halt before them, as something impenetrable and inalterable. Individuals are not born equal but rare and ordinary in their degree through the most manifold dimensions. Secondly, understanding halts before the reality of *organic illness and psychosis*, before the elementary nature of these facts. This is the decisive reality though many of the phenomena show much particular content that in one aspect at least seems meaningful. Thirdly, understanding halts before the reality of *Existence itself*, that which the individual really is in himself. The illumination of psychoanalysis proves here to be a pseudo-illumination. Though Existence itself is not directly there for psychological understanding, its influence is felt in the limits it sets for psychological understanding at the very point where something is which only shows itself in the inconclusiveness of the meaningful. Psychoanalysis has always *shut its eyes* to these limitations and has *wanted to understand everything*.

CHAPTER VI

MEANINGFUL CONNECTIONS AND THEIR SPECIFIC MECHANISMS

(a) *The concept of the extra-conscious mechanism*

Normally we do not give a thought to those extra-conscious mechanisms which are the understructure of our psychic life and without the intact functioning of which no meaningful connection can ever be realised. We live wholly by a genetic understanding of psychic events and, since we have no direct knowledge of extra-conscious mechanisms, there is all the less reason to bring them to mind. We only come to think of changes in them when in the course of some illness meaningful connections dwindle away or appear in some abnormal fashion, e.g. as physical sequelae (perhaps the psychogenic paralysis of an arm). We then add an hypothesis of abnormal mechanisms to give some temporary explanation for the existence of such abnormal meaningful connections. It is an important function of psychopathology to try and find out all it can about meaningful connections arising on the basis of extra-conscious mechanisms and the present chapter is concerned with this. The mechanisms themselves are inaccessible to investigation. Our understanding of the meaningful connection is the only way in which the facts can be grasped at all and this can only be done indirectly.

It is fundamentally important for the comprehension of abnormal psychic life that we clarify the concept of *psychic mechanism* as an extra-conscious precondition of psychic phenomena and of their effects on bodily function. As yet there has been no successful description of these mechanisms in more exact bodily or physiological terms. They remain purely a theoretical, psychological concept to help us bring some order into the phenomena (hysterical phenomena, for example), the true existence of which has sometimes been denied both by physicians with a purely somatic orientation and even by psychiatrists, who intellectualise. Investigation of mechanisms from their point of view is impossible. We can only describe the *different ways in which meaningful connections come about in actuality*. Any detailed theoretical construct which tries to go beyond the use of extra-conscious mechanisms as a general auxiliary concept would be untestable and, so far as I know, has never been fruitful. The Freudian investigations, in so far as they are constructions of extra-conscious events—and they are that to a large extent, particularly in dream-interpretation—are wide open to criticism. But sometimes they provide us with surprising insights when they evidently describe actual meaningful connections (a number of symbolisations, repressions, etc.). Hence we will leave the *general concept* of extra-conscious mechanisms and move on to a *construction of them in detail*, in the exceptional cases where we can make convincing use of such a construction for the ordering of the phenomena (cp., for example, the concept of dissociation).

Our present subject-matter, therefore, is not meaningful contents as such but how they come to appear through the mechanisms that give them their form. We would like to recognise the abnormal mechanisms. But the presentation of extra-conscious mechanisms, as shown by the meaningful content, only brings order into phenomena, and does not provide us with any theory. The following grouping, therefore, is not in the nature of a logical deduction, and the individual paragraphs tend to overlap. Our aim is to demonstrate the large variety of the phenomena in question, rather than the narrow confines of a theory, which in the last resort can never be true.

(b) *Meaningful content and mechanisms*

In dreams and psychosis there arise contents which can only appear through given mechanisms of this sort, but have nothing to do with the mechanism itself in so far as it is there and brought into action. On the other hand meaningful psychic content—along with physical illness, fatigue and exhaustion—can often be a factor in setting these mechanisms in motion. Psychic drives and attitudes even play a part in falling asleep and frequently turn the inner attention in a certain direction in dreams: I want to go on dreaming this or I do not want to do this but want to wake up. A person can only be hypnotised if he is willing. In all psychogenic reactions (*Erlebnisreaktionen*), it is the meaning of the experience which is the decisive factor in precipitating the state.

(c) *Mechanisms that are universal and constantly in action and those that are specifically evoked by psychic experiences*

Whenever meaningful connections are taking effect, then extra-conscious mechanisms are invariably active, such as habituation, memory, after-effect, fatigue, etc. There are in addition still other mechanisms which are set in motion by meaningful psychic traumata; they can be grasped only through understanding the meaning and in themselves retain a glimmer of meaning, even though we ourselves are still vague. Nietzsche's insights into such mechanisms offer us an example:

Instinctual drives will simply realise themselves wherever possible, where there is no resistance. Resistances arise countering this realisation. If instincts have no outward discharge, they will turn inwards . . . our whole inner world, originally confined between two membranes, has gained extension and grown, acquired depth, width and height, pari passu with the fact that the individual power of outward discharge has suffered inhibition. This *inhibition* arises either from the reality situation or from active suppression. The inhibited instincts in either case take effect in a changed form, namely:

1. A search for inadequate and in any case different contents, *a disguised or symbolic gratification*. 'The majority of drives—hunger is an exception—can be gratified "with imaginary supplies".'

2. *An inadequate discharge* of existing tensions or moods. 'Even the psyche needs

certain cloaca for the discharge of its excreta, and for this purpose it makes use of people, relationships, status, its country or the world at large.' 'Malicious remarks made about us by others are often not intended for us but express anger or a mood brought on by quite different reasons.' 'The individual who is dissatisfied with himself is always ready to wreak this dissatisfaction on others' . . . 'Gifted, but lazy, people always appear irritated when one of their friends has finished a good piece of work.' 'It is only envy that is stirring and they are ashamed of their own laziness.' 'In this mood they criticise the new work and their criticism turns into a revenge which deeply alienates the author.' *Confession* is a special kind of discharge. The individual 'who communicates himself' gets free of himself and the person 'who acknowledges something, can forget'.

3. A process which Nietzsche termed '*sublimation*'. There is 'strictly speaking, no selfless way of acting and no point of view is entirely disinterested. In each case there are only sublimations, in which the basic element appears volatile and only reveals itself to the sharpest observation.' Nietzsche speaks of 'people with a sublimated sexuality'. 'Some drives—the sexual drive, for instance—can be much refined through the intellect (into human love, prayers to the Virgin and the Saints, artistic enthusiasm. Plato considered the love of knowledge and philosophy to be a sublimated sexual drive). Yet with this the drives retain their old direct effect.' 'The quantity and quality of an individual's sexuality extend to the highest reaches of his mind.'

(Freud has popularised these ideas in cruder form. He took over the term '*sublimation*' for the transformation of sexual drives into artistic, scientific and ethical activity, etc. He used the term '*conversion*' for the appearance of physical phenomena due to psychic causes and '*transformation*' for the appearance of different psychic phenomena, anxiety, for instance, in place of the sexual drive.)

We can easily understand that where real satisfaction is lacking, a substitute is looked for and mentally conceived. But if an *actual* substitute-gratification is to be experienced or an *actual* sublimation is to take place, some extra-conscious mechanism is called for. Sublimation in particular and the real relief brought by confession both have to be attributed to something completely unconscious. It is through the meaningful connection itself that such mechanisms are set in motion.

In kleptomania the theft can be literally experienced as an act of sexual gratification. Sensuous pleasure in the phenomenon accompanies many neurotic phenomena. So with the drive to self-inflicted pain the struggle with the symptom is also enjoyed and through this cycle of pseudo-gratification there comes about a destructive increase of the symptoms.

(d) Normal and abnormal mechanisms

All meaningful psychic life comes to realisation by means of *normal* extra-conscious mechanisms. We speak of *abnormal* mechanisms when psychic experiences lead to an *exaggerated* or *entirely new* kind of transformation. Here margins are fluid. We take as our norm the ideal type: that in the meaningful personality connectedness remains intact, there is always a possibility of full illumination through self-reflection and the link with consciousness and the state of consciousness continues sensible and subject to control.

SECTION ONE

NORMAL MECHANISMS

(a) Psychogenic reactions (Erlebnisreaktionen)

This is not the place to remind ourselves of all the infinite world of human experiences. We would only observe the basic fact that the individual in his temporal course passes by fate and change through a number of situations and events and comes upon fundamental experiences that shake him to his roots and form his subsequent nature.

We must distinguish between violent emotional shocks such as terror, horror, rage (arising, for example, from sexual assault, earthquake, death, etc.), which are due to *sudden catastrophe* and those deep emotional changes which grow slowly out of the *fixities of fate* (the wasting of hope with increasing age, lifelong captivity, the crumbling of self-deceptions which had helped one to evade reality, restricted living through poverty and lack of opportunity, a lack of positive experiences). 'Each generation, class or individual collects cultural wounds of their own in the areas of nature and external circumstance, and every one has a different point at which he is most vulnerable, a different quarter from which he is most likely to receive his most violent shocks, for one it is his money, for another his reputation, for a third his feelings, religion, knowledge or family' (Griesinger). In the order of frequency the chief role seems to be played by: sexuality and eroticism, fears for life and health, worry over money, material existence and domestic life; then come motives related to success in one's calling and in one's human relationships; finally there is religion and politics. Where we want to analyse the meaningful connections we must apply ourselves to the particular contents of each individual case.

Traumatic experiences can bring a person into a state and afford him experiences which may well appear to him abnormal compared to his everyday life. We consider these experiences normal in the first place so long as they remain under that person's control and, in the second place, so long as they have no obscure, disturbing sequelae; thirdly, so long as they are more or less possible for anyone to have. (Man has an extraordinary capacity for extreme endurance.)

Terror by itself, without any other precondition (psychic attrition, physical weakness), is hardly likely to precipitate a psychosis. Such effects of terror in the 1914-18 war were always linked with other causes. The explosion at Oppau¹ (where 657 workers out of 6,000 were killed and 1,977 were wounded) did not cause a single acute reactive psychosis.

But acute traumatic experiences may lead to very remarkable phenomena:

1. In the most vehement emotional upsets when there is desperate fear of death a *complete loss of adequate emotional response* has sometimes been observed—a marked

¹ Kreiss, *Arch. Psychiatr. (D)*, vol. 74, p. 39.

apathy appears, a rootedness to one's place, with unfeeling, quite objective observations of events as if one were merely registering them. This has been noted particularly among the survivors of earthquakes and conflagrations. They seem indifferent to everything. These states may sometimes be difficult to distinguish from a vigorous self-control in a taxing situation. Occasionally this stunning through pain has been described subsequently as a subjective calm.

Baelz¹ describes his own experience of a Japanese *earthquake*: 'There was a sudden, lightning change in me. All my better feelings were extinguished, all sympathy and possible participation in others' misfortunes, even interest in my threatened relatives and my own life disappeared, while mentally I remained quite clear and I seemed to be thinking much more easily, freely and quicker than ever. Some earlier inhibition seemed to have been suddenly removed and I felt responsible for no one, like Nietzsche's superman. I was beyond good and evil . . . I stood there and looked on at all the ghastly events around me with the same detached attention with which one follows an interesting experiment . . . then, just as suddenly as it came, the abnormal state vanished and gave way to my old self. As I came to, I found my driver tugging at my sleeve and begging me to get out of the danger from the nearby buildings.'

From the description of a South American *earthquake* (Kehrer, Bumke's *Handbuch*, vol. 1, p. 337) . . . 'Nobody tried to save their relations. I was told it was always like this. The first shock paralysed all the instincts save that of self-preservation. Once real misfortune happens, many regain their senses and one sees miracles of self-sacrifice.'

2. *Experiences occurring seconds before an apparently certain death* (during a fall from a height or during drowning) are rarely reported but often discussed. Albert Heim² gives the following account: 'As soon as I began to fall I saw I was bound to be dashed on the rocks and waited for the impact. I dug my fingers into the snow to try and break my fall and tore my fingertips without feeling any pain. I heard my head bump on the rocky corners and then I heard the thud when I finally hit bottom . . . I only began to feel pain after an hour. It would take me ten times as many minutes to tell all that I thought and felt during the 5–10 seconds of the fall. First I saw my possible fate . . . the results for those I would leave behind . . . then I saw my past life rolling off as countless pictures on a faraway stage . . . it all looked translated, as it were—beautiful without pain or fear or anguish . . . atoning thoughts pervaded everything and sudden peace flooded me like magnificent music . . . I grew more and more enveloped in a marvellous blue sky of small clouds, rose and faintly violet . . . I floated quietly and tranquilly away among them . . . observation, thought and feeling went on side by side . . . then I heard a thud and the fall was over . . .' Heim was unconscious for half an hour after this as a result of the impact, though he himself did not notice it.

3. Here is one illustration from the descriptions of *front-line experiences* in the first World War: Ludwig Scholz³—'We were reduced to having to "wait and see" although we were in immediate danger. Our minds froze, grew numb, empty and dead. Every soldier knows such an experience if he has had to lie still under heavy barrage. One gets so tired, so utterly weary. Thoughts crawl, to think is such a

¹ Baelz, *Allg. Z. Psychiatr.*, vol. 58, p. 717.

² A. Heim, 'Über den Tod durch Absturz', *Jb. schweiz. Alpenclub*, 1891 (quoted by Birnbaum).

³ Ludwig Scholz, *Seelenleben des Soldaten an der Front* (quoted by Gaupp).

labour, and even the smallest voluntary act becomes painful to perform. Even talking, having to reply, get one's thoughts together, jars on the nerves and it is felt as a sheer relief to doze and not have to think of anything or do anything. This numbness may indeed grow into a dreamlike state, time and space disappear, reality moves off infinitely far, and while one's consciousness obediently registers every detail like a photographic plate, feelings waste away and the individual loses all touch with himself. Is it you who sees, hears and perceives, or is it only your shadow? This is an experience common to men 'who are condemned to inactivity and at the same time are exposed to grave and immediate danger'. Scholz goes on: 'Feeling is frozen. As the firing gets louder and never ceases, it blends with a sense of fatalistic calm. The threatened man becomes numb, cool, objective—the senses slowly grow enveloped with a merciful stupefaction, become clouded and conceal the worst from him . . . the monotony of uninterrupted droning noise narcotises him . . . the eyes slowly close and right in the middle of the deadly uproar he falls asleep.'

4. Experiences *while being severely wounded*. Scheel¹ describes his experiences as follows: 'In 1917 I sustained two shot-wounds in my jaw with damage to my tongue, two right-sided shots in the arm and a shot in the seat . . . I immediately collapsed though consciousness was preserved. At first I felt no pain . . . on the contrary I felt almost quite comfortable and well, the running blood gave me the feeling of a warm bath . . . my thinking, though preserved, was retarded. I could hear grenades exploding near me and the cries of the wounded but I had no idea of the danger of my situation . . . I understood everything said and I can still hear my battalion commander rallying those who were calling out though not so badly hurt: "grit your teeth—what are you shouting about? Here's Lieutenant Scheel—so badly hit but not a word out of him" . . . My silence was interpreted as sheer heroism, but if it had been known it was only the effect of shock which robbed me of the pain the others were suffering . . . I lost all power of movement once I was hit . . . I never felt uncomfortable nor the bump on the ground when I fell.'

5. In the period *immediately after traumatic experiences* there may be the most vivid dreams (e.g. battle-dreams of the wounded). There is a compulsion to see, hear and think the same thing over and over again. It haunts the individual's mind and he gets depressed, feels changed, cries, is tense and restless.

Grief, it seems, is often not immediate but takes time to grow. After the first period of calm, there is violent reaction. We speak of a time-lag in the affect.

6. People *differ enormously in their psychogenic reactions*. Baelz writes: 'In an earthquake, some are terrified by the slightest tremor, while others keep comparatively calm even when the quake is severe. People who have given proof of their courage in combat or elsewhere may grow deathly pale at the smallest tremor, while a sensitive woman who might be terrified by a mouse will remain relatively calm'. From these and similar remarks we can see the wide extent of what is normal.

(b) *After-effects of previous experience*

Everything we experience and do leaves its trace and slowly changes our disposition. People with the same disposition at birth may eventually find themselves in entirely different grooves, simply through their life-history and experiences and the effects of their upbringing as well as of their own efforts at

¹ Scheel, *Münch. med. Wschr.*, vol. II (1926) (quoted by Kehrer).

self-education. Once such development has taken place there is no point of return. In this lies the personal responsibility involved in every single experience.

The course of psychic events leaves diverse after-effects: 1. *Memory-traces*: which make the recall of events possible. 2. The facilitation of psychic events through repetition (*practice*). 3. Abbreviation of the same events, so the same result is achieved with fewer conscious phenomena (*automatisation or mechanisation*). In learning to ride a bicycle most movements are first learnt consciously and one does not rely on one's instincts. But as we learn we gradually give up conscious guidance of our movements until the decisive moment is reached when we dare to trust the learned mechanism (acquired instinct). Finally automatisation has gone so far that only the expressed intention of wanting to ride the bicycle needs to be in consciousness. Everything else happens automatically while consciousness can be concerned entirely with other matters. 4. A general tendency for the same psychic experience to recur (*habit*). 5. Lastly there are *unnoticed influences* often at work in emotionally-toned experiences, and they have an effect on other psychic events, on feelings, values, actions and the general conduct of life (*effect of complexes*). Memory, practice and mechanisation have already been dealt with in our discussions on the objective psychology of performance, so here we shall only deal with habits and the effects of complexes which have a meaningful aspect for us. They are to be encountered in practically every psychological analysis.

I. *Habits* dominate our life to a degree which we only rarely admit. Traditional customs and accidentally acquired habits affect most of our actions and feelings. Habits grow on us and become needs. Even bad actions to which one has been forced soon grow bearable through the strength of habit. Habits are responsible for the constancy of our attitudes and are an effect of discipline. They become our 'second nature'. What we have grown used to—even if it is criminal—becomes entirely unremarkable to us. Spontaneity of the psyche retires in the face of it. To try and analyse or sort out the diversity of our habits would present us with an endless task.

II. *After-effects of emotionally-toned experiences*, particularly *unpleasantly-toned* ones. These normally fall into the following types: (a) affects, like habits, once they have run their course *can be fully roused again through association* as soon as one element of the original experience reappears. Moods may thus appear which at first seem quite groundless to the person concerned until the associative link has been recognised. (b) *Affects can displace themselves* in that objects which were associated with an unpleasant or pleasant experience may take over the same feeling-tone. Hence emerge the countless subjective emotional values which objects acquire for people as a consequence of chance, coincident experience. This displacement can also take place when affects are simply aroused associatively, without any fresh reason or fresh object, so that the subjective feeling-tone which the object acquires for the person may originate in something which can no longer be disentangled either by the individual

concerned or his analyst. If, however, there is patient evocation of associations, in some cases it is possible to arrive at a meaningful clarification. (c) Unpleasant experiences are *worked out*. Either we give free rein to our affects in tears or acts, in irony, defence reactions or creative activity, utterances or confession so that they exhaust themselves in this way (*abreaction*) or free discharge is inhibited and the whole experience is therefore *worked out intellectually*. The experience is summed up as a whole, the connections are weighed up, conduct evaluated and action decided upon as seems necessary. This is an emotionally-toned, intellectual task and in so far as it is a true and genuine effort, character traits for the future become engraved and basic principles formed as a result of this impassioned yet reflective intellectual labour. (d) When unpleasant experiences are blocked from outlet and 'swallowed direct', denied, deliberately pushed aside and forgotten, '*repressed*' without any such intellectual elaboration, they tend to show exceptionally strong after-effects. In this case the associative re-awakening and the emotional displacement—which always occur as after-effects—tend to be even more intensive and widespread. Repression, however, can occur without any such consequences, particularly when the personality is stolid and dull.

Attempts have been made to demonstrate the normal after-effects of emotionally-toned experiences, particularly through the use of association-tests.¹ The investigator examines the effects of certain facts known to him. He compares the reactions to a series of stimuli of people who are and are not involved in these same facts. A number of differences can be detected (e.g. prolongation of reaction-time, forgetting the reaction, meaningless or absent reaction, exaggerated gesture or other accompanying phenomena on the part of those involved) and these can be explained partly as simple after-effects of the experience and partly by a tendency to conceal. However, such reactions occur not only when something has really been experienced or done but also when the proband merely imagines he is suspected to have experienced or done something like that.

The disposition, which is the residual result of the experience or type of experience and which uniformly influences the later psychic life in a way that is meaningful in terms of the original experience, is called a *complex* (Jung). All complexes have it in common that they are supposed to characterise a particular, irrational after-effect arising from some experience in the past. This leads to feelings, judgments and actions which do not have their source in objective values or in objective truth or purpose but in these personal after-effects themselves. It is always implied that if the individual concerned only had good self-observation and would exercise self-criticism he would not attribute any objective validity to the content of such after-effects. Complexes have a tendency to dominate the personality to such an extent that the individual

¹ A critical summary with full bibliography is given by O. Lipmann, *Die Spuren interessabetönter Erlebnisse u. ihre Symptome* (Leipzig, 1911). He also indicates the symptoms shown in other tests (e.g. experiments on evidence). Ritterhaus, *Z. Neur.*, vol. 8, p. 273. Jung, 'Diagnostische Assoziationsstudien', *J. Psychiatr.*, vols. 3, 4, 5—a basic study.

no longer has complexes but the complexes have him. The concept of the complex carries various shades of meaning:

1. *Projection of a single experience on to the world as perceived:* After an experience which has made one despise oneself one feels—and one's whole demeanour betrays it—highly embarrassed as if people were noticing. One instinctively believes that the change in oneself will be conspicuous to everyone else. A 'delusion-like' state develops from over-valued ideas. Goethe describes this in Gretchen's experience: 'The most casual of glances troubled me; it was no longer mine to be happy and unaware, and go about unknown, of good repute and not imagine the silent watcher in the crowd.'

2. The *disposition* which remains on as the trace left by an experience: When certain elements bring back the experience, it recalls the other elements through association and this leads to *affectively-toned reactions that are personal to the individual* (e.g. antipathy to a place or to some phrase, etc.).

3. The disposition which as a result of prolonged experience of *certain situations* leads to particular affectively-toned reactions. For example, a man becomes afraid whenever he has anything to do with the military. He accumulates hatred and resentment against superiors or preferred persons and on some trivial occasion there is an explosion of rage. One person has an antipathy towards every party-opponent or a liking for the 'outsider' as such. Another finds those types attractive which remind him of some loved person. Another has an irreversible servant/master attitude which rests on long habit and tradition, and with which, should the external circumstances change, he will have to wrestle as if with an uncontrollable inner force.

(c) Dream-contents

The decisive step in the mastery of reality is the making of a clear distinction between dream and waking life and between the meaning of both experiences. The dream, however, remains a universal human phenomenon. It may be regarded as an indifferent pseudo-experience or as a symbolic or prophetic experience, the interpretation of which is an affair of some importance. The psychic life is so changed in dreams that it could be called abnormal were it not tied to the sleeping state and were it not so common a human experience. It is, so to speak, an abnormal event which is normal and comparisons between psychoses and dreams are an old matter.

In the first place sleep and dream can both be investigated as to what objective *somatic factors* are involved. We can thus consider the dream's richness of content and its frequency in relationship to the factor of ageing (more in the young than in the old), or to the depth of sleep (more frequent when sleep is light), etc.

Secondly, one can investigate the *psychic existence of the dream-experience phenomenologically*, the modes in which objects present themselves, the levels of dream-consciousness, the shifting contents, their infinite variability and interchangeability.

Lastly, we can try to understand the *contents of the dream-experience, what they mean*. The question *whether dreams have meaning* has been debated down the ages.

1. Dream contents can be regarded as *being of cultural interest in themselves*, in so far as they are *an experience*. It is as if deep meanings for humanity come to light in dreams. We look then for typical dream-contents—characteristic anxiety dreams, dreams in which one experiences a longing for something unattainable. The dreamer feels harshly abandoned in a desert place while all that he strives for vanishes into the infinite distance. He wanders through a labyrinth of rooms. There are dreams of flying and falling.

2. We either dismiss the infinite variety of dream as chance and impenetrable chaos or we can try to answer the question why particular contents occurred in this situation to this individual and not to others. In answering this question, we '*interpret*' the dream. We practise the psychology of meaningful connections and enquire into experiences, conscious or unconscious aims and wishes, into the personality and life-history, the situations and special experiences of the dreamer and into tendencies common to everyone. In opposition to the concept of dreams as *accidental and chaotic events*, Freud put forward the proposition of their *complete determination* and meaningfulness. Perhaps both these extremes are wrong. Some dream-contents do perhaps have a meaning other than their relationship to trivial, insignificant experiences of the previous day or two. Perhaps they can be understood in a much more fundamental way.¹

Let us set out possible interpretations briefly in the form of question and answer:

What does symbol-formation mean? One dreams that one is in the street naked—the bedclothes have fallen off. One dreams one is at a drinking-party—the dreamer is actually thirsty. One dreams one is flying—obstacles, frustrated wishes, difficulties, are thus overcome. The dream images are—at least in part—objectifications of something else which appears in them symbolically and which can be interpreted as their 'meaning'.

What is it that is symbolised? Silberer suggests the following grouping:

1. Bodily stimuli (somatic phenomena).
2. Functional phenomena: the ease of the psychic state, how heavily it is burdened, how retarded.
3. Material

¹ 'Dream-interpretation' is extremely ancient (cp. the famous classic: Artemidor, trs. Fr. Krauss, *Symbolik der Traüme* (Vienna, 1881), but this nearly always meant interpretation of dreams as prophetic signs, revelation of metaphysical meaning, divine commands. *Modern dream-interpretation* understands dream-content as stemming from wishes, repressions, symbol-formation, as a pictured representation of the dreamer's situation, state, and of the prognosis in relation to his own somatic and psychic happenings. Scherner (*Das Leben des Traums* (Berlin, 1861)) found symbolic portrayal of bodily events—physical stimuli such as restricted respiration, pressure sensations, etc., in great numbers. Wundt (*Physiologische Psychologie*, 5th edn., pp. 652 ff.) accepted this in principle with some individual interpretations. But Freud's work was the first to offer a fresh interpretation of great importance: *Die Traumdeutung* (Vienna, 1900), 1st edn.—containing an historical survey. H. Silberer, *Der Traum* (Stuttgart, Enke, 1919) is a short book giving an introduction to Freud's theorising. For a historical presentation see L. Binswanger, *Wandlungen in der Auffassung und Deutung des Traumes* (Berlin, 1928).

phenomena: the content of wishes, the desired goals. Freud differentiates different levels of wish, as it were: those that are the unfulfilled, inoffensive ones of every day; those which have cropped up during the day but have been dismissed and repressed; and, at the deepest level of all, unconscious wishes which are hardly ever related to daily life but stem from the world of infancy, as for example the incest-wish.

What are the ways of symbol-formation and of moulding the dream-content? Symbol-formation may take place directly and openly as the mere pictorial representation of a thought, something self-evident and scarcely to be doubted. But this type plays the smallest part in Freud's dream-interpretation. Far more important are the wishes dismissed by consciousness as objectionable and disguising themselves in images that are difficult to recognise on the face of it, in order to reach symbolic fulfilment in the dream. Many tendencies to symbol-formation combine within the single image (over-determination), the 'censor' transforms the symbol till it becomes unrecognisable to consciousness. Thus and in many other ways, according to Freud's point of view, does the dream-content proceed to structure itself.

Instead of discussion, an example, abstracted from Silberer and condensed, will illustrate better what is meant:

Paula's dream. In an Egyptian temple, altar of sacrifice. Many men present but not in ceremonial dress. Emma and I stand near the altar . . . I put an old yellowed manuscript on the altar and say to Emma . . . just watch . . . if what they say is true, sacrificial blood should appear on the paper. Emma smiles incredulously. We stand there a fairly long time . . . suddenly a red-brown spot appears on the paper in the form of a drop. Emma trembles all over. Suddenly I am in an open field and see a magnificent rainbow . . . I call the lady of the house (for whom Paula worked as companion) to show her but she will not come. Then I come to a narrow path enclosed by high walls on both sides. I become terribly frightened because the narrow path with its high walls seems endless. I scream, no one comes. Suddenly the wall gets lower on one side; I look over it and see close to it a wide river which again blocks the way. I walk on and see an uprooted rose-bush. I decide to plant it back as a memorial in case I die there and start to dig with a stone from the wall. It is pure black garden earth. I plant the bush and looking up from the work I see the wall quite low and beyond it beautiful fields and sunlight.

Silberer interprets the dream as follows: Paula, who had not had sexual intercourse for some considerable time, must have taken it up again. Without using contraceptives she was anxious about the consequences because her period was delayed. She had ideas of death as if faced by a great danger. Paula communicated her dream by letter and after a few weeks she confirmed the interpretation. Some time after the dream she had given herself to a man but at the time of the dream it was only the thought of doing so that had occupied her mind. The dream did not reflect an actual event but the intention and the fantasies linked with it. As to the details: The altar stands for the marriage altar. The apparently irrelevant emphasis on 'not in ceremonial dress' together with the other details may be seen to refer to the absence of contraceptives (which Paula called 'covers'—Ueberzieher). The unfolded manuscript stood for the vagina where blood is expected to appear. Several times people are

called but do not come—the ‘good lady’ of the house does not come—the menstrual periods are not so ‘good’ as to start. The frightening passage between the walls refers to a phantasy about the lower bodily passages and to birth . . . Silberer deals in more detailed fashion with the blood and the rose-bush. The anxiously awaited bloodstain is in the first instance the menstrual blood supposed to appear in the vagina (the folded manuscript). The manuscript is yellowed, Paula is worried that she is growing old. Hence the second interpretation of the blood, defloration blood—Paula wishes she was ‘virgo intacta’ (a clean page) so that defloration was still possible. The rose-bush is a symbol of sexuality and fertility. Paula thinks of the possibility of becoming pregnant. She has in fact played with the idea that if she becomes pregnant she would rather die but she would like the child to live. The walls are the walls of inhibition. As she breaks these down, she makes her own grave, giving the child life. Silberer, whom I have only quoted in a fragmentary way, concludes: ‘This by no means exhausts all the dream connections, which are extremely complex and it would fill a whole book to go through them every one.’

What criteria are there for correct interpretation? Any interpretation can be made to sound plausible if we pursue the path of associations, which leads from everything to everything else, and if we follow the line of reasonable connection, especially as in dreams platitudes are common and contradictions a matter of course and usually there are a host of over-determinations, transformations of meaning and heterogeneous identifications, of oneself with the content and so on. We can recognise the content but because of the unlimited possibilities of its interpretation, we need some special criteria for preferring one interpretation to another, or for declaring one particular interpretation as the correct one. Initially it is a question of probability—should we accept the coincidence of comprehensible contents of experience with comprehensible dream-contents as accidental or significant (for instance, in Paula’s dream, the Egyptian temple allows the reminder that the man with whom she wanted to have intercourse used to call her ‘sphinx’). But that does not get one very far because it is obvious that all dream material is rooted in some experience or other. Interpretation presents the problem of finding out what factor is decisive for the content and what is just accidental. In the last resort it is the subjective evidence of the dreamer that will be decisive, when he is awake and interprets the dream or has it interpreted for him. Only the dreamer can give validity to the colouring, feeling and emotional tone attaching to the dream-content, and this validity is essential if the interpretation is not to be just an unending game of logical associations. We certainly come across the most illuminating instances but usually the particular case presents endless problems and verification becomes an impossibility.

Instead of correctness (in the sense of making an empirical statement of a meaning that is already effective in fact) interpretation may have a certain truth, in that it brings the given dream-material into some relation to reality, to an actual train of thought which can now become effective in life through an act of self-understanding. Here the process of dream-interpretation is not the process of getting some empirical knowledge, but a productive activity, a

form of communication between the interpreter of the dream and the dreamer himself, a communication which influences his whole outlook, something which indirectly educates him for better or worse, but capable at any stage of deviating into nothing but an entertaining game. In every case the analysand is open to the analyst's suggestions and theories, and success depends on the degree to which he accepts them.

What is the scientific significance of dream-interpretation? In the first place it may discover *universal mechanisms* and determine their presence or absence. But, as far as Freud's theory is concerned, I find it to be largely a construct from extra-conscious material, with no scientific interest since verification is impossible. On the other hand, much of it strikes one as particularly apt, for instance, all that refers to the psychology of association, but this soon becomes a rather boring performance, an endless process of analysing contents according to the conventional procedure. In the second place, it is thought that by dream-interpretation we can penetrate into *the depths of a particular personality*, with the idea that we can get a better history in this way than by taking note of accounts given when consciousness is clear. This may be quite true in certain rare cases but the proof of correctness can only be furnished by further data from experience. In the third place, there is the question whether we get a *broader understanding of meaning, a widening of the intellectual field* in respect of dream-interpretation and through its use. So far our understanding has been almost wholly of an elementary, primitive and platitudinous kind and to this has been added our re-discovery of folk-myths in the content. But the result in this third respect seems to me almost zero. In the fourth place, we might conceive of the biological significance of dreaming in general. Freud explains the dream as the '*guardian of sleep*'. Sleep-disturbing wishes are hushed through dreamed-of wish fulfilments. This basic idea cannot be dismissed lightly and a small proportion of our dreams may possibly be of this sort.

Taking it all in all, I think that some truth is to be found in the principles of dream-interpretation. My objection is not raised against its correctness (though it provides an endless field for fantasy and mock-performance) but rather against the importance attached to it. Once the main principles are learnt, and tested out on certain cases, there is little else to learn. The dream is a remarkable phenomenon, but after the first flush of enthusiasm to investigate it we are soon disillusioned. So far as any knowledge of psychic life is concerned, the information we gain in this way is of the slightest.

(d) Suggestion

On the appearance in an individual of a wish, a feeling, a judgment of something, an attitude, or alternatively when he acts, we usually 'understand' the content in terms of his previous traits, his basic nature and the presenting situation. Moreover if, in spite of the fact that we know him extremely well, our understanding fails us, we look to see whether the phenomena might not constitute the 'ununderstandable' part of a morbid symptom. There are a large

number of psychic events which fall into neither category. We call them the phenomena of suggestion. Their content can of course *be understood* but not in terms of the person's character nor in terms of a logical or other adequate motive. It can only be understood in terms of a specific psychic effect which other persons have exercised on the individual, or which he has exercised on himself in an almost mechanical way without the aid of his own personality or any motive that strikes us objectively as sensible or comprehensible. 'Realisation' sets in *without counter-ideas*, counter-motives or counter-evaluations. Judgments, feelings, attitudes achieve their realisation without any question or criticism, without act of will or personal decision. Under cover of the hypothesis that there are mechanisms of suggestion which are ununderstandable and cannot be further explored, the resultant phenomena unfold themselves in a series of understandable connections, in so far as the content of the psychic operation and the content of the phenomena that ensue have some correspondence with each other.

In the widest sense *involuntary imitation* belongs to the phenomena of suggestion. (This is not so with voluntary imitation which in each case can be understood in terms of the individual's motives and goals.) In a crowd the single person loses his self-control not because he himself is enthused but because the crowd infect him.¹ Thus passions spread and it is in such imitation that fashions and customs have their source. We imitate the movements, phrases and ways of others without noticing it or intending it. So far as we are not dealing with an understandable development of our personality, the forces of suggestion are at work.² Every kind of psychic experience can be aroused in this way, feelings, points of view, judgments. Most striking of all are the involuntary imitations of physical phenomena, appearing without any influence of the conscious will. Somebody, for instance, feels acute pain in that part of the body where someone nearby has sustained a fracture of the bone, or someone has paralysis or cramp because the sight of others so suffering has alarmed him. It is possible to speak of an imitative-reflex. It is one of the basic characteristics of human nature.

A type of suggestion is that of *judgments and values*. We exercise judgments, affirm values and take up attitudes which we have simply taken over from others without intending or knowing that we have done so. It is not our judgment, evaluation or attitude yet we feel *it is ours*. This acceptance of others' judgment as our own along with the semblance of its being our own all the same has been termed 'suggested judgment'.

All the kinds of suggestion we have discussed so far may operate unintentionally and involuntarily. There is no intentional suggestion and the victim himself does not notice it. But suggestion may also be *intended* and in that case

¹ Gustav Le Bon, *Psychologie der Massen* (German trans.) (Leipzig, 1912), 2nd edn.

² Tarde (*Les Lois de l'imitation*) described imitation and enlarged the concept considerably. He wanted to make it the basis of sociology, as a result of the common procedure of turning one particular mode of understanding into an absolute. Involuntary imitation is only one among many other factors that give a distinctive character to particular social circles, strata, callings, etc.

the concept of suggestion grows more circumscribed and is of more superficial application. It then signifies only the intentional influence of people on each other (which in its intensified form becomes hypnosis). Finally a suggestion may be realised *with the knowledge of the person affected*. I want something and I expect it, or I am afraid, in spite of what I know, that I cannot defend myself, or rather it is just my knowing that prompts the suggestion. But knowledge of this sort is already self-suggested; it is the knowledge of a believer, the expectation of the unavoidable.

Experiments have shown that in human beings the effects of suggestion are universally drastic. For instance, at the end of a dark passage a light-coloured bead is suspended and the task is to say when it first becomes visible as one approaches it. It is seen by two-thirds of all the probands, even when it has been removed. A professor tells his audience to turn away and pours distilled water from a well-wrapped bottle on to a wad of cotton wool, ostensibly to test how quickly a smell will spread in a room. At the same time he sets a stop-watch. Two-thirds of his audience, those in the front bench first, give the sign that they have perceived the smell. In the same way one can achieve mass-hypnosis and other forms of suggestion but in all these cases we find a minority who do not respond. They exercise natural powers of criticism, perceive nothing, experience nothing and find themselves surprised.

Autosuggestion has a special role and may be contrasted with suggestion from others. For one reason or other, and it may be quite understandable, an individual is struck with some idea, some expectation or conjecture and the content is immediately realised within his psychic life . . . He expects to smell something and at once he smells it. He supposes something to be so and immediately there is conviction. He expects a blow to paralyse him and at that moment his arm is paralysed. Here is a mechanism which only produces worthwhile results when a conscious will is at work. We intend to wake up at a certain time and succeed in waking up punctually. We want to banish a particular pain and in fact it disappears. We want to go to sleep, and in fact we do.

(e) Hypnosis

With most people, provided they are willing and believe in the power of the person in authority and have confidence in him, one can in the first place suggest that they are feeling tired, are tranquil, are surrendering to the words of the suggestor, and should concentrate on these words alone. One can then induce a state varying from the mildest sleepiness to the deepest degree of hypnosis with exclusive rapport with the suggestor. Such a state provides the most suitable condition for the realisation of further suggestions. How successful this is depends on the depth of the hypnotic state. Insensibility of the skin, different postures, immobility, specific sensations, hallucinations, can all be evoked. Once the hypnotist has ordered it, the hypnotised individual cannot move, or a potato tastes to him like a luscious pear. While deeply hypnotised he carries out a theft, etc. During the deepest stages of hypnosis, the eyes are again open, the individual starts up, walks about and moves as if he were

awake but all his movements and experiences are conditioned exclusively by rapport and suggestion (somnambulism). These states are subsequently covered by complete amnesia. We do not *differentiate* hypnotic states solely by their depth but according to the kinds to which individuals are prone in varying degree. Somnambulism is a kind of partial wakening, which remains tied to specific conditions. There are certain remarkable *post-hypnotic* effects (Termin-suggestion). The hypnotised individual will carry out an order days or weeks after it was given under hypnosis, he will pay a visit perhaps. At a certain time, in a way which he himself cannot understand, he will experience an urge to do something and he will give in to this unless some overwhelming inhibition, rooted in his personality, makes him resist. He will often fabricate a motive which suits him and which he will consider as the real reason for his action. Finally, physical phenomena can be suggested under hypnosis and so brought about though voluntarily this would be impossible, e.g.: determining the menses to a particular day, reduction of bleeding, blister formation on the skin (suggesting that a piece of paper is a mustard-plaster).

Hypnosis resembles *sleep* yet is something quite different. The difference lies in the *rapport*, in the 'island of wakefulness' in the otherwise sleeping psychic life.

Hypnosis is also something different from *hysteria*. The phenomena of hypnosis and hysteria are identical so far as their mechanism goes, but the difference lies in the fact that with hypnotic phenomena the mechanism is brought into action by specific conditions which are transitory while with hysterical phenomena it is maintained as a lasting peculiarity of the psychic constitution of certain individuals.

However, there is some relationship between *hysteria* and the *capacity to be hypnotised*. The latter is common to all humans but it varies in type and degree. The deepest degree of hypnosis is achieved most commonly by those who are inclined to spontaneous hysterical mechanisms and by children (whose psychic life is normally much closer to the hysterical psychic life). On the other hand some patients *cannot be hypnotised at all*, for instance, the dementia praecox group and other patients who can only be put into the lightest of artificial sleeps which one can hardly call hypnosis, e.g.: psychasthenics.

Hypnosis is a human phenomenon and presupposes self-reflection and the adoption of an attitude to the self, and hence it is not possible in very young children. There is no hypnosis of animals. What is referred to by that name refers to reflexes which are physiologically quite different and in nature essentially quite another matter from human hypnosis.¹

There is in addition *autohypnosis*. Here it is not another person but I myself who put myself into a hypnotic state intentionally through auto-suggestion. In this state I can achieve far more wide-reaching physical and

¹ Hypnotic phenomena were closely studied in the last decade of the nineteenth century and descriptions are largely concordant. Explanations and theories are numerous and of changing nature but not of particular interest here. The most important are Bernheim, *Die Suggestion* (German), from Freud (Vienna, 1888); Forel, *Der Hypnotismus* (Stuttgart, 1902), 4th edn.; Moll, *Der Hypnotismus* (1907), 4th edn. Of the psychologists Lipps, *Suggestion u. Hypnose (Abbr. Bayr. Akad.)*, 1897; Wundt, *Hypnotismus u. Suggestion* (Leipzig, 1892).

psychological effects than in the waking state. This control of physical events and this sort of awareness derives from very ancient practices and still survives in the Yoga techniques in India. In the Occident it has almost been forgotten. Levy was the first to use it in the field of medical therapeutics¹ but it was J. H. Schultz who elaborated every aspect methodically, tested it, made observations and gave it a physiological and psychological interpretation.²

Everyone can through the exercise of his own will bring suitable conditions about whereby a switchover into the hypnotic state occurs without any external suggestion. This calls for relaxation—the most comfortable position for the body, reduction of outside stimuli—a co-operative readiness and concentration (fixing on some point, monotony). According to Schultz, the switchover is a vital event that occurs without any suggestion only when concentrated relaxation is present. We are dealing with a basic vital reaction, analogous to the release of falling asleep. Autohypnosis is a ‘concentrative alteration of set’, commonly of course the effect of suggestion but not strictly tied to this. It is rather an automatism that requires certain conditions for its appearance.

The experiences in this state are typical. At first, feelings of heaviness, warmth, sense-phenomena, phantom limbs, heart-regulation. As the state deepens, a wealth of experience becomes possible, productive picture-worlds, automatisms such as medium-writing, etc. In rare cases performances in such a state reach a fantastic level.

It is essential that the switchover establishes itself slowly at first and not too effectively, but gradually improves with practice. Repetition brings it on more quickly and finally it can be brought on at once by an act of will. It is possible to link the switchover with partial relaxation of the muscles of the neck-shoulder region. As training progresses, the switchover takes place immediately this local relaxation occurs. ‘The well-trained person, therefore, should he want to arrest an emotional state that has unexpectedly arisen, only needs to carry out the above-described sliding and lowering of the shoulder-girdle. This can be done whatever the posture and so inconspicuously that only those who know will notice the postural change.’

Thus the switchover is a technique that can be learned. It takes 6–8 weeks to acquire it in the first place. ‘Usually only after 3–4 months this self-directed switchover is so well learned that a considerable performance becomes possible.’

In India this procedure has been developed for thousands of years to a degree that to us seems almost unbelievable. Schultz has investigated this procedure under the conditions of occidental culture and looked at it purely physiologically, apart from the original contents of philosophy and faith. He secured the facts as a whole but in so doing he robbed the procedure of its philosophical weight. He separated empirical reality from metaphysical reality. Once the content was lost, there only remained a technical method. The effects of this method are limited if we measure them by those achieved

¹ Levy, *Die natürliche Willensbildung* (D) (Leipzig, 1909).

² J. H. Schultz, *Das autogene Training* (Leipzig, 1932).

in India where the exercises are the operation of a life-time and the individual throws his whole existence into them. In psychotherapy the procedure becomes a way of obtaining a period of recreation, refreshment and repose. It enables a certain control over bodily events which, analogous to the control of the muscles, are then, so to speak, appropriated through the vasomotor, cardiac and vegetative systems. The aim is to bring about a regulation of sleep, suspension of pain and a relaxation of the self.

SECTION TWO

ABNORMAL MECHANISMS

Abnormal extra-conscious mechanisms are defined not as a single type but from a number of standpoints:

1. We speak of abnormal phenomena when in their amount, degree and duration these go beyond what is usual. From this standpoint we find temporary transitions occurring everywhere between phenomena, that can be called average, and those that are pathological. Excitement becomes *over-excitement*, inhibition becomes *paralysis*.

2. Associations that have become mechanical habits turn into despotic and *binding ties*, into *fixations*. A normally mobile psychic life becomes immobile. As a result it is directed by complexes, fetichisms and inescapable images and is trapped finally in a cul-de-sac. Here too we find all sorts of transitions from the normal to the manifestly abnormal.

3. Since all psychic life is a continual synthesis of what has been separated, a holding together of what tends to fall apart, final and complete *dissociation* (splitting-off) is something abnormal. Consciousness, the momentary crest of our psychic life, is linked normally with the unconscious in a mutual reciprocity. Nowhere is the latter closed to consciousness, but it can be grasped, acquired and sustained by consciousness at every point. From consciousness itself over the borders of what is unnoticed to what is unconscious there stretches an entirely accessible expanse where everything is potentially linked with consciousness. All that happens and is experienced, even if for the moment it may become almost independent, will presently find its return-link with the personality, be accepted, defined and shaped into the context of the psychic life as it is led in its entirety. *Radical dissociation* (splitting-off) is abnormal in every case and so is its inaccessibility for consciousness, its failure to integrate into the personality and the disruption of continuity with the individual life as a whole. This dissociation (splitting-off) is to be *sharply demarcated* from those divisions of normal life that commonly reunite again into context. Dissociation (splitting-off)—like the crossing of a Rubicon—demarcates anarchy from unified experience. *Interpretation according to the category of dissociation* occurs with numerous modifications: neurotic symptoms, organ-complaints, come to be regarded as phenomena torn away from their meaningful life-source. Independence of apparatus leads, for example, to uninhibited isolation

of the sensory fields. The term dissociation (splitting-off) is given to the inability to remember experiences which remain effective none the less. A lack of relationship in psychic development, the disintegration of integrated wholes, unconnected double-meanings, double-interpretations and similar phenomena in dementia praecox have led to the use of the term dissociation-insanity (schizophrenia). Experiences of a double-self are called dissociation of the self. The continual problem is *what is it* that produces this *tearing apart* and *by what means* can *re-integration* take place and with it the restoration of meaning, definition and proportion.

Dissociation (splitting-off) itself, however, has not been clarified as a concept methodologically or systematically. It is a descriptive concept for something factually experienced as well as a theory for what happens in the particular state of dissociation and it provides the hypothesis for an occurrence which eventuates in this dissociated state. As a basic idea we encounter it everywhere in psychopathological thinking. It certainly does not describe anything uniform but in every case it touches upon modes of extra-conscious mechanism.

4. There is a mechanism that *switches over* the state of consciousness. J. H. Schultz distinguishes the switchover that takes place in hypnosis and his autohypnosis from that which takes place in suggestion. In hypnosis the switchover is usually achieved by means of suggestion but favourable circumstances and appropriate actions can also bring it about automatically. A similar switchover happens daily in the experience of falling asleep; this may partly be due to the will to sleep acting autosuggestively but it can happen without this, simply through tiredness, habit or conditions that induce sleep. Schultz differentiates the switching-over process, the state of consciousness induced by the switch-over and the phenomena and effects possible in this state. All this is really indivisible but these three aspects can be separated out for consideration.

All changes of consciousness and general alterations of a person's state can be considered as switchovers analogous to the switchover into sleep or hypnosis. In abnormal psychogenic reactions, hysterical phenomena, and psychotic states, however different they are in meaning and implication, we always find the same, sudden jolt into an entirely different psychic state which becomes the condition for new abnormal phenomena to appear. The switchover can obviously be of very different kinds, if only we had more exact knowledge and did not have to apply a somewhat crude analogy. A switchover is something specific but we can only grasp this specific element in a crude way, principally by an analogy with normal extra-conscious mechanisms.

Reviewing the various ways in which we have characterised abnormal extra-conscious mechanisms we see that we neither know nor understand any one of them. *Our formulations only represent various ways in which we try to grapple with the puzzle.* We have factual knowledge of the phenomena possible on the basis of these hypothetical mechanisms and to a limited extent we know

what has set these mechanisms in motion. Where these abnormal mechanisms come from remains problematical, even if they are called into action by stimuli in which psychic excitation plays a contributory part. We attribute them to special abnormal dispositions (constitution), to cerebral processes or to other somatic morbid processes. Or we speak of psychic causes in the narrower sense, when the formation of the mechanism derives from some unwonted psychic shock, though even here we have to make the additional hypothesis of some predisposition which would not have manifested itself without that particular trauma. Or we have to suppose that anyone may be brought into the power of abnormal extra-conscious mechanisms by certain situations and experiences, which is a view favoured by some investigators on the basis of individual observations and probably without sufficient ground. In any case there are quite specific mechanisms, such as those effective in schizophrenia, which certainly cannot appear in everybody, and it is likely that there are many others also, such as those in gross hysteria.

Where some understandable experience triggers off the extra-conscious mechanism we think we have understood the transformation as much as the content but we are mistaken. The everyday occurrence of such mechanisms leads to familiarity with them but not to any understanding of them. What is understandably abnormal in extra-conscious mechanisms is not their meaninglessness, which applies to all mechanisms as such, but the extraordinary character of the mechanisms that occur. There are most unusual realisations of meaningful connections, based on abnormal mechanisms for which the meaningful element itself—due to preconditions usually unknown—has become a causal factor.

The switchover into altered consciousness occurs understandably and intentionally through suggestion and autosuggestion. The same thing happens understandably but unintentionally through psychogenic reaction (*Erlebnisreaktion*). It may also occur understandably in illness, poisoning, extreme fatigue, all of which enforce the switchover, whereas suggestion and experience, if they are to operate as causes, call for some kind of 'co-operation', and this remains as the one factor in the causal chain which is psychologically understandable.

§ I. PATHOLOGICAL PSYCHOGENIC REACTIONS

The term 'reaction' has a number of different meanings. We speak of the reaction of the physical organism to the influences and conditions of the external world; of the reaction of an organ, for instance the brain, to events within the organism; of a reaction of the individual psyche to a psychotic disease process and finally of a reaction of the psyche to an experience. In the following we shall deal only with this last type of reaction.

The meaning which certain events have for the psyche, their value as experience, the psychic commotion which accompanies them, all evoke a

reaction which in some measure is 'understandable'. For instance, in the reaction to prison, there are the psychological effects of knowing the significance of what has happened, and the possible consequences; then there is the whole atmosphere of the situation, the loneliness, darkness, cold walls, the hard bed, harsh treatment and the tension and uncertainty as to what will happen. Perhaps there are other factors too, such as lack of nourishment, owing to poor appetite or bad food, and exhaustion through sleeplessness. Such physical effects prepare the ground in part for the specific type of reaction that follows and contribute to the establishment of the whole clinical picture of prison psychosis. The pathological reactive state does not often occur after *one single* experience but after the summation of many effects. Psychic and physical exhaustion were often observed to be the basis in reactive war psychoses, where the onset was sometimes triggered off by a relatively trivial experience following long resistance to severe trauma.

However well we understand the experience, its shattering significance and the content of the reactive state, the *actual translation* into what is pathological remains nevertheless psychologically incomprehensible. Additional extra-conscious mechanisms have to be construed. We explain these by means of special predispositions (*Anlagen*) or a somatic disease process, or we suppose that psychic shock as such may cause a transient alteration in the underlying structures of our normal psychic life. Psychic distress is immediately followed by a host of bodily accompaniments and similarly it can effect an alteration in the psychic mechanisms which in their turn condition the abnormal state of consciousness and the manner in which the meaningful connections are realised (clouding of consciousness, dissociation, delusional ideas, etc.). This alteration in the extra-conscious foundations is a theoretical construct; we have to conceive of it as causally conditioned and analogous in some way with the manifest somatic sequelae of an emotional upset.

(a) Reaction as distinct from phase and thrust

Pathological reactions are to be differentiated in principle as follows:

1. *Pure precipitation of psychosis*—where the content has no meaningful connection with the experience. For instance, a bereavement may precipitate a catatonic illness or a circular depression. The type of psychosis need not correspond to the experience at all. The psychic upset is only the last and possibly quite dispensable provocation upon which an illness breaks out either as a transient phase or as the thrust of some process which would finally have emerged without this provocation, and which now takes its own course following its own independent laws. From this we must differentiate 2. *Reaction proper*—where the content is meaningfully connected with the experience. The reaction would *never* have occurred *without* the experience and throughout its entire course remains dependent on the experience and what is connected with it. The psychosis remains linked to the central experience. Where the psychosis is simply precipitated or rises spontaneously we can observe a primary growth

of the illness which can only be explained in physical terms and is unrelated to the patient's life-history and experiences. It has content as every psychic illness must have, but this is only accidental and carries none of the effective weight of previous experience. Where there are recoverable phases, we find a subsequent tendency to recognise the experience clearly as an illness and to look at it in a detached way as something completely alien. In reactive psychoses we observe either an immediate reaction to some incisive experience or some kind of explosion following a long period of unnoticed growth and meaningfully connected with the life-history and recurrent impressions of every day. When the psychosis is over the patient may be able to assess the psychosis unreservedly as an illness. However, the psychotic contents which have grown out of the life-history tend to have lasting effect on the subsequent life so that the patient, in spite of his intellectually correct attitude, is apt to stay attached to the morbid contents in his emotional and instinctual life.

The concept of pathological reaction has an aspect of *meaningfulness* (experience and content), a *causal* aspect (a change in what is extra-conscious) and a *prognostic* aspect (this change is transient). Even though the immediate translation into an abnormal state is reversible, and particularly when there is rapid recovery after the cessation of traumatic events, after-effects will persist owing to the close link between the experience and the personality, and where there is repetition and summation of the experience will lead finally to a reactive, abnormal development of personality. After every reaction, it is true, there is return to the 'status quo ante' as regards the specific psychic mechanisms and functions, the capacity to perform, etc. But the various contents may continue to exert an influence.

It is only in the obvious borderline case that *reactions proper* need to be radically differentiated from 'thrusts' (Schuben). On the one hand we have psychoses materially conditioned by psychic trauma and showing convincing meaningful connections between the psychotic content and experience (the reactive psychoses proper). On the other hand we have psychoses which are the result of processes. Here the psychotic content has no meaningful connection with the life-history though of course what content there is must be drawn from the former life but its value as experience, as part of the context of the patient's life, is not the decisive reason why it has merged into the psychotic content (genuine phases or thrusts).

(b) *The three different ways in which reactions become meaningful*

We understand the *extent of a trauma* to be adequate cause for breakdown. We understand a *meaning*, which the reactive psychosis subserves. We understand the *contents* of reactive psychosis in particular.

1. Psychic experiences as we have seen are always accompanied by bodily changes. They set in motion extra-conscious mechanisms which indeed we cannot describe in detail but which are a necessary theoretical postulate that provides the ground for abnormal reactions with a meaningful content. In

some cases, however, psychic traumata will lead to somatic or psychic disturbances which have no meaningful connection with the content of the experience. The experience is itself the 'psychic source' for an event entirely alien to it. Extreme psychic excitements give rise directly to drastic effects. How this comes about usually remains hypothetical. But generally speaking we know that affects influence the circulation, that they bring about somatic sequelae by acting via the vegetative sympathetic/parasympathetic nervous system and the endocrine glands, and that the somatic changes in their turn have an effect on the brain and the psyche. It is possible that affects bring about seizures in epileptic patients via some such chain of somatic events. Through the media of circulatory changes and rise in blood pressure, an affect may possibly bring about the bursting of blood-vessels in the brain and strokes. The following effects of psychic events are particularly worth noting:

(aa) Abnormal psychic states are *cured* by psychic shock. The best-known example is the way in which even heavily intoxicated persons are suddenly sobered up by some important situation which makes severe demands on them. It is surprising how the undoubted physical effect of alcohol can suddenly be annulled in these cases.

Apart from this group and belonging to the field of meaningful connections are the cases where the contents of abnormal personalities are changed by the impress of psychic experiences. Morbid jealousy in an abnormal personality ceases as soon as some serious illness absorbs the attention, or neurotic complaints fade away as soon as the individual has to exert himself strongly.

(bb) Severe psychic traumata (catastrophes, earthquakes, etc.) may *change the entire psycho-physical constitution*. The signs and manifestations of this sometimes lack all meaningful connection with the experience itself. There appear changes in the circulatory system, anxiety states, sleep-disturbances, reduction in performance and numerous psychic and neurasthenic phenomena which tenaciously remain over long periods.

(cc) Very severe psychic excitements seem to produce *effects similar to those of head-injuries*. Cases have been observed which after delirium ended fatally and others also which showed a Korsakow syndrome (Stierlin). It is still uncertain¹ to what extent we are dealing here with a disorder which can only be due to an existing arteriosclerosis and therefore must be regarded as organic and to what extent a psychic experience can bring about such organic sequelae where the blood vessels are healthy.

(dd) It is possible—though rare—for some *pleasant experience* to produce a *somatic illness* by upsetting the equilibrium. Psychasthenic patients for instance often tell of an increase in their discomforts after delightful experiences and in that context will speak of some 'set-back'.

2. We understand a *meaning in the reactive psychosis*: The abnormal psychic state as a whole serves a certain purpose for the patient and the individual features of the illness are all more or less adapted to this end. The patient

¹ See Bonhoeffer: To what extent are there psychogenic illnesses and morbid processes other than hysteria? *Arch Z. Psychiatr.*, vol. 68, p. 371. Bonhoeffer does not differentiate between meaningful connections and causal effects.

wants to be irresponsible and develops a prison-psychosis. He wants to get compensation and develops a 'compensation-neurosis'. He wants to be cared for in some institution and develops the varied complaints of the haunter of hospitals. Thus patients strive instinctively for the gratification of their wishes and these reach fulfilment in the psychosis or in the neurosis (purposive psychosis, purposive neurosis). In rare cases the illness can be laid on more or less consciously. In the first place the illness is fostered by an initial, possibly conscious simulation. Subsequently the patient finds himself confronted by it without being able to help himself. Or a psycho-neurotic affective upset arises extraneously in the first place and only becomes hysteria in due course, inasmuch as the illness serves a purpose (release from the Services, compensation, etc.).

Kohnstamm gave us the phrase '*failure in the duty to keep well*' (Gesundheitgewissen). The healthy individual who naturally wishes to be and keep healthy will gloss over many complaints and bodily discomforts. A number of immediate phenomena are thus made to disappear because he does not pay any attention to them. Even when somatic illness impairs performance and calls for sensible treatment, healthy people will inwardly detach themselves from it.¹ It is not easy to determine anyone's limits of endurance (it is perhaps easier to decide where continuing effects may do harm, may bring about a worsening of the illness or be the cause of death). In extreme situations, where an individual is utterly exhausted, he is overcome by feelings of real powerlessness, the whole vital tone falls to indifference and the simple statement that one can do no more rings true and credible. If nevertheless the question is pressed, whether one did not want to do more, and was there not a wish to give in to the existing weakness and helplessness, there is often no possible answer. But with hysterical and hypochondriacal reactions in the form of physical illness, the absence of any sense of obligation to keep healthy is usually only too obvious.

3. We understand the slide into psychosis or into physical illness from *the contents*. It is like a *flight into illness* in order to escape from reality and relieve oneself of responsibility in particular. What needs to be endured inwardly, worked through or integrated is replaced by a physical illness for which one appears to have no responsibility, or by a wish-fulfilment in psychosis, an actuality that not only obstructs but masks the empirical reality. The flight into psychosis allows one to experience as apparently real what reality itself refuses, though usually not without ambiguity. The psychosis manifests all the individual's fears and needs as well as his hopes and wishes in a motley procession of delusion-like ideas and hallucinations.

¹ Kant (writing on the power of the mind to be master of its own morbid feelings through the exercise of sheer determination) says: 'a rational person will ask himself when he is worried whether there is any real ground for it. If he does not find any, or even if there is one and he cannot do anything about it, he will tell himself this and return to his daily routine. That is, he leaves his apprehension where he found it as if it were no concern of his and turns his attention to what he has to do.'

There are some unusual cases which are reactions in certain extreme situations created by the individual's own actions (infanticide, murder). A development changes the person's entire life and leads to delusion-like *conversion experiences in the course of an acute psychosis*. The contents are then tenaciously maintained as a basis for the individual's whole life.¹ There was a patient who was a farmer's daughter, and who up to then had seemed robust and psychologically healthy. She was pregnant by a Russian prisoner of war and killed the child immediately after birth. Another case was that of a borderline defective who committed murder through the influence of another person. Weil summarises as follows: In both cases—the infanticide and the murder—the psychoses started as a matter of fact after confinement in prison. Both wrestled in prayer and this led the child-murderess to the certainty that God wanted it like that and the murderer further than that to a false memory, that he had once offered himself to God as a sacrifice so that God would use him to show that bad deeds too came from God. Both had visions from the same sphere. The one found her 'peace of soul' and the other his 'peace of heart'. Both accepted the reality of the phenomena and their significance, that is they were tokens of redemption and grace. Through the psychosis both were absolved from remorse. She became 'God's child' and he became 'the preferred child of God'. Both were converted and had feelings of elation. Neither persons were alike in constitution, personality or character, so that their analogous psychoses of wish-fulfilment were all the more remarkable.

These cases differ from schizophrenia (the early stages of which are often marked by baseless conversion experiences) through the absence of primary symptoms, the centering of the psychosis on delusional content which was almost wholly meaningful, the purposiveness of the delusional content as a unique meaningful revolution of the individual's essential attitude and the absence of any chaotic, haphazard or non-sensical symptoms.

It is noteworthy how in such a context even feeble-minded persons may have meaningful and magnificent experiences. Weil's case described his ecstasy on Xmas morning, after his wrestle in prayer with the desperate question of his misdeeds: 'As I looked at the wall it grew clear as glass. I seemed highin the air like the sun . . . then it got rather dark like night, then red . . . I saw a frightening, great fire coming from far away, closer and closer . . . as if the world and the earth was on fire . . . I saw millions of people on the bare fields, no houses, or trees, nothing but horribly disfigured faces, most of them praying in fear, turning their eyes up and lifting their hands as if they still hoped they would be saved . . . there was some red light from the great fire and I saw the devil chasing about in it . . . then it got dark but not for long . . . then for a minute I saw the mighty world of heaven above this one . . . I can't really say how lovely and wonderful everything was . . . I saw the souls so wonderful and beautiful . . . everything suddenly went . . . and it got pitch dark . . . and the thought came back that I was in prison . . .'

It is really doubtful whether we can conceive of such cases as being healthy and not hysterical. There must be some quite specific predisposition or gift for such a transformation (if indeed these cases did not turn out in the end to be schizophrenic).

¹ Villinger, 'Do psychogenic, not hysterical, psychoses spring up on normal psychological ground?', *Z. Neur.*, vol. 57. Weil, 'Ein Bekehrungserlebnis als Inhalt der Haftpsychose eines oligophrenen Mörders', *Z. Neur.*, vol. 140 (1932), p. 152.

Let us now summarise. The psychosis has a meaning, either as a whole or in its individual details. It serves as a defence, a refuge, an escape, as a wish-fulfilment. It springs from a conflict with reality which has become intolerable. But we should not over-rate the significance of such understanding. In the first place the actual mechanism of the transformation can never be understood. In the second place, there are almost always more abnormal phenomena present than could ever be accommodated wholly within a single, meaningful context; and in the third place even where traumatic experience plays its part as a causal factor, it is hard to assess the extent of its causal significance.

(c) Classification of reactive states

For purposes of review, we classify reactive states as follows:

1. According to what precipitates the reaction. 2. According to the particular psychic structure of the reactive state. 3. According to the type of psychic constitution that determines the reactivity.

1. According to the precipitating factors: First we distinguish the *prison-psychoses* which have been investigated very thoroughly¹ and on which the whole teaching on the matter of reactive psychoses has been built. Next there are the *compensation-neuroses* after accidents,² the psychoses due to *earthquakes* and catastrophes,³ the *reactions of homesickness*,⁴ battle-psychoses,⁵ the *psychoses of isolation*, whether due to linguistic barriers or deafness.⁶ Vischer⁷ has described reactive states which occur when there is isolation along with a few comrades as in the prisoner-of-war camps:

The situation: loss of freedom for an indefinite period. Communal life with a

¹ Siefert, *Über die Geistesstörungen der Strafhaft* (Halle, 1907). Wilmanns, *Über Gefängnis-psychosen* (Halle, 1908). Homburger, *Lebensschicksale geisteskranker Strafgefangener* (Berlin, 1912). Nitsche u. Wilmanns, Referat in *Z. Neur.*, Ref. u. Erg. 3 (1911). Straußler, *Z. Neur.*, vol. 18 (1913), p. 547. 'Über den Begnadigungswahn der lebenslänglich Verurteilten.' Rüdin, *Über die klinischen Formen der Seelenstörungen bei zu lebenslanglichem Zuchthaus Verurteilten* (München, 1910).

² Wetzel, 'Ein Beitrag zu den Problemen der Unfallneurose', *Arch. Sozialwiss.*, vol. 37 (1913), p. 535.

³ Stierlin, *Über die medizinischen Folgenzustände der Katastrophe von Courrières* (Berlin, 1909). Cp. *Dtsch. med. Wschr.*, vol. 2 (1911). Zanger, 'Erfahrungen bei einer Zelluloid-Katastrophe', *Mschr. Psychiatr.*, vol. 40, p. 196. Die Wirkung der Fliegerangriffe auf die Bevölkerung in Freiburg.' Hoche, 'Beobachtungen bei Fliegerangriffen', *Med. Klin.* vol. 2 (1917). Air attack did not cause a single psychiatric admission. But there were individuals who got into a state of sleeplessness and perpetual fear which only stopped when the weather was bad and air attack impossible. There was also over-sensitivity to acoustic stimuli. Those able to leave town did so. The overwhelming majority got accustomed and some neurotics got into a state of pleasant excitement during attacks. Victims of direct explosion fell into the type of apathy described by Bälz.

⁴ Author's dissertation on Heimweh u. Verbrechen, *Arch. Kriminalanthrop.*, vol. 35.

⁵ Wetzel, 'Über Shockpsychosen', *Z. Neur.*, vol. 65, p. 288. Kleist, 'Schreckpsychosen', *Allg. Z. Psychiatr.*, vol. 74. Bonhoeffer, 'Zur Frage der Schreckpsychosen', *Mschr. Psychiatr.*, vol. 46 (1919), p. 143. *Handbuch der ärztlichen Erfahrungen im Weltkriege* (1914-18), pub. by O. v. Schjerning, vol. 4. Bonhoeffer, *Über die Bedeutung der Kriegserfahrungen für die allgemeine Psychopathologie*. Gaupp, *Schreckneurosen u. Neurasthenie*.

⁶ Allers, 'Über psychogene Störungen in sprachfremder Umgebung', *Z. Neur.*, vol. 60.

⁷ Vischer, *Die Stacheldrahtkrankheit* (Zürich. Rascher & Co., 1918). Cp. *Zur Psychologie der Übergangszeit* (Basel, 1919).

limited number of comrades, always the same, no privacy. Cropping up of violent antipathies. Increased irritability. People cannot bear the least contradiction. Craving to discuss things. Petty in one's relationships. Each interested only in himself. Foul language. No concentration. Restlessness and irregular habits. Complaints about excessive fatigue (e.g. when reading). Frequent jumping up, inability to sit still. Loss of memory. Greyness of mood. Distrust. Frequent sexual impotence. Few remain free of such a state if they have been prisoners for longer than six months. There are many subtle variations of the symptoms.

Vischer: recalls Dostoevski—*Memoirs from the House of the Dead*. He also recalls the experiences of a few people living isolated from the world for a long time, white people living in the Tropics (jungle-madness); ships' crews (particularly in the old sailing vessels), monastic life (*Siemer, H., Meine fünf Klosterjahre*, Hamburg, 1913), polar exploration (Nansen's description, Payer, Ross).

2. *According to the type of psychic structure of the reactive states*: A whole series of types could be characterised. Clear demarcation would only be possible if we could distinguish the different extra-conscious mechanisms and so recognise the specific hysterical or paranoid reactions, the reactions of altered consciousness, etc. At present this is impossible. We have to be satisfied with enumerating a number of types:

(a) All experiences, particularly the less important ones, are reacted to with feelings that are qualitatively understandable but are excessively *strong, linger on abnormally, and quickly create fatigue and paralysis* (psychasthenic reaction). States of *reactive depression* are very common, but reactive manias are extremely rare. Sadness tends to grow naturally, cheerfulness may exceed all bounds and become unmanageable but it is volatile and dissipates itself. Abnormality, apart from lying in the strength of the reaction, may also lie in the *intensity of the after-effects*. It is a common experience for our mood in the morning to be influenced by the dreams of the preceding night even if traces are slight and only susceptible to introspection. Some people are greatly affected by their dreams which may dominate their whole day. Similarly the duration of after-effects may be abnormally long, a melancholy feeling is slow to creep away; all the affects run a long-drawn-out and curving course.

(b) There may be an *explosion* in the form of fits, tantrums, rages, disjointed movements, blind acts of violence, threats and abuse. There is a working-up of the self into a state of narrowed consciousness (prison-outbreaks, frenzies, short-circuit reactions, are some of the terms used). Kretschmer calls this whole group 'primitive reactions'. They quickly rise to full height and as quickly disappear again.

(c) Strong affects, anger, despair, fright, bring with them a certain *clouding of consciousness*, even within the normal limits of intensity. Memory *afterwards* is incomplete. In the abnormal situation there are twilight states with disorientation, senseless acts and false perceptions, also theatrical repetitions of certain acts which are rooted in the original experience rather than in the present reality. We call such states hysterical. In the state of clouded consciousness the original experience is usually not in mind and it can be completely repressed during the brief psychosis. Afterwards it can be completely forgotten. Wetzel observed shock-psychosis in the Front Line, in cases where the patients had repressed the death of their comrades who had been mortally wounded. They showed theatrical behaviour and woke up suddenly when

'the return from theatrical gesturing to the behaviour of the disciplined soldier was extremely impressive'. Such cases contradict the view that such 'theatrical, hysterical' behaviour must always be to a great extent rooted in the total personality.—This clouding of consciousness, however, does also occur in individuals who remain aware of the original event for a long time. They even realise that they are ill and their subsequent memory is largely unimpaired.¹

(d) If a dreamy state dominates the picture, and there is a kind of behaviour which strikes one as contrived and childish (puerilism), a talking past the point (e.g. how many legs has the cow—five) or, in a word, a state of 'pseudodementia' and if, in addition, one finds physical signs of hysteria (analgesia, etc.) then one is dealing with the *Ganser syndrome*.² If while consciousness is still clouded, with disorientation, there is theatrical repetition of the content of the precipitating experience (sexual assault, accident, etc.) and there are 'attitudes passionnelles', emotional expressions and gestures, we term the state a *hysterical delirium*. *Stuporous* pictures may also be observed (stupor of fright), fantastic delusions while orientation is clear as to place and time. During the course of long imprisonment *elaborate ideas of persecution* may grow out of normal mistrust and understandable suspicion, and querulant tendencies may develop from the notion that the whole conviction was unjust. None of these states can be sharply differentiated but we find them combined with one another in the most varied ways.

(e) *Reactions with hallucinations and delusions*. These have been observed in the prison-psychoses and arise from the persisting influences of the unpleasant situation. Patients are anxious and tense and do not feel in control of their own thoughts. They want to get some result, see something happening, take up an attitude. They long for something unattainable. They hear suspicious noises. People have malicious views about them. They hear suspicious footsteps along the corridor and suddenly a voice says: 'Today we shall finish him off'. The voices multiply and one of them calls the patient by name. Now he sees figures as well, he is in a dream-like daze, tears at his mattress in fear, attempts suicide. States such as these are fairly common. The contents are later easily elaborated into delusion-like ideas and the patient is convinced he is really being persecuted and is to be killed. Kurt Schneider³ has reported some rare and interesting cases of *acute paranoid reactions*.

3. Finally we can classify reactive states according to the type of psychic constitution which determines the reaction. In wartime we can sometimes observe reactive psychotic states. They are of brief duration and occur in personalities who show nothing psychopathic either before or after the event.⁴ The idea might well be held that everyone has his 'limits' at which point he falls ill. Yet even if no predisposition can be demonstrated objectively in such cases, and even if robust personalities are found who fall ill on rare occasions though their psychic health appears particularly good, we still have to retain the view that in such cases there is a specific 'Anlage', nevertheless, since many

¹ Straußler, *Z. Neur.*, vol. 16 (1913), p. 441.

² Ganser, *Arch. Psychiatr. (D)*, vol. 30 (1898), p. 633. Hey, *Das Gancersche Syndrom* (Berlin, 1904). Raecke, *Allg. Z. Psychiatr.*, vol. 58, p. 115.

³ K. Schneider, 'Über primitiven Beziehungswahn', *Z. Neur.*, vol. 127 (1930), p. 725. Knigge, *Z. Neur.*, vol. 153 (1935), p. 622.

⁴ Cp. Wetzel, 'Über Schockpsychosen', *Z. Neur.*, vol. 65, p. 288.

people can be physically wrecked, suffer from cerebral disease and utter exhaustion and still show no reactive psychotic state. In most cases, however, the preconditioning factor is clearly visible in the constitution as a whole, quite apart from the reaction. This constitutional factor is either innate and persistent (personality disorder—psychopathy) or it fluctuates (phases) or it is acquired and transient (exhaustion). So it is with the observed characteristics of increased reactivity (excitability, irascibility) and the hysterical, psychasthenic reactions. But these may all appear in certain people and at certain times that to the superficial observer seem quite unremarkable. We see the same people who at other times appear quite normal display excessive affectivity and an inability to absorb experience on the occasion of some relatively trivial provocation. The unfavourable times may be conditioned by pure endogenous phases or by psychic or physical exhaustion, head injury or long-lasting emotional stress, insomnia etc.

Organic disease processes may, like the constitution, be the basis for abnormal reactions. In *schizophrenics* we find reactive psychoses based on the advancing disease process. These differ from the thrusts of the process itself because the patient returns approximately to his former state, whereas the thrusts of the process bring about a lasting change even though the florid manifestations may subside.¹ Content in the thrust is general and derived from any past event; content in reactions is well defined and derived from single or several experiences from which the psychosis emerges as a continuum. Thrusts occur spontaneously, reactions are linked temporally with experience. Obviously there are reactive aspects in all illnesses in so far as there is still some connectedness in the psychic life, but so far as the course of the illness is concerned they are almost always inessential.²

In conclusion let us once more summarise the factors common to all *genuine reactions*: There is a *precipitating factor*, which stands in a close time-relationship with the reactive state and has to be one which we can accept as adequate. There is a meaningful connection between the *contents* of the experience and those of the abnormal reaction. As we are concerned with a reaction to an experience, any abnormality will lapse with the course of time. In particular, the abnormal reaction comes to an end when the primary cause for the reaction is removed (regaining one's freedom, the return of the homesick girl to her people). Reactive abnormalities are therefore a complete contrast to all morbid processes which appear spontaneously.

However, causal and meaningful connections are so interwoven and the imposition of the one on the other so complex that in the individual case we

¹ Bleuler first formulated the concept of a *reactive psychosis in schizophrenia* (*Schizophrenie*, 1911). On the problem of reactive states in schizophrenics, see my paper, *Z. Neur.*, vol. 14. Also Bornstein, *Z. Neur.*, vol. 36, p. 86. Van der Torren, *Z. Neur.*, vol. 39, p. 364. K. Schneider, *Z. Neur.*, vol. 50 (1919), p. 49. Schizophrenic reactions without process (schizoid reactions) affirmed by Popper, *Z. Neur.*, vol. 62, p. 194. Kahn, *Z. Neur.*, vol. 66, p. 273. Critique of the above views: Mayer-Gross, *Z. Neur.*, vol. 76, p. 584.

² Schilder, *Z. Neur.*, vol. 74, p. 1, shows this in certain cases of delusions of grandeur in G.P.I.

cannot draw any sharp distinction between reaction proper and phase or thrust. A lack of meaningful content can be misleading in cases of psychogenic reaction, and the wealth of such content be equally so where there are disease processes. On the one hand we may find abnormal psychic states actually caused by psychic trauma (e.g. catastrophe psychoses, primitive reactions with raving and fits), where there seem to be few meaningful connections between content and cause and, on the other hand, we find extra-conscious processes effecting changes in psychic constitution where the individual phase or thrust exhibits an abundance of meaningful connections with the person's life-history.

(d) *The curative effect of emotional trauma*

It is an interesting fact that experiences may precipitate a psychosis but can also have a favourable—although not a curative—effect on a psychosis already in existence. It has been observed, relatively frequently, that paranoid patients suffering from a schizophrenic process lose all their symptoms on being admitted to hospital (symptoms such as hallucinations, persecutory ideas, etc.).¹ It has also been reported that patients in states presenting a marked catatonic picture have been aroused by strong affect as if 'from a deep sleep' and have progressed to recovery from the acute state. Bertschinger,² for example, reports the following case:

A young woman who had behaved immodestly for weeks and who enjoyed showing herself in the nude, was surprised in a very indecent situation by someone in the institution whom she had known before. She blushed and was embarrassed and for the first time in weeks was able to go to bed. From then on she remained quiet and could soon be discharged.

There are many subjective reports by patients that this or that experience exerted a particularly favourable influence on them as they were recovering from acute psychoses. A striking objective improvement can also be observed; a patient, for instance, who has been stuporous for long periods, becomes accessible when relatives visit (if they do so infrequently). But after a few hours the old state has reasserted itself and the course of the illness goes on unaffected.

We may wonder to what extent the heroic treatments of a hundred years ago and the modern therapies of insulin and cardiazol shock effect the change which we call 'cure' through providing a traumatic death-experience, through a repeated reduction of the patient to extremities, and to what extent there are somatic causal factors at work in these endeavours.

¹ Riklin, 'Über Versetzungsbesserungen', *Psychiatr.-neur. Wschr.* (1905).

² Bertschinger, 'Heilungsvorgänge bei Schizophrenen', *Allg. Z. Psychiatr.*, vol. 68 (1911), p. 209. Cp. Oberholzer, *Z. Neur.*, vol. 22 (1914), p. 113.

§ 2. ABNORMAL AFTER-EFFECTS OF PREVIOUS EXPERIENCE

(a) *Abnormal habits*

We will give a few striking manifestations of habit: once someone with a personality-disorder (a psychopath) gets caught up in a situation while he is in a certain mood, he finds he can no longer abandon it. For instance, an unpleasant word at the start of a meeting spoils the whole evening. A querulant attitude towards the hospital where he is cannot be laid aside. In another hospital, where conditions may be worse, he has no complaints.

Criminal acts tend to be repeated. There are some striking examples offered by women poisoners (Marquise de Brinvilliers, Margarethe Zwanziger, Gesche Margarethe Gottfried and others) who did not seem to consider their murders anything out of the ordinary. There was no particular purpose but they murdered out of pure craving for power and finally simply for pleasure. Feuerbach (*Merkwürdige Kriminalfälle*, Bd. I, p. 51) describes a case: 'Making poisons and administering them rapidly became an ordinary enough business for her, whether done in joke or in earnest. Finally it became something which she pursued with passion not for its consequences but for its own sake . . . poison appeared as her last, most faithful friend. She felt drawn to it irresistibly and could not abandon it. It became her constant companion, and when caught by the police she had poison in her handbag . . . when the arsenic found on her was shown to her after many months in prison, she appeared to tremble with joy, her eyes shone entranced as she stared at the white powder. However, she always talked of her deeds as mere "minor offences" . . . there is nothing remarkable about what we have become accustomed to.'

Abnormal movements and abnormal expression will linger on some time after acute psychotic states as a matter of habit, though there is no longer any actual cause for them to do so.

Once a strong normal or abnormal reaction has been experienced after some trauma, this produces an effect which varies in degree according to the individual. The same reaction returns with the same strength after lesser stimuli that lie in the same direction as the original experience, or it recurs after stimuli which are merely reminiscent of it and finally after all kinds of emotionally toned events, where the connection with the original experience can only be understood with difficulty or not at all. Someone who has experienced lightning at close quarters is put into a state of extreme panic by every thunderstorm. Someone who has seen a beast slaughtered may never be able to eat meat again (not for any theoretical reason but simply because of the inner resistance). Hysterics develop their first morbid symptoms after severe trauma. At this stage the contents of the symptoms are understandable in terms of the experience (paralysis of an arm, aphonia). But later the same symptoms are brought on again by other—sometimes quite trivial—experiences. They have become habitual, abnormal types of reaction. The tendency to form insurmountable habits is universal and with personality disorders this is stronger than in normal circumstances. There is every gradation from habits which

could in certain circumstances be dealt with as 'bad habits' to unalterable acquired forms of reaction. In the case of sexual perversions, it is well known that these spring from chance events, particularly those of childhood, and may then continue to conduct themselves like primary instincts.¹

A case of Gebssattel's may serve as an example of the after-effects of experience (*Gegenwartsprobleme der psychiatrisch-neurologischen Forschung*, p.60, Stuttgart, 1939). —A 40-year-old man was flung against the roof during a car accident. For a moment things went black and for a second he lost consciousness. Shortly after that he went to work in his office. Subsequently, among other symptoms, he could not go out in the dark without an anxiety attack. He could not look out of the window at night nor enter a dark room from a lit corridor. He always sat with his back to the window and entered a room backwards until he could switch on the light (cathartic hypnosis removed the symptom). It turned out that darkness recalled the moment of the accident—blackness before the eyes—along with the fear of the black door of death.

In *schizophrenic psychic life* we meet with *habits* which in an excessive form dominate the whole psychic life. These are termed *stereotypies*.

Every kind of event that can be possibly linked with the psyche—from the simplest of movements to the most complex actions, chains of thought and experiences—may be repeated perhaps thousands of times in such a monotonously regular way that anyone would be forced to compare such an individual with an automaton. Patients walk round the garden in exactly the same circle, take up one and the same place, make the same sequence of arbitrary movements, lie for weeks in bed in the same position, always have the same mask-like facial expression (stereotypes of movement and posture). They will repeat the same words and sentences, the same lines and shapes when they draw. Their thoughts move in the same circle. For instance, a patient wrote the same letter for years to the Paris Police, Petersburg, which she often handed over to the Doctor in batches without ever bothering about what happened to them afterwards. One often observes in old cases turns of phrase recurring over the years as the only verbal utterance. A patient greeted everyone with 'For, for or against, against'. He was satisfied with the answer 'For, for' and never said anything else.

(b) *The effects of complexes*

These become abnormal when they get out of the individual's control split-off (dissociated) and operate from the unconscious.

i. A patient could not return to the place where he had become bankrupt without getting into a severe depressive-paranoid state and showing symptoms

¹ In regard to sexual perversions (homosexuality in particular) views are opposed. There are those who explain them as inborn instinctual tendencies, the content of which is determined from the start and those who regard them as accidents of the life-history, a fixation of the first experience of waking sexuality directed to inappropriate objects and so acquired. As usual with such opposite opinions, both parties can be right, depending on the case. Cp. Stier, 'Zur Aetiologie des konträren Sexualgefühls', *Msch. Psychiatr.*, vol. 32 (1912). Also Naecke, *Z. Neur.*, vol. 15 (1913), p. 537. Some workers think that in many cases homosexuality is due to a predetermined Anlage of the sexual feelings, while the perversions (e.g. fetishism, exhibitionism) are acquired through experience and rest on sexual fixations that can be partly reversed.

of a neurasthenic complex. When facing a situation where something terrifying has once been experienced, one undergoes an access of fear; for instance, after a railway accident, there may be a fear of travelling in trains, and after an air attack, or earthquake, the same thing happens. At the slightest sign that such a situation is imminent, or indeed when there is the very smallest resemblance, anxiety will appear.

Further, in cases where the experience seems to be a source of complex-effects, usually these have understandable roots reaching beyond this one experience into the past. An experience which in itself is not so significant—and inadequate for understanding—may become the source of a neurotic state, because the ground was already prepared by previous experience. For instance, the individual with erotic problems is much more hurt by upsets in other fields than someone whose erotic life is happy and whom the same event may leave quite untouched. Lastly, the roots of abnormal psychic states and symptoms ramify into the whole past history, and if one is patient one can tease out a whole nexus of meaningful connections, the threads of which all happen to cross at this one point. Freud brought this situation to light with his concept of 'over-determination'.

2. In all the cases we have mentioned so far the complex in question can become conscious, though hitherto it has been disregarded. With the help of some self-criticism, the individual can make himself aware of it. But the complex becomes the source of certain morbid bodily and psychic symptoms, which can be traced back to an experience it is true, but while the morbid state is in being, the experience is forgotten, truly unconscious and not something that is merely disregarded: *split-off (dissociated)* complexes or repressed complexes (e.g. some prison psychoses, where the patient is no longer conscious of his crime but when an attempt is made to evoke the memory of what he has done, develops florid symptoms). In order to comprehend these phenomena we need the theoretical concept of dissociation (splitting-off) of psychic events.

(c) Compensation

Inner defects, defects in experience, psychic losses take effect through *compensation*, a utilisation, as it were, of the total possibilities of the person concerned.

The analogy is drawn from physiology, in particular from neurophysiology, where the direct morbid phenomena are differentiated from the compensatory phenomena.¹ The living organism usually reacts to all disturbances and destructions with alterations in function which serve the continuance of life under the changed conditions. When such events take place, we speak of substitute phenomena, of self-regulation. These matters have been studied in detail in the case of neurological phenomena which have only secondary interest for psychopathology.

Ewald's experiment is most striking. Disturbances in posture and movement

¹ Anton, 'Über den Wiederersatz der Funktion bei Erkrankungen des Gehirns', *Msch. Psychiatr.*, vol. 19, p. 1.

appear after extirpation of one labyrinth in a dog. Within a week the disturbances disappear. If the other labyrinth is then extirpated, disturbances appear once more, only more severely. After some months, everything is again all right. One then begins to ablate the leg-area in the cortex. The usual disturbances disappear after some weeks. If then the other leg-area is ablated, all the other previous symptoms reappear floridly and do not disappear. If the eyes are occluded by a bandage, the few remaining capacities for movement disappear completely. Here we see how the second labyrinth, the cortical areas for movement and posture and the visual sensations which subserve stance and movement all take over from each other until every possibility for compensation is exhausted.

Good compensation often occurs in organic cerebral diseases. For instance, after hemiplegia and aphasia. But that this is only a compensation and that the defects remain latent is proven by the immediate, severe disturbances created when big demands are made or when there are strong affects, and by the rapid fatigue and slowing down of function.

When there is restitution of disturbed function, there is either a kind of new creation, in that areas which up to then have been resting now develop the relevant function (in the lower animals there can be a morphologically recognisable regeneration), or there is compensation, in that other functions which before had been only ancillary now take over all the work.

Comparable with this are the psychic compensations that arise when whole sense areas are missing. Helen Keller in spite of her total blindness and deafness was able to acquire the culture of a modern individual by using the sense material of touch alone. Perhaps some contrast-phenomena also belong to the field of psychic compensation (colour-brightness in the visual sphere; and, in the sphere of affects, incomprehensible good spirits following deep pain, etc.).

However, when we come to 'meaningful' psychic connections we are dealing with something quite different. 'There is such a thing as a neurotic cowardice which is really deep-rooted self-defence. Where the individual should be mastering his anger, he shows lassitude and apathy. When compassion threatens to upset him, he works himself into a blasé and detached attitude. He avoids all thought-complexes that are affectively toned, he evades the matter in hand, the thing that is important, and deflects himself to what is peripheral' (Anton).

We can understand the psychological development of these connections, which indeed are self-evident, but if we conceive them as 'compensation' for some 'weakness' this can only be in a metaphorical sense. Such connections do not have much in common with the compensations we have been recounting above. It is, moreover, doubtful whether they can be said to be at all purposeful in the biological sense. There is no replacement of this or that missing function but there is an effort to bring about a subjective reduction of displeasure which biologically may even be harmful.

(d) Disintegrating and integrating tendencies

Experience has constructive as well as destructive effects. If we look at life

and the psyche in a vague and general way, everything that happens may be seen as a 'dying and becoming'. Life is a constant re-emergence from dying, that is from dissolution, a physical dissolution into mere chemical-physical processes, a psychic dissolution into mere mechanical-automatic events. Psyche and mind are the constant holding-together of opposites and polarities into which at every moment they tend to fall apart. If we call these integrating tendencies, plasticity, then disintegration may be seen as an increasing rigidity. Life may thus be measured by the level of plasticity, and a process of recovery become a progress towards plasticity.

This vague, general view of life can be analysed further: from the *biological aspect* life is a constant integration of the body in its environment. From the *aspect of the mind*, life is a synthesis of all the facts of mental experience through the dialectical process of negation, preservation and integration. From the *existential aspect* it is the discovery of the ultimate origins of one's own being.

In no one case can we comprehend these events in their entirety and so control them. Everything rests on the unconscious which at the decisive moment creates something fresh whereby disintegration is overcome. Failure in this creative effort of the living whole is death itself and all its preparatory stages. Our knowledge and practice can advance only so far as those limits where we encounter the decisive act of the living event in its entirety. As an object of knowledge, we only circle round it, and in our therapeutics we only deal with it through the use of stimulus, set task and persuasive appeal. It is the act of life itself, the act of creating, the act of being oneself. We are not in control of these acts but they are the prime source of every potentiality. Our knowledge and our practice deriving from this knowledge may be capable of psychoanalysis but not of psychosynthesis. The latter always has to emerge from the unconscious element in life, in mind and in Existence itself. We can prepare the way, foster, inhibit and endanger it but we cannot achieve it through any kind of arrangement, power of persuasion or goodness of intent. There always remains the all-embracing precondition which we call the vitality of life, idea, creativity, the initiative of Existence itself. We can call it Grace, or the Gift of oneself, but none of these names say anything of what it properly is.

There is above all no finality. Dying, growing rigid, failing to appear, are but instances of Life. Life in its entirety can never be attained by humanity. Man travels along the path of ever-recurring death and renewal until his finite existence in time is extinguished in death.

Even in *severe pathological states*, as long as the person remains alive, we find *tendencies towards some restitution of a whole*. These may range from compensations for particular defects to the recreation of personality in schizophrenics. In the case of demented patients, integrated worlds come about somehow. There is always something that moves into a new context, into direction and control under new conditions, that arise perhaps from tendencies that have themselves become abnormal. Certain efforts at order oppose the distractions, the derailments, the disintegration and the

tendency to split off. But all these generalisations only give broad expression to the over-all aspect, which only becomes of scientific relevance when there can be empirical demonstration in some definite context.

§ 3. ABNORMAL DREAMS

(a) Dreams during physical illness

Sometimes the beginning of a physical illness will show itself in an individual's dreams or when he is dozing. Abnormal body-sensations and general feelings of abnormality, as yet unnoticed in the waking state, now penetrate into consciousness. In febrile illnesses there are troubling dreams with compulsion-like phenomena as if one were spinning round. Then after various haemorrhages there are vivid dreams that leave strong impressions behind.

(b) Abnormal psychotic dreams

Epileptics, just before a seizure, often have frightening and troubling dreams. After the seizure these are pleasant and easy, and on the night of the seizure there are never any dreams.¹ Similarly with catatonic illness of brief duration. The brief periods of sleep during the thrust are usually dreamless. (On the other hand hysterics always dream during their attacks.)²

In acute psychoses, particularly in early schizophrenia, the mode of dreaming often alters.

Kandinsky gives the following description: 'During the sense-delirium my dreams (so far as visual images and the feeling of moving in space were concerned) were *unusually vivid*. It was *hallucinating during sleep*. In an hallucinating patient the waking and sleeping states generally are not so sharply differentiated. In the dream the images are so vivid that the patient is, as it were, awake while he sleeps, and in the waking state the hallucinations are so strange and various that we might say the patient is dreaming while he is awake. During my illness the dreams were often no less vivid than something experienced in reality. When certain dream-images came into my mind, I sometimes had to weigh things up carefully and it took me some time to recognise whether I had really experienced them or only dreamed them.'

Schreber thinks: 'The fact that someone who sleeps restlessly believes he sees dream-images that have been conjured up, so to speak, by his nerves is such an everyday occurrence, it needs no talking about. But the dream-images of the previous night and similar earlier visions went beyond anything I had ever experienced, at least when I was well, so far as their *plastic clarity and photographic truth* were concerned.' Another patient recounted that her dreams were so remarkable that she often did not know *whether it was reality or dream*. 'Last night she had the feeling of flying. The moon moved above her head as she floated, two faces appeared between a small cloud. Another time the angel Gabriel appeared, then she saw two crosses, Christ on one, herself on the other. Such dreams made her happy. On waking she

¹ Göttke, *Arch. Psychiatr.* (D), vol. 101 (1934).

² Boss, 'Psychopathologie des Traumes bei schizophrenen u. organischen Psychosen', *Z. Neur.*, vol. 162 (1938), p. 459.

was blessedly content.' Patients often take such dreams as reality. They experience persecutions, bodily influences; sometimes it seems as if the sensory base for delusional ideas may well lie in abnormal dream experiences of this kind.

Boss describes *two modes of dream experience* which are only found in schizophrenics. They are not easy to elicit because the patients 'themselves detect the work of the psychosis in the dreams and are guarded about them':

The '*dream-bustle*'. The dream-scenes flit past the dream-consciousness with an unpleasant and uncanny rapidity. The scenes are pale and fleeting and appear to chase along and vanish. The patients try vainly to hold on to something in the dream. Quite intentionally they will keep themselves lightly asleep from the fear of losing hold of reality entirely in these troubling dreams.

Dream-actuality. The content of the dream is quite trivial but the patient awakes trembling in extreme terror and screams for help. She had dreamt she was in bed in hospital and a nurse came and propped her pillow up. This schizophrenic patient was so frightened because the outside world had long grown shadowy to her and she experienced the dream-scene in all its long-forgotten actuality and warmth of feeling. 'These patients cannot bear it when in their dreams their affects try once more to establish a profounder relationship with their objects.'

(c) *The content of abnormal dreams*

Herschmann and Schilder¹ believed they had found that melancholics frequently had happy and joyous dreams, and that generally speaking just those symptoms of melancholia which are not specially prominent in the waking state will make their appearance in dream.

Boss investigated series of dreams in schizophrenics, starting at the time when they were well and following them through their illness. He found an increase in brutality and raw crudity, 'a reduction in the dream-censorship'. The Ego lost its powers of repression. When remission occurs, the dreams change but never return to the same degree of normality as does the waking personality.

Boss writes:

'We found poorly censored dreams with little symbolisation. The obvious content stands in stark contrast to the patients' own moral attitudes. In spite of this *they arouse no anxiety or very little* and so with the other affective defence-reactions of the Ego. Such dreams are *an early and important symptom* for the diagnosis of schizophrenia.' He says crude sexual dreams occur in hebephrenic patients, aggressive dreams in catatonic ones and homosexual dreams in paranoid patients.

The following is an example of a dream of a schizophrenic patient in the sixth year of his illness: 'I was going across a moor with my mother and Anna. Suddenly a furious anger rose in me against my mother and I deliberately pushed her into the bog, cut off her legs and pulled her skin off. I then watched how she drowned in the bog and felt a certain satisfaction. As we were about to walk on, a big man with a knife in his hand ran after us. He took Anna first and then me, got us down on the ground

¹ Herschmann and Schilder, 'Traüme der Melancholiker', *Z. Neur.*, vol. 53, p. 130.

and had sexual intercourse with us. In all this I was not at all afraid and was suddenly able to fly over a beautiful landscape.'

We may question whether there are 'prognostic dreams', any anticipation of the future in the dream, the dream-images being a symbolic representation of one's own life and illness. Boss describes as 'endoscopic dreams' the representation in the patient's Ego of the past, present and anticipated psychotic happenings and believes he has found instances of this in neurotics, schizophrenics and in organic disorders, as well as certain prophetic dreams before the onset of an illness.

A patient dreams she sees the onset of an eclipse. There was a faint twilight. Then she saw herself standing in the middle of a busy street. A crowd of people and motor cars came towards her in reverse. The minute they arrived close to her they always avoided her and slid by her with ever-increasing speed. Everything passed her by and she became giddy and sank down in a faint. She found herself again in a homely farmhouse room where an oil-lamp gave a warm light. A fortnight after this striking dream, the patient passed through a mild schizophrenic delusional state which lasted two days. She was, however, soon able to regain a hold on herself and after the attack she was if anything rather more released and emotionally warmer than before, just as she had anticipated in her dream.

§ 4. HYSTERIA

When the will purposefully controls the play of the mechanism of suggestion, a mental force is in operation that rules our own unconscious psychic and bodily life and it is not a case of illness. But if mechanism of suggestion functions without *our knowledge or volition* and *against our will* then something most unhealthy happens which we describe as hysterical.

In hysterical phenomena every kind of suggestion is developed in exaggerated fashion. All sorts of tendencies are stimulated and reach realisation without any inhibition from critical attitudes in the personality as a whole or from previous experiences. Quite often there is a meaningful choice of the phenomena which are realised, meaningful in terms of the wishes and drives of the personality which are thus displayed. During inoculations we may observe involuntary imitation, when after someone has fainted, all the others faint one after the other. Only a few decades ago hysterical fits were spreading in girls' schools, for instance, as they used to do in convents. The effects of suggestion on the judgment is shown in the hysterical gullibility. The mechanism operates as auto-suggestion when falsehoods, which were initially conscious, develop into self-believed fantasies (*pseudologia phantastica*). The mere play-acting of a mental illness may develop into an actual psychic change. A patient relates how in her childhood she became frightened and gave up playing at madness when she noticed this tendency for its realisation. In people of hysterical predisposition prison-psychoses frequently represent actual psychic changes, which have arisen in the first place from simulation and from the desire to be

ill. Out of the role which is merely played develops real delusion, the 'wild fellow' gives place to the autonomy of irresistible excitement. Half-simulated physical complaints turn into compensation-hysteria which then becomes an actual, self-established illness. An hysterick in prison developed involuntary and insistent pseudo-hallucinations of sexual scenes between the public-prosecutor and his fiancée, due to his anxious fancy that they were having an affair and he came to believe in the reality of these relationships. The essential suggestibility of hysterics can be seen in their adaptability to any and every environment. They are influenced so easily that they do not seem to have a personality of their own. They take on their environment as it is at the time, they are criminal, devout, industrious, enthusiastic for suggested ideas which they will adopt with as much intensity as their originator and just as readily drop in the face of some other influence. They intend to give only one interpretation to a situation and to exhaust the possibilities of this. A patient received 250 Reichmarks from his Accident Insurance. He felt enormously rich and thought of nothing else, became engaged, bought rings, furniture, clothes on hire-purchase, and then took to theft and got two years in prison. He felt subsequently that his condition had been like an illness.

The concept of hysteria has been the subject-matter of many discussions. The net result has been that the concept increasingly moved away from the early concept of a disease-entity towards a general psychopathological characterisation of certain phenomena which occur in all sorts of illnesses, though most commonly there is also a predisposition present. We differentiate *hysterical character* (p. 443) from *hysterical attack* (accidents mentaux) and these in turn from *hysterical stigmata* (physical symptoms—p. 241). In all these three, we distinguish the tendency or rather the wish to be ill—as we do all other contents and tendencies—from the mechanism which is connected in some way with the dissociation.¹

We have got to know certain peculiar amnesias either restricted to a single experience or covering the entire past which do not prevent the patient all the same from moving and acting unconsciously as if he remembered everything quite well. We also know the disturbances in sensation which we may find in hysterics and which never involve the consequences of any real loss of sensation. Janet has described all these peculiar facts in a metaphorical way as 'the dissociation of psychic material'.² In normal life we find a true forgetting, a genuine loss of psychic dispositions or else the continuously maintained unity of psychic life, that is, the lasting ability to endure passively the after-effects of past experience as well as to be actively aware of them. In abnormal states, however, we find dissociations of entire psychic areas. Sensibilities, memories, have effects which can be objectively described but which do not become conscious. Feelings, actions, performances appear which are conditioned by this dissociated psychic life. The dissociated and conscious psychic

¹ 'Über die Psychopathologie der Hysteria', Janet, *L'état mental des Hystériques*, 2nd edn. (Paris, 1911).

² Janet, *L'automatisme psychologique*, 6th edn. (Paris, 1910).

life are in some way connected, in that what is dissociated exerts an influence on conscious operations and reaches up, as it were, into what is conscious. The clearest example is that of the post-hypnotic time-suggestion. A girl pays a visit at twelve noon as she had been ordered to do under hypnosis on the previous day, though she does not know anything about this order. She feels she is driven to pay this visit but she finds quite a different motivation for it subsequently. When these time-suggestions concern the performance of certain foolish acts—to put a chair, for instance, on the top of a table—the urge to do so is felt subsequently most keenly but it may perhaps be so erroneously motivated or regarded as so stupid that it is suppressed. In these cases the connection between the original experience (the hypnosis) and the emergence of the urge from the unconscious can no longer be doubted. The 'dissociation of psychic complexes' is a good metaphorical expression for these phenomena, which, should they appear *spontaneously*, we call hysterical. It is of course only a metaphor, a theoretical construct which Janet developed very clearly, in order to cover certain cases and it is not necessarily applicable to psychic life in general. Following Janet rather freely we may illustrate the situation in the accompanying diagram (Fig. 3):

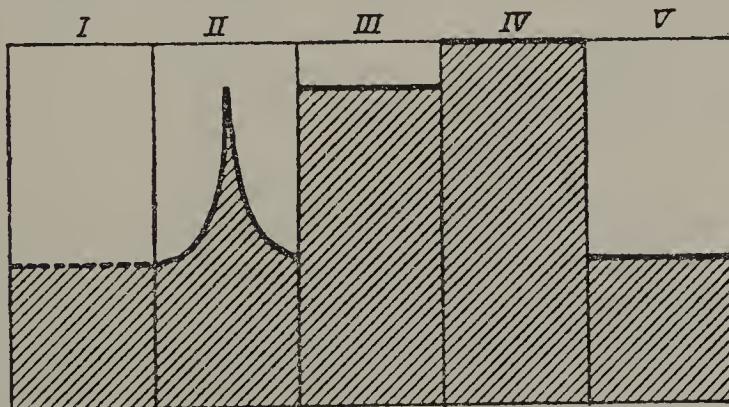


FIG. 3

- I Normal
- II Appearance of a hysterical symptom
- III Hypnoid state
- IV Twilight state or 'double personality'
- V Chronic hysterical state without manifest symptoms

The shaded parts indicate the unconscious. The blank parts indicate the conscious psychic life. In column I the healthy state of the shifting border between what is unnoticed and what is extra-conscious is indicated by a dotted line. In the other sections a full line is drawn to denote the sharp separation, the dissociation. In column V we find the chronic hysterical state, for the moment without any manifest symptoms. The dissociated elements are quiescent. In column II the appearance of a hysterical symptom (nausea, vomiting, false perceptions, etc.) is indicated. In column III a hypnoid state of

day-dreaming is shown and in column IV there is a twilight state excluding normal consciousness. These latter cases have been strikingly described as *double personalities*¹ or as *alternating consciousness*, because the dissociated psychic life appears so richly developed that it feels as if one is dealing with another personality. When however the state comes to an end, the normal personality has no memory of it.

It is rare to find cases where Janet's experiments are successfully demonstrated and there is proof of the existence of a dissociated consciousness. Post-hypnotic suggestions are also rare and alternating consciousness particularly rare. None the less the *same underlying mechanism is assumed for a great number of hysterical phenomena*. The chief justification for this assumption lies in the observations made by Breuer and Freud,² concerning the origin of particular symptoms, which were found to lie in upsetting experiences (*psychic traumata*). While Janet had conceived the dissociation to be spontaneous and to arise solely from the Anlage, these authors recognised that dissociation could also be brought about, given the Anlage, by certain experiences. This is not only so after physical accidents (hysterical paralysis of an arm after a fall from a carriage in one of Charcot's famous cases) but after all kinds of affects as well (fright, anxiety, etc.). 'Thus a painful affect which arises during a meal may be repressed and later cause nausea and vomiting which continue as hysterical vomiting for a month.' 'In other cases the connection is not so simple. The relationship between the cause and the pathological phenomena is only a symbolic one, as it were, when, for instance, neuralgia is added to psychic distress or vomiting to the affect of moral contempt.' The experiences that underlie the morbid symptoms are not remembered by the patients in their ordinary state but they can be brought out under hypnosis. Memories are split off or dissociated, the patient has no access to them, yet he suffers from their effects without knowing it. Once the memories are made accessible to the waking consciousness (psychoanalysis) and the patient simultaneously lives through the original affects once more (abreaction) a cathartic effect sets in: the symptoms in question have vanished. During the traumatic experience there is a hypnoid state and this along with intentional repression of affect or unintentional 'damming up' of it, all play a part as factors which facilitate the dissociation.

The whole process of *repression* and its effects may be illustrated by some examples from Pfister³ who has set them out in a table which we reproduce in a modified way below. The factual correctness of the examples is not so

¹ Azam, *Annal. méd-psychol.* (July, 1876). Summary: Binet, *Les altérations de la personnalité* (Paris, 1891), 2nd edn., 1902. Classic case: Morton Prince, *The Dissociation of a Personality* (New York, 1906). Cp. Flournoy, *Die Seherin von Genf*. (Leipzig, 1914). Hallervorden, *Z. Neur.*, vol. 24 (1914), p. 378.

² Breuer and Freud, *Studien über Hysterie* (Vienna, 1895). Freud later developed very different views. The original views on these traumatic connections were followed up chiefly by Frank, *Über Affektstörungen* (Berlin, 1913), theoretically and therapeutically.

³ Pfister, *Die psychoanalytische Methode* (Leipzig, 1913).

important as the way they show us how repression and dissociation are to be conceived:

Experience	Conflicting wishes and drives producing repression of one side		Understandable result in a dissociated image of real gratification of a wish or of escape (dissociated realisation)	Resulting understandable content of an objective manifestation
	(a)	(b)		
15-year-old girl; student wants to kiss her; she manages to resist	wish to be kissed	shy of forbidden sexuality	'I have been kissed too much'	Swollen lips
A boy masturbated and stole from his mother	need to confess the sexual misdeed and the theft	shy to confess such things	He intends to confess one evening but shame prevents. The thought then comes: 'I can't talk any more as I want to; it's all dark ahead'.	At that time he showed hysterical mutism and dim vision. He knows nothing of his previous monologue which comes to light only in analysis
16-year-old girl is in love with a priest whom she has seen once	feelings of desire	feelings of something forbidden and unattainable	'The priest assaults me sexually'	Spreads malicious accusations: The priest molests her with obscene remarks. She knows she is lying but cannot help it. Reproaches herself bitterly

Repression does not always depend on direct action by the personality but it is much more often due to the hardly noticed conflict between opposing drives and wishes and to the final 'damming back' of the one or the other. Repression as such does not produce hysteria. Normal people can repress successfully without any such disturbance but in some individuals repression discovers hysterical mechanisms which transform the repressed material. This conversion into symptoms is what is pathological and could not come about without the dissociation. The conversion issues in bodily symptoms and in psychic ones. It appears both as affect and as lack of affect, and as disturbance of function, etc.

In order to try and grasp the relationship between the experience and the symptom, we either have to take the meaningful, symbolic connections which we previously discussed, the transference of affects, etc., over into the dissociated psychic life as we conceive it, or we have to turn to yet another analogy: that of the *energy of affects* which can be transformed into other forms of energy. When repression prevents discharge in a natural reaction, the suppressed energy will show itself in changed form elsewhere. Janet constructed the concept of '*dérivation*'. The diverted energy discharges itself through motor attacks, pains, through other uncalled-for affects. The affect is converted, e.g.: repressed sexual libido converts into fear and vice versa. The

affect reactivates old pathways (e.g. evokes rheumatic pains that were there before, or heart-pains and so on). This analogy undoubtedly holds for a few cases; we only have to be cautious with any general theoretical elaboration. The use of these analogies of dissociation and of transformation of affect-energy led to findings which, as Breuer and Freud were able to show, vividly illuminate the 'contradiction that lies between the statement that "hysteria is a psychosis" and the fact that a number of clear-headed, strong-willed and critical people of good personality are to be found among hysterics. The waking, thinking individual may well be thus, but in the hypnoid state, he is changed as we all are in dreams. But while our dreams do not influence our waking-state, the products of the hypnoid state extend far into the waking life in the form of hysterical phenomena.' The incomprehensible excess of feeling, the excessive enthusiasm for things which objectively do not seem to justify such enthusiasm, becomes explicable through the analogy of an influx of affect-energy from the drives, the content of which (as symbol, or through similarity, etc.) has a meaningful connection with the content of the enthusiasm. Inversely, the incomprehensible coldness becomes explicable through the concentration of all affect-energy in one single area of drive and a fixation on the contents of this. Thus in hysteria, if we presuppose mechanisms of dissociation and transformation, this allows us to bring the notable contradictions of affective excess and insufficiency into some meaningful connection with the patient's experiences.

Dissociation is a fairly obvious theoretical help in clarifying the *ambivalence* of hysterics. The person clearly has the conscious intention to get well and this is perfectly credible; there is the wish to get rid of the paralyses and other disturbances. He also has another intention—not connected with the first—which strives with all its might against it once recovery comes on in earnest. The conscious will of the personality will only regain its normal power and the other intention will only vanish, at least in this particular form, if there is a remarkable switchover which has often been seen to take place, through suggestion-therapy, or through some severe and painful shock or through some of the chances of the life-situation.¹

We may ask what are the criteria whereby we can legitimately assume in any particular case that the source of a phenomenon is psychic dissociation (i.e., there is a repressed, 'encapsulated' affect which has now become a 'foreign body' that operates with an alien power)? (1) the precipitating psychic experience must be objectively established; (2) there must be a relationship between the symptom and the experience which is understandable in the context; (3) the lost memory should return during the hypnotic state together with other concrete phenomena of the experience when emotionally re-lived (abreaction) and there should be subsequent recovery from the symptom in question; (4) all kinds of expressive phenomena accompanying the appearance

¹ Kretschmer vividly described hysterical volition. 'Die Willensapparate der Hysterischen', Z. Neur., vol. 54, p. 251.

of the symptom should do so in a way which is understandable in the first place and which points to content other than that which is present in consciousness (for instance, sexual movements during an investigation into the refusal of food).

The relationship between the content of the repressed experience and the content of the illness can be seen particularly clearly in some hysterical deliria where the precipitating experience (accident, sexual assault, etc.) is repeatedly relived in a hallucinatory way though it is no longer remembered in the normal consciousness. We also see the same thing in some Ganser twilight-states during captivity where the crime is now forgotten but every wish is felt to be gratified (innocence, liberty, etc.).

Suggestions become all the more effective, the more they are directed towards the patient's *wishes* (the enormous effect of auto-suggestion in neurotic patients who are receiving compensation for some traumatic event), and the more they *arouse fear* (the immediate realisation of hypochondriacal complaints which initially were only suspected). Timid people can be made ill by relevant suggestion as in the same way one can make them well again.

Everything connected with suggestion and hysteria is obscure and misleading to the investigator.

In every field of psychic life it is extremely common but always surprising to observe a *deficiency in the conscious psychic events* which, when looked at from another angle, proves to be *not a true deficiency at all*. The missing element continues to exist in the unconscious, as we say, and to spread its influence from there. It can be brought back into consciousness by psychic means (suggestion, affect). A large number of disturbances are of this order: total amnesia for circumscribed periods, for particular objects or for the entire past; total disturbance of registration, loss of sensation, paryses, loss of volition, alterations in consciousness, etc. Just as astonishing as the deficiency itself is the way in which in some sense it is 'not there'. A patient who has forgotten her entire previous life behaves as if she still knew everything. The blind person never stumbles over anything as she walks about. The paralysed person can walk when situation and impulse force her to it. It is always possible to discover conditions under which the deficiency appears to be corrected. *All tests*, therefore, which try to make some clear distinction between *hysterical phenomena and simulation come to grief*. With *hysterical phenomena* we are *never dealing with events which allow us to study certain psychic functions more precisely in the defect-state*. In hysteria psychic functions are always disturbed in one and the same way, a way which we cannot characterise precisely and the unity of which in many cases we can only guess at rather than know and to which we give the name of the hysterical mechanism. The study of this hysterical mechanism teaches us about one side of psychic life that is as puzzling as it is important. The mechanism we are dealing with, once we have recognised it, reveals itself as something we can also trace in ourselves and in everyone to a slight degree. But the phenomena which are conditioned by it only lead to the study of the mechanism itself. It is *an old mistake to make use of hysterical phenomena for the analysis and interpretation of psychic and somatic phenomena in general*. Hysterical disturbances of memory, for instance, are wholly unsuitable for us to learn from when it comes to the particular functions of memory, just as hysterical somatic

disturbances can teach us nothing about the normal physiology of the organs. We have to admit, however, that all psychic events take on a new aspect once the hysterical mechanism is in charge.

Once suggestion and hysteria play a part, there is no chance to investigate any laws or necessities of a physiological or psychological kind. *Everything*, it seems, *is possible*. All these phenomena, therefore, can only be used to illustrate hysterical mechanisms and nothing more of physiological or psychological relevance. Cases in which they play a part must be omitted from any material evidence offered in support of any psychological theory or thesis. Exact experiment is not really possible, and nothing can be properly verified or determined. Just as it can be said that the most experienced psychiatrist can be tripped up by hysterics, so it may be said that even the most critical of investigators in the psychological and somatic field will continue to be caught by the phenomena of suggestion. It is however annoying to find some authors who make use of what are obviously phenomena of suggestion and hysteria as supportive evidence for a general insight into psychology and physiology.

The phenomenon of so-called *induced insanity* (psychic epidemics)¹ is a particularly striking kind of suggestion-phenomenon to which many, though not only hysterical, persons are prone. There is a wide spread of hysterical fits, attempts at suicide and delusion-like convictions. It is of course out of the question that any disease process can be transmitted psychically. Dissemination comes about through a mass consciousness, a group feeling, which plays all the greater part—sometimes to an uncanny degree—the greater the number of persons involved. There is the particularly interesting case where someone suffering from a paranoid process infects a number of healthy people with his ideas so that he becomes the centre of a movement which quickly dies down again when once he is removed from it. Inversely, as paranoid persons are beyond any influence, these cases have produced the proverbial remark: 'It is easier for one madman to convince a hundred sound people than for a hundred sound people to convince him'.

§ 5. MEANINGFUL CONTENT IN THE PSYCHOSES

Much has been explained as meaningful which in fact was nothing of the kind.

Thus attempts have been made to make *feelings* the explanation for all abnormal phenomena. If we use the term 'feeling' to denote everything for which common usage permits us to use the word, there is always some truth in this, but it then comes to very little if we go on to derive delusions, for instance, from feelings. Ideas of senselessness, sinfulness, impoverishment, can be understandably said to arise from depressive affects and it was generally supposed that the depressed patient concluded

¹ Wollenberg, *Arch. Psychiatr.* (D), vol. 20, p. 62. Schönfeldt, *Arch. Psychiatr.* (D), vol. 26, p. 202. Weygandt, *Beitrag zur Lehre von den psychischen Epidemien* (Halle, 1905). Hellpach, 'Die psychischen Epidemien' (in der Sammlung, *Die Gesellschaft*), Schoenhals, *Mschr. Psychiatr.*, vol. 33, p. 40 ('Literatur'). Riebeth, *Z. Neur.*, vol. 22 (1914), p. 606. Peretti, *Allg. Z. Psychiatr.*, vol. 74, p. 54 ff. W. Dix, *Über hysterische Epidemien an deutschen Schulen* (Langensalza, H. Beyer and Söhne, 1907). Nyiro and Petrovich, *Z. Neur.*, vol. 114 (1928), p. 38.

there must be something which made him so miserable. People also wanted to explain delusions of persecution by the affect of distrust, and delusions of grandeur by euphoric moods, but they did not realise that, though one may understand ordinary mistakes and over-valued ideas in this way, one can never do this with delusions. Frightening hallucinations in sleep during fever or a psychosis have been attributed to some kind of anxiety, otherwise conditioned. In all these cases we can, it is true, find meaningful connections, and they teach us something about the relationship of delusional content and previous experiences but nothing at all of how the delusions, false perceptions, etc. could have come about in the first place.

For delusions to develop a new factor has to be added. If one calls the new element 'the paranoid mechanism' this is only a name and one which includes very heterogeneous material such as the formation of delusion-like ideas as well as of delusions proper.

(a) *Delusion-like ideas*

There is nothing new in the circumstance that the contents of delusion-like ideas have 'meaning' in terms of the patients' life-experiences, wishes and hopes, fears and anxieties. Friedmann¹ has described peculiar cases of '*mild paranoia*' where the content of the delusion confines itself to the connection with some specific experience. Birnbaum² has described the frequent occurrence of delusion-formation in prison, where the delusions are changeable, can be influenced and tend to disappear on discharge. He therefore termed them 'delusion-like fancies' rather than delusional ideas. The content was to a large extent meaningful in terms of wishes and the situation in general.

This is also the place, perhaps, for the '*sensitive delusion of reference*',³ found in the psychasthenic individual who is tender, thin-skinned but full of self-conscious ambition and obstinacy. They become ill because of some experience of humiliating insufficiency, in particular defeats of a sexual-moral nature, for instance, the late love of middle-aged single women, which cannot find any free outlet. Paranoia comes instead with depressive self-reproach, fears of pregnancy and delusions of reference. The patient knows she is observed and spited by family and friends, the public and the newspapers. She fears pursuit by police and Courts. There are transient, acute psychoses with excitement and severe neurasthenic symptoms and so many delusions that the clinical picture may well look like some progressive incurable disorder but content and affect remain centred round the originating experience.

¹ Friedmann, *Msch. Psychiatr.*, vol. 17.

² Birnbaum, *Psychosen mit Wahnbildung u. wahnhafte Einbildungen bei Degeneration* (Halle, 1908).

³ Kretschmer is responsible for the description. *Der sensitive Beziehungswahn; ein Beitrag zur Paranoiafrage u. zur psychiatrischen Charakterlehre* (Berlin, 1918). These processes may only be special types of paranoid schizophrenia in personalities which have remained intact and natural. Similar cases may be seen where no decisive experience precedes the psychosis, as K. Schneider demonstrated in his own patients (*Z. Neur.*, vol. 59, p. 51). But the clear delineation of such types and the tracking down of all the meaningful connections brings knowledge of a kind with a value of its own in as much as it reduces what are otherwise chaotic phenomena into some sort of order and form.

(b) *Delusions in schizophrenia*

From time to time and incidentally attempts have been made to understand the contents of delusion as well as other psychotic symptoms in terms of the individuals' wishes and longings. This approach has been extended to schizophrenia by the Zürich school (*Bleuler* and *Jung*). However, they did not stop at the obviously meaningful contents but followed in Freud's footsteps and treated them as symbols. They have thus come to 'understand' almost all the contents of these psychoses by applying a procedure which as the results show only leads on into endlessness. In the most literal sense they have rediscovered the 'meaning of madness' or at least they believe they have. Their results cannot be summarised briefly nor are they ready for an objective formulation. We therefore refer to some of the publications of this school for an orientation on the problem.¹ The following is a crude example: Voices accuse the patient of sexual intercourse; to have perpetrated this would correspond with his repressed wishes.

Bleuler and Jung conceived that schizophrenic psychoses, the contents of delusions, of catatonic behaviour and of false perceptions become meaningful in terms of repressed complexes of a *dissociated* kind. This 'interpretation' of symptoms is doubtful but can be discussed. It is noteworthy that according to Bleuler these complexes need not be repressed. They can have remained in consciousness and yet dominate the schizophrenic deliria. From this angle there is sometimes a surprising analogy to be drawn between hysteria and schizophrenia and Jung draws attention to this. The whole interpretation is a *translation to schizophrenia of concepts which have been arrived at during the analysis of hysteria*. We should, however, never forget the radical differences which exist between hysteria and a schizophrenic process and which show themselves for example in the fact that schizophrenics as opposed to hysterics cannot be hypnotised and are not at all easily suggestible.

Meaningful contents are to be found in every kind of objective phenomena. Even the *contents of hallucinations*, for example, need to be looked at in this way. They are not completely accidental but to some extent have meaningful connections, and are significant of experience in the form of commands, wish-fulfilments, teasing and ridicule, agonies and revelations. Freud called hallucinations thoughts turned into images.²

(c) *Incorrugibility*

In countless cases the mistakes of healthy people cannot actually be corrected but usually the mistakes are shared in common with others and this adds confirmation. Conviction comes not from 'insight' but from the sense of 'all

¹ Jung, *Über die Psychologie der Dementia praecox* (Halle, 1907). Bleuler, *Die Schizophrenie* (Vienna, 1911). Maeder, 'Psychologische Untersuchungen an Dementia praecoxkranken', *Jb. psychoanal. u. psychother. Forsch.*, vol. 2, p. 185. Circumspect interpretations are given by Hans W. Maier, 'Über katathyme Wahnbildung u. Paranoia', *Z. Neur.*, vol. 13, p. 555.

² Jung, *Der Inhalt der Psychose*, 2nd edn. (Leipzig, 1914).

of us together'. The mistake which is delusion is peculiar to the solitary individual. In that respect delusion has been referred to as an illness of the social self (Kehrer). But the *truth* of an individual may also assert itself against the majority and it may hardly be possible to differentiate this from delusion so far as the social behaviour is concerned. In trying to understand the incorrigibility we may find what interest it serves: the delusional content is of vital necessity for the deluded person and without it he would inwardly collapse. Indeed no one, even the healthy, can be expected to appreciate a truth which makes utter nonsense of his existence, but the *incorrigibility of delusion has something over and above the incorrigibility of healthy people's mistakes*. So far, however, we have not succeeded in defining what this is. We may speak of a *stability of affect* (Bleuler) or emphasise the tendency of delusion to spread or progress, or talk of the logical reasoning which serves the delusion and can never turn and refute it but in so doing we simply give a name to something which we can neither see nor comprehend. And yet it is precisely this problem that gives us no peace. Delusion, particularly the delusional system, presents itself as a whole coherent world of appropriate behaviour apparent in a personality that is quite sensible and by common standards not otherwise to be considered ill. This constitutes what is called 'being unhinged or mad', and is all the more alarming in that quite often others in the environment may take over the delusion. In principle, but not perhaps in practice, untruth can always be overcome by the great process of human reason which amongst a welter of mistakes, falsifications, obscurities, sophisms and bad intentions pursues truth. In the case of delusion, however, we may see someone irretrievably lost in untruth—an extreme situation which we may not be able to correct yet would much like to comprehend.

(d) Classification of delusional content

From very early on we have collected the contents of delusion and classified them. They are of striking variety, imaginativeness and eccentricity. The initial folly was committed of considering every single delusional content as a special illness and giving it a name (Guislain) without noticing that nomenclature of this sort has no end. But the contents do have a number of general, common characteristics that recur repeatedly and give a peculiarly uniform character to the multiplicity of the contents. We are not wanting to extend the wealth of contents but only to discover basic types. In this respect we can look at the material from several angles:

1. *Delusions that are objective and delusions centred on the person:* Human drives and wishes, hopes and fears, are universal so that most delusional formations may be regarded as in the closest relationship to the individual's particular weal or woe. The patient is almost always the centre of his delusion but on rarer occasions the delusional formations are objective in content, the delusion is about the meaning of the world, is connected with some philosophical problem or historical event not related to the person of the patient. The patients

have made a magnificent invention and work at it all the time; they have squared the circle, trisected an angle, etc. or by the use of numerical symbols they have prophetically grasped the basic laws of events. The patient feels his personal importance as a discoverer, the content has no particular significance for himself. He fills his time with hard mental work that is meaningful to him. He has an interest in being right, since if he were not life would lose all meaning for him, but what he has thought out is objective. These constructions, however, which in themselves are interesting, do not occur nearly so often as those which are egocentric.

2. *Actual delusional content.* The following are frequent contents which relate to the patient's well-being or otherwise:

(a) *Delusions of grandeur:* relating to origin (aristocratic stock, royal birth, brought up as a foster-child), to possessions (owning large estates, castles, etc., which are withheld by intrigue), to abilities (great inventors, discoverers, artists, possessors of special wisdom, gifted with inspiration), status (adviser to leading diplomats, the real director of political destinies). (b) *Delusions of diminished status:* relating to property (delusions of poverty), to abilities (demented, ineffective), to moral status (delusions of sin, self-accusation). (c) *Delusions of persecution.* The patient feels noticed, observed, put at a disadvantage, despised, ridiculed, poisoned, bewitched. He is persecuted by authorities or by the public prosecutor for crimes of which he is falsely accused, by gangs, Jesuits, Freemasons, etc. There are also delusions of physical persecution on the basis of bodily influences (false perceptions) and 'made' phenomena (passivity feelings), and querulant delusions about injustices, plots and treacherous manipulations. (d) *Hypochondriacal delusions.* In contrast with neurasthenic complaints of palpitations, headache, weakness and pain, there are delusional contents such as, the bones have softened, the heart is not right, the bodily substance has altered, there is a hole in the body, etc. There are delusions of being changed; the patient is changed into an animal and so on. (e) *Erotic delusions.* Erotomania is the term for the delusion that one is loved by another person though there is not the slightest sign of this and the person concerned declares the contrary (delusions of love and marriage-delusion). (f) *Religious delusions.* These may appear as delusions of grandeur or of diminished status: the patient is a prophet, mother of God, bride of Jesus, or the patient is the devil, is damned, or the anti-Christ.

The description of delusional formations as characteristic for particular diseases is the province of special psychiatry. For illustration's sake we would simply remark here that it is characteristic for certain paranoid processes to have delusional contents about great world events of which the patient is the centre. He is 'in touch with the whole world', the 'whole history of the world depends on him' or he is the centre of cosmic revolutions in which he plays a very special if passive role. A patient who was already quite deluded said, 'Every spark of well-being has been quenched, and so I have wandered about for thousands of years, always unwittingly reborn. The reason for this must be attributed to the creation of the world.'

3. *The binding of opposites.* All delusion is understandably rooted in the tension between opposites. Friedmann saw the basic conflict in every delu-

sional formation as lying in the patient's experience of having his own will overpowered by the whole will of the community. What is visible in the delusion is the conflict between reality and the individual's own desires, between compelling demands and private wishes, between being honoured or humiliated. Delusion always *encompasses both poles*, so that honour and humiliation of the self, delusions of grandeur and delusions of persecution go together. Gaupp¹ described the mutual relationship between delusions of persecution and of grandeur as a meaningful whole, which he based on the sensitive personality disposition (accompanied by pride, shame, fear), presupposing that the form of the delusion as such cannot be understood. Kehrer² described delusions of persecution and grandeur as similar meaningful wholes. Whether we are dealing with a schizophrenic process or a personality development in which the individual reacts to life's conflicts in a delusion-like way, the meaningful element remains no different. There is a difference only in the course taken, in the form of the experience and in the psychic phenomena in their totality.

4. *Forms of paranoid attitude to the environment.* Kretschmer differentiated *wishful*, *combative* and *sensitive paranoics*. The delusion may be a reactive gratification of illusionary wishes, or an active affirmation of its own truth to the world around, or it may suffer its ideas of reference and persecution with little outward action but content itself with the inner pride of delusions of grandeur. Whichever it is, essential differences of content result in fact. On these lines, prison-paranoia with its delusion-like imaginings is a type of wishful paranoia, querulant delusion is a type of combative paranoia and delusions of reference and grandeur are a type of sensitive paranoia.

¹ Gaupp, *Z. Neur.*, vol. 69, p. 182.

² Kehrer, 'Der Fall Arnold', *Z. Neur.*, vol. 74, p. 155.

CHAPTER VII

THE PATIENT'S ATTITUDE TO HIS ILLNESS

An individual can face himself reflectively and in the same way a patient can face his own illness. Psychic illness looks different to the medical observer from what it looks like to the patient who is reflecting on himself. Thus it happens that someone, who regards himself as quite healthy, may be analysed as mentally ill or that someone may consider himself to be ill in a way that has no objective validity and is in itself a morbid symptom, or that someone through his own contriving may influence morbid processes for good or bad.

The concept of 'the patient's attitude' embraces a number of different phenomena. What unites them is that through them we try to *understand* the patient's attitude to the symptoms of his illness. We may observe how the vast majority of normal personalities will react to illness with the healthy part of themselves, as it were. But in understanding the particular attitude adopted we come up against the *limits of insight which a person has into himself*. These limits provide one of the most important criteria for personality type and in particular for the change which the personality has undergone as a whole through the illness.

(a) *Understandable attitudes to the sudden onset of acute psychosis (perplexity, awareness of change)*

Perplexity is one of the most understandable reactions in normal people to the onset of an acute psychosis. It is therefore a frequent observation and in some psychoses this perplexity pervades the most severe confusional states as a sign of what has been preserved of the normal personality, otherwise masked. Retardation, difficulties in comprehension, incoherence, inability to collect one's thoughts (*Unbesinnlichkeit*), all evoke the same reaction, which shows itself objectively in the puzzled expression, the searching about, a certain marked restlessness, a marked amazement and distractedness, and in such remarks as:

'What is it? Where on earth am I? Am I really Mrs. S. L.? I don't know what is wanted of me . . . What am I supposed to do here? . . . I don't understand any of it . . .' In addition there may be the questioning of the psychotic content: 'Surely I haven't killed anyone? Surely my children are not dead?' etc.

A schizophrenic wrote the following, which illustrates the perplexity felt in relation to the psychotic situation while the sensorium was still clear:

'I understand my situation less every day and so I make more mistakes every day. I simply cannot act in any considered way but just act instinctively because I cannot

reach any real conclusion. What are the brown blankets on my bed? Do they represent people? How am I supposed to move if my mouth has to be closed? What am I supposed to do with my hands and my feet if my nails are so white? Am I supposed to scratch? What on? My environment changes every minute as the nurses move about. I don't understand them and therefore cannot respond. How can I do anything right if I don't know what is right? I think as simply as I thought when I was Leonora B. and cannot grasp this queer situation. I understand it daily less and less.' (Gruhle).

From this purely reactive and understandable perplexity which comes from an inability to orientate oneself to the situation and grasp the new experiences we must differentiate other forms of perplexity, which is often difficult to do in the individual case.

There is (1) *Paranoid perplexity*: with a clear sensorium. The patient is driven into a painful restlessness by the delusional experience and the still vague contents of his consciousness. He feels something is afoot and goes round searching; he asks questions and cannot make things out: 'If you would only tell me what it is, there is something I know' a patient asked her husband. (2) *Melancholic perplexity*: The utterances are reminiscent of the reactive type. The patients are in the grip of their delusions of poverty, diminished status and nihilism and view everything in an anxious, questioning way: 'Why are there so many persons? All these doctors—what is to happen? Why are there so many towels?'

At the beginning of a mental illness some persons undergo an *uncanny feeling of change* (as if they had been bewitched, enchanted or there may be an increase in sexuality, etc.). All of this adds to the awareness of impending madness. It is difficult to say what this awareness really is. It is the outcome of numerous, individual feelings, not a mere judgment but a real experience.

A woman who suffered from periodic insanity described how this feeling arose even when the psychosis itself was not at all unpleasant. 'The illness itself does not frighten me but only the moment when I begin the experience again and do not know how it will turn out.' Another patient who suffered from brief, florid psychoses wrote: 'The most frightening moments of my life are when I pass from my conscious state into confusion and the anxiety which goes with it.' Referring to prodromal phenomena, the same patient said: 'The uncanny aspect of the illness is that its victim cannot control the passage from healthy to morbid activity . . .'

We often learn of *individual instances*, noted at the start of an illness: an isolated false perception, a conspicuous change in affectivity, an unfamiliar and uncontrollable tendency to rhyme, verses come to mind unwittingly and so on. But here we are not dealing with some feeling of over-all change but with post-hoc statements of what it was like at the beginning. The *fear of going mad* is sometimes found in the early stages of a process, particularly among better-educated people. They become terribly restless and try to reassure themselves by testing out their environment. A patient put a woman friend's finger into his mouth to see if she would show signs of fear. If not, he would bite it. He

took this as a sign that she thought him quite well and for a short time this reassured him.

Further, the fear of becoming mentally ill and feelings of impending madness are common but baseless symptoms which are found particularly in people suffering from personality disorders (psychopaths) and mild cyclothymics who do not as a matter of fact fall ill.

(b) *Working through the effects of acute psychoses*

Individuals have a complex-laden attitude to everything which has once been a significant experience for them. For example, someone cannot think of his terrifying war-experiences without lapsing into uncontrollable gloom. Another may resist seeing again the object of an old passion or revisiting a place or environment where there has been unresolved suffering. Thus we find psychoses which introduce new significance in themselves, others which are linked in content with the personality and yet others which always remain entirely alien to the personality and bring no added burdens or significance to the psyche. Here the patient often will show an obvious embarrassment when talking about things except to the private ear of his doctor.

Mayer-Gross¹ studied the forms which after-effects took following acute schizophrenic psychoses and analysed them according to their meaningful connections. He distinguished: despair, 'renewal of life', shutting out (as if nothing had happened), conversion (the psychosis offered something fresh by means of a revelation) and integration.

(c) *Working through the illness in chronic states*

Relatively sensible patients, particularly in chronic states, offer us a great variety of reactions to the individual phenomena of their illness. The patient *works through his symptoms* somehow. Laboriously he develops a delusional system out of his delusional experiences. He assumes an attitude to the contents of his experience; for example, he remarks on the increasing stupidity of the originator of the voices, who repeats trivial phrases endlessly or meaningless fragmented sentences. Awareness of physical illness and psychic change is often ascribed to painful influences of all kinds. The patient thinks of means of defence against these, particularly against the feelings of physical influences and various kinds of 'made' phenomena (passivity phenomena). Various methods of distraction are used and are sometimes helpful (saying a pater-noster, working). In other cases patients will pass their time with the contents of their false perceptions. They evoke their visual pseudo-hallucinations intentionally and enjoy them. They annoy the voices by changing the rhythm of their step which the voices follow and this change puzzles and silences them. A number of unpleasant phenomena can be countered by self-control, such

¹ Mayer-Gross, 'Über die Stellungnahme zur akuten abgelaufenen Psychosen', *Z. Neur.* vol. 60 (1920), p. 160.

as the above-mentioned distractions, or by some active effort of will; for instance, an effort directed against the 'made' (passivity) movements or against 'made' (passivity) feelings of anger. Self-control also will help many in respect of the physical complaints in psychic illness and the agonising feelings which abnormal psychic life brings along.

In the cases so far mentioned the patients' attitude is on the whole understandable. As it becomes less so and the attitude to the illness becomes stranger, this in itself becomes a sign of the change in total personality which the illness has wrought. Thus in many cases it is remarkable how the patient gets used to his symptoms (for instance, to painful false perceptions and other experiences which are passively accepted), how he grows to look at them indifferently in spite of alarming content, and how apparently he does not notice fundamental delusional contents of utmost importance to him or else forgets them again rapidly. On the other hand we may be equally surprised by the overpowering strength of some hallucinations and delusions which seem to dominate the patient as by some physical compulsion. It is striking how some contents appear to captivate the patient's attention and how he is moved profoundly by matters that seem quite trivial. In the acute, florid psychoses we may observe how patients simply submit to feelings of loss of will, and bear the most agonising things passively. This helpless state, which they often characteristic-ally describe, links up with their feelings of indifference as to what will come. Even where mighty cosmic revolutions are concerned, the patients nevertheless go on with their accustomed jokes or make frivolous remarks.

Much can be learnt from *patients' own interpretations*, when they are *trying to understand themselves*. A schizophrenic patient explained the specific contents of what he saw as follows:

'The figures seem exaggerated personifications of little, unimportant mistakes I have made; for instance, when I have enjoyed a meal, there might follow on the same evening—like an echo of the sensation—a demon who showed himself in the shape of a ravenous, gluttonous man-beast with enormous mouth, luscious thick red lips, fat belly of enormous size. I felt this monster near me until for a time (perhaps 2 to 3 meals) I had refrained from enjoying the food which seemed to be the source that fed him.' 'In everyone around me I saw their smallest failings as ugly, menacing figures that stepped out of them and attacked me' (Schwab).

The same patient *interpreted his illness as a whole*: He unified into a single meaning everything that the psychiatrist saw as the sequence of the process:

'I believe I caused the illness myself. In my attempt to penetrate the other world I met its natural guardians, the embodiment of my own weaknesses and faults. I first thought these demons were lowly inhabitants of the other world who could play me like a ball because I went into these regions unprepared and lost my way. Later I thought they were split-off parts of my own mind (passions) which existed near me in free space and thrived on my feelings. I believed everyone else had these too but did not perceive them, thanks to the protective and successful deceit of the feeling of

personal existence. I thought the latter was an artefact of memory, thought-complexes, etc., a doll that was nice enough to look at from outside but nothing real inside it.

In my case the personal self had grown porous because of my dimmed consciousness. Through it I wanted to bring myself closer to the higher sources of life. I should have prepared myself for this over a long period by invoking in me a higher, impersonal self, since "nectar" is not for mortal lips. It acted destructively on the animal-human self, split it up into its parts. These gradually disintegrated, the doll was really broken and the body damaged. I had forced untimely access to the "source of life", the curse of the "gods" descended on me. I recognised too late that murky elements had taken a hand. I got to know them after they had already too much power. There was no way back. I now had the world of spirits I had wanted to see. The demons came up from the abyss, as guardian Cerberi, denying admission to the unauthorised. I decided to take up the life-and-death struggle. This meant for me in the end a decision to die, since I had to put aside everything that maintained the enemy, but this was also everything that maintained life. I wanted to enter death without going mad and stood before the Sphinx: either thou into the abyss or I!

Then came illumination. I fasted and so penetrated into the true nature of my seducers. They were pimps and deceivers of my dear personal self which seemed as much a thing of naught as they. A larger and more comprehensive self emerged and I could abandon the previous personality with its entire entourage. I saw this earlier personality could never enter transcendental realms. I felt as a result a terrible pain, like an annihilating blow, but I was rescued, the demons shrivelled, vanished and perished. A new life began for me and from now on I felt different from other people. A self that consisted of conventional lies, shams, self-deceptions, memory-images, a self just like that of other people, grew in me again but behind and above it stood a greater and more comprehensive self which impressed me with something of what is eternal, unchanging, immortal and inviolable and which ever since that time has been my protector and refuge. I believe it would be good for many if they were acquainted with such a higher self and that there are people who have attained this goal in fact by kinder means.'

Such self-interpretations are obviously made under the influence of delusion-like tendencies and deep psychic forces. They originate from profound experiences and the wealth of such schizophrenic experience calls on the observer as well as on the reflective patient not to take all this merely as a chaotic jumble of contents. Mind and spirit are present in the morbid psychic life as well as in the healthy. But interpretations of this sort must be divested of any causal importance. All they can do is to throw light on content and bring it into some sort of context.

Every chronic illness confronts the patient with a task, whether he is a cripple who has lost limbs but is otherwise quite healthy, whether he suffers from a somatic illness which affects him as a whole or whether he has a somatic illness accompanied with psychic disturbances. What can be achieved by people who are legless, armless or blind has been described often enough and it testifies to the energy, persistence and skilfulness of such individuals. But physically they were healthy. The situation is entirely different when the disturbance is not

limited to an auxiliary member but strikes at the vital powers of an individual and affects his entire somatic and psychic state.

We may take an example from behaviour in chronic states following encephalitis epidemica (Dörer).¹ His cases show what different possibilities there are. The patients have to find their way about in a new situation. They suffer from the consequences of their illness at every moment. Their environment is changed, their occupation gone, the whole world alters in relationship to the patient. Isolation follows almost of necessity. Dörer describes the over-sensitive individuals who retreat into themselves, think only of themselves and demand the attention of the environment for their sufferings. They despond, become egotistical and complaining. Then there are those who 'in spite of everything' make greater displays of energy, want salvation at any price, undertake the most impossible things, and appear hunted and harried and turn into self-conscious outsiders. There are also those who remain spectators of life and so on. He wants to illustrate the saying: In the last resort it is a person's character that determines what the illness makes of him. The character shows itself to be modified by the particular culture with which it is interwoven and by relationship to the human community and the latter's response.

(d) *The patient's judgment of his illness*

We can properly speak of attitudes only where the personality observes and passes judgment on the experience with which it is faced. When the judgment is a psychological one the patient makes himself aware of his experience and the manner of it. The ideal of a 'correct' attitude to experience is achieved by patients when they 'have insight into their illness'. Up to now we have got to know some features in patients' attitudes when faced with the content of morbid phenomena. We did this by looking at the *reaction* to the changed psychic life and at the *way patients work through* the contents. We will now describe features in patients' attitudes which appear when they turn away from content to their own selves and the experience they are having, and ask the reason for what is happening. They are in short passing a judgment on their illness either in its individual aspects or as a whole. We are concerned here with everything that can be collectively called awareness of illness or insight into the illness.²

The term '*awareness of illness*' is applied to the patient's attitude when he expresses a feeling of being ill and changed, but there is no extension of this awareness to all his symptoms nor to the illness as a whole. It does not involve any objectively correct estimate of the severity of the illness nor any objectively correct judgment of its particular type. Only when all this is present and there has been a correct judgment of all the symptoms and the illness as a whole according to type and severity, can we speak of *insight*, with the reservation that the judgment can only be expected to reach that degree of accuracy attainable

¹ Dörer, *Charakter u. Krankheit*, 'Ein Beitrag zur Psychologie der Encephalitis epidemica'.

² Pick, *Arch. Psychiatr. (D)*, vol. 13, p. 518. Mercklin, *Allg. Z. Psychiatr.*, vol. 57, p. 579. Heilbronner, *Allg. Z. Psychiatr.*, vol. 58, p. 608. Arndt, *Zbl. Nervenkh.*, vol. 28, p. 773.

by the average, normal individual who comes from the same cultural background as the patient. Clearly the attitude of the personality to the illness will be well defined, well formulated and individualistic according to the intelligence and educational level of the patient. Someone steeped in the natural sciences and psychopathology will have a different attitude from someone with a background of theology or the humanities. We must always take the patient's milieu into account when attempting to evaluate his attitude as a *morbid* one. The same opinion might signify nothing but superstition in a simple peasant but betray a profound personality change, tending towards dementia, in an educated person.

1. *Self-observation and awareness of one's own state.* The patient's observations and judgment can encompass the phenomenological elements, the disturbances in psychic performance, the symptoms in all their complex unity, and the entire personality; in short, it can encompass everything that becomes the subject-matter for psychopathology.¹

Patients' self-observation is one of the most important sources of knowledge in regard to morbid psychic life; so is their attentiveness to their abnormal experience and the elaboration of their observations in the form of a *psychological judgment* so that they can communicate to us something of their inner life. Self-observation depends on interest, on some psychological aptitude, on powers of discrimination and on the sick person's intelligence. Under certain circumstances, however, *self-observation* may appear as a *painful symptom of illness*. Patients are compelled to spend their time analysing their experiences. All their other activities are disturbed and interrupted by this self-observation and the results may be very poor indeed. Reflection on one's own psychic life has here become compulsive and torturing. Such cases have quite unjustifiably given rise to the assertion that self-observation can be harmful. Kant had already warned against it as leading to rumination and madness. Self-observation does not cause illness but some morbid conditions do produce an abnormal kind of self-observation.

There is an *awareness of one's awareness*. We may feel 'torpid', 'dozy' or especially alert. This latter seems to occur sometimes to an abnormal degree. Vision is felt to be extremely clear—as happens in schizophrenia—and this may have some connection. Again there is something quite different in encephalitis lethargica, as in the case of a patient who wrote:

'I have the feeling that I was never so wideawake and aware before the illness. Perhaps it is a result of my constant self-observation and immediately making myself aware of my smallest thought or slightest movement. Every bodily event, such as sneezing, coughing, thinking, fills me with a burning curiosity as to how it comes about. I then try to feel myself into it as far as possible.' The patient described what she called 'registering', i.e. drawing into awareness every physical and psychic event . . . 'this registering spoils enjoyment and anticipation, because I have always to keep telling myself: now you are enjoying yourself; now you have expectations' (Mayer-Gross and Steiner).

¹ See *Z. Neur.*, vol. 6, p. 460, for my analysis of reality-judgment in false perception.

Below a certain level of psychic differentiation, individuals seem to live purely in their environment and lack all knowledge of themselves. In the case of idiocy, the fully developed acute psychoses and deep dementia, the problem does not even arise as to what attitude the personality adopts. It would be better here not to speak of the absence of any awareness of illness but to talk of a loss of personality, which embraces the missing awareness of illness automatically as a part-element. To some extent those remarkable cases of organic dementia that are *quite unaware of the most severe bodily defects* can be said to belong to this category.

In organic cerebral illnesses (tumour, softening, etc.) where paralysis, blindness, deafness or other such severe defects have occurred, we sometimes find an absence of awareness.¹ The completely blind patient says he can see perfectly well, reacts to examination with grumbling resentment, gets indignant and finally helps himself out by creating phrases of his own, like a patient with a Korsakow syndrome. When asked 'what is this?' (a watch held in front of him) he says as he gropes in the air 'you see it there, there it is'. 'What is it you want?' . . . He describes anything possible, the examiner for instance, goes around gesticulating as if he saw everything, swears, maintains it is dark, etc. Redlich and Bonvicini have shown how a general psychic change (torpor, apathy, euphoria, severe disturbance in registration) can make such failure in awareness understandable. Related to this is the fact that some patients can be brought to a certain insight into their blindness for short periods but they immediately forget it again. However, there seem to be particular defects in performance which are difficult to detect by their very nature, where defective insight does not necessarily appear as disintegration of personality. Thus Pick² describes: 'the amnestic aphasic individual who gropes for the missing word and has continuously a feeling of the inadequacy of his speech, whereas the aphasic who talks in telegraphic style or uses infinitives never hesitates for a single moment when speaking. He does not feel that anything is missing which he should look for (even when the patient is aware of his speech defect).' In the same way we can observe the paraphasic flow of talk in patients with sensory aphasia who do not seem to grasp that no one understands them, whereas the patient with motor aphasia hardly utters a word; he makes attempts to speak but gets held fast in his own awareness of disability and gives up the effort.

2. Attitudes in acute psychoses. In psychosis there is no lasting or complete insight. Where insight persists we do not speak of psychosis but personality disorder (psychopathy). Individual phenomena may be judged correctly but, apart from that, the innumerable manifestations of the illness are not recognised as such and inversely there are morbid feelings where the content is a false one and is itself a symptom. For instance, a melancholic patient considers she is rotting away physically or a paranoid patient thinks his thought-processes are being interfered with by external machinations. Patients will say,

¹ Redlich and Bonvicini, 'Über das Fehlen der Wahrnehmung der eigenen Blindheit bei Hirnkrankheiten', *Jb. Psychiatr.*, vol. 29. Bychowski, *Neur. Zbl.*, vol. 39, p. 354. Stertz, *Z. Neur.*, vol. 55, p. 327. Pick, *Arch. Augenk.*, vol. 86 (1920), p. 98. Pötzl, *Z. Neur.*, vol. 93, p. 117.

² Pick, *Agrammatische Sprachstörungen*, p. 54.

'I don't know . . . am I mad or what?' . . . 'I see something but I don't know what, am I imagining it?' . . . 'I don't know what all this means, am I bewitched or what?' In acute psychoses there are transient states of far-reaching insight. The patient returns from his fantastic experiences for a moment and finds he is in hospital; he may even try to expedite his committal to a mental hospital. Sometimes at the beginning of a process we find considerable insight, the correction of delusions, the proper assessment of voices, etc., which one might well consider as recovery and a benign psychopathic state, but insight of this sort is quite transient. We can occasionally observe how it comes and goes within a few hours or days. Sometimes clear consciousness will arise in the very middle of the schizophrenic experiences. The patients will say afterwards 'for a moment I was again aware that I was disturbed', or 'Suddenly I was quite aware that the whole thing was nonsense'. Thus the momentary insight which emerges is more far-reaching than the content of most of the verbal utterances suggest:

Miss B. explained she was not ill but pregnant. It was not a delusion, it was terrible that it had happened and the future was frightening. She didn't know what to do for worry. However, after a few minutes she explained quite spontaneously how situations like this had always passed before (she had had several similar phases from which she had always recovered).

In *states of personality disorder* (psychopathic states) where the patient is almost overcome, insight is still always there. Von Gebstallt described the insight of an anankastic patient as follows:

'She can distinguish between what is morbid and healthy. She feels she is "double" and thinks one day the whole compulsive system will have to "collapse like a house of cards" or "vanish like a ghost". At times the "scales fall from her eyes". She then "sees everything clearly and naturally" and feels very happy, but only for a moment. It is as if one had just left the theatre and "got rid of the scenery". She feels one day she will be able to step out of her illness or wake up from it as if from a dream.'

3. *Attitude to psychosis after recovery.* In order not to be deceived regarding the total picture of the illness, it is more important to penetrate beyond the content of the judgments as expressed (which can so easily mislead us) into the real attitude of the patient to the psychosis from which he has recovered rather than to the acute psychosis while it lasts. We get a clear picture of complete insight, it is true, in patients who recover from deliria, alcoholic hallucinosis or mania. They will say without reservation, and in respect of any one of their symptoms, that they have been ill. They will speak freely and frankly about the psychotic contents which are now quite alien to them and a matter of indifference. They can talk about them simply and detachedly and even laugh about them as if they did not belong to them. The consequences they draw from this insight are entirely understandable; they worry about relapse, the odium of certification, etc.

In contrast with this, cases are not so rare with other psychoses, and in

particular the schizophrenias, where subjectively honest judgments seem to show full insight, but when examined more closely it is clear they do not. Patients will assert they have passed through a mental illness, they are convinced of the unreality of past contents and feel quite well again but they do not talk quite freely about all the contents and even if they want to one notices an inappropriate excitement when they are asked to talk about them. They will blush, grow pale, perspire, give evasive answers and say they do not want to be reminded of the matter because it is upsetting. There is every gradation from cases such as these to others where the patients refuse to answer point-blank. Occasionally we can notice that individual details (persecutions, etc.) are still maintained as real and remarks are dropped such as 'theoretically speaking, I am a bit doubtful whether it was really so or not; but in fact I cover it up or I should be locked up for ever', etc. In cases such as these we cannot talk of full insight. The patient's personality has been lastingly affected by the content of the psychosis—often without his realising it. He is not in a position to look at it at all objectively as something detached from him. He can only deal with it as something troublesome that has to be dismissed. In other cases patients do not remember the acute psychosis as unpleasant. They are even sorry their memory of it is slowly disappearing. They do not like missing the rich experiences which the psychosis brought into their life. Gerard de Nerval began his description of his illness as follows:

'I shall try to record the impression of a long illness that took place in the mysterious recesses of my mind. I do not know why I use the expression "illness" because, as far as I am concerned, I never felt better in my life. Sometimes I took my powers and abilities as twice as great. I seemed to know and understand everything and my imagination gave me immense delight. Should one regret the loss of all this when one has regained once more what men call reason?'

4. *Attitudes in chronic psychoses.* The verbal contents in chronic psychotic states often mislead one into thinking that a great deal of insight is present:

Patients with incurable paranoid disorders of the dementia praecox group may for instance make remarks such as the following: Miss S.: 'my trouble is secondary paranoia'; 'I am suffering from hallucinatory-paranoia of the Krafft-Ebing type; I seem turned upside down'. 'I am suffering from paranoia-sexualis, doctor, my textbook is dated 1893 and there was no dementia praecox then.'—Mr. B., a workman, is asked whether he is ill and replies, 'I have nothing to say on that; I come up against an iron curtain—disbelief. The world takes it as delusion, the world wants reality. I can't prove anything. I keep it to myself, otherwise I shall get shut up in hospital' . . . After an excited period the same patient said: 'It is all absolutely nothing, a fata morgana; I only believe what I see. That is the right principle for nowadays.' Another patient when reproached said: 'I can do that, you see I am mad'.

Although such utterances lead one to expect a far-reaching insight, the patients in fact have none. They are convinced of the reality of their delusional contents and at the same time draw no consequences from their apparent

insight. They have merely learnt what psychiatrists and other people think and turn out appropriate phrases which to them are quite meaningless.

(e) *The determination to fall ill*

Through self-reflection an individual can *see himself, judge himself and mould himself*. But there are forces which work in the other direction. The individual would like to be transparent, and *not see himself*, he would like to deceive himself and veil reality. In the morbid sphere we find a determination to be ill, *an instinctive drive towards illness* and in opposition to this the *inner obligation to keep well*. The will *can interfere* with the psyche which it may darken or illumine, inhibit or yield to, inflate in some respect or repress in another.

When the individual is ill, there are all these various possibilities open to him in so far as a state of illness is not only an objective biological condition but a subjective state as well, in the form of an awareness of illness. This latter is not merely something that happens alongside the illness, the mere reflection of it in consciousness, but it is an effective factor which is an actual link in the morbid state itself.

Objective physical illnesses run a typical course: there is a feeling of discomfort or of general disturbance not yet accepted as an illness. The judgment 'I am ill' arises in the setting of a radical reorientation of the vital self-awareness. This is due to the collapse of the patient's capacity to perform which forces him to stop work or seek medical opinion. What up to then had only been something irksome and did not really count now becomes an important symptom and a justified object of attention. The individual tends to the 'either-or'. Is he well or sick? If he decides he is well, then he should not worry over his irksome symptom, but if he thinks he is ill his discomforts and failing performance justify him in expecting to be treated with consideration, nursed and cured. When there are not only manifest physical illnesses but also a rich interplay of somatic and psychic symptoms and phenomena, the patient's basic attitude can sometimes be of decisive importance for the whole course which the morbid somatic phenomena take.

An attitude of 'not bothering about it' and of 'self-control' in the maintenance of normal life is the direct opposite of *being overpowered* by somatic illness and of that *completely unnoticed surrender* to illness, which appears almost as a *purposive determination to be ill*. Patients want sympathy, want to create a sensation or evade some obligation, want to get a pension or enjoy certain fantasy pleasures. Determination and surrender of this sort play a great part in neurotic illnesses as well as in the development of *pseudologia phantastica* (self-credited, fantastic lying, linked with apparently consequential behaviour) and other hysterical phenomena. After an initial phase of deliberate behaviour such patients are rapidly mastered by the illness against their will. The illness takes its own course (prison-psychoses, for example). One can also give in to manic excitement, one can foster it or manage to control it to a moderate degree.

We find people who have a need to be ill. When anything morbid appears, they will foster it and instinctively say 'yes' to it, though consciously they ask for medical treatment and cure. Their illness becomes the main content of their life, a means of playing a part, calling on others' services, gaining advantage or evading the demands of reality. Generally formulated, we may say that these people are *determined that events for which they are accountable and in which they are understandably concerned shall be taken as mere casual happenings, for which they themselves are entirely irresponsible.* For other people there is the necessity to be healthy at all costs and to be regarded as healthy. They would rather try to blame themselves than feel they are in the grip of some illness. They do not allow nervous phenomena to develop, for instance, because they are continually clearing these up for themselves. They do not want to accept predetermined causal relationships and will try to transform most situations into something understandable, undetermined and something for which they themselves can be held accountable. In abnormal states, if this attitude is taken too far, it may be a relief for them to have to accept something at last as a 'morbid' event.

Where the tendency to be ill has played a part in the development of morbid physical states, a remark of Charcot's becomes most applicable: 'There is a particular moment between health and sickness when everything depends on the patient.'

Psychic behaviour undoubtedly influences physical disturbance. Someone receives a distressing telephone message. On putting the receiver down, his hand and arm feel tired. He gets writer's cramp when writing. He ignores it while at work and after sleep, the disturbance vanishes, but it may be preserved and return at the slightest stimulus. A patient feels 'the sensation of something shooting down his arm' whenever he faces some depressing or disadvantageous situation. Möbius reports on a patient with *akinesia algera*, who 'tried to divert his attention forcibly on to something else, as he supposed thinking about his own state would be bad for him. He only failed when going off to sleep and on waking up. He then felt his thoughts rushing into his limbs, as it were, and how these became more sensitive.'

Kretschmer tried to clarify how a more or less definite determination to do so could maintain and develop a transformation into bodily phenomena.¹ We ourselves can see how the same patellar reflex can be strong or weak depending on whether we determine to reinforce it or not. This normal event can again be seen with hysterical phenomena. In the first place there is an acute affective reflex (e.g. trembling all over). At its initial peak it can hardly be suppressed. The intensity of the reflex then recedes and at this point it is readily accessible to voluntary reinforcement. Through habit, it becomes more resistive again and progressively stronger, and finally it cannot be suppressed even with all the will in the world. Volition can strengthen the reflex for the moment and then silently install itself within the reflex through repetition.

(f) *The attitude to one's own illness: its meaning and possible implications*

Kierkegaard wrote the following from his own experience: 'The worst affliction of all is, and continues to be, that one does not know whether one's suffering is an illness of the mind or a sin.'

¹ Kretschmer, 'Die Gesetze der willkürlichen Reflexverstärkung in ihrer Bedeutung für des Hysterie- u. Simulationsproblem', Z. Neur., vol. 40, p. 354. Kretschmer works out a connection very well but we do not have to make it an absolute and deny the existence of hysteria.

The crude psychopathological categories which we use to classify and apprehend our subject-matter do not penetrate to human fundamentals. The individual has an original source from which he takes his start and which enables him to detach himself from all that happens to him or overcomes him, or that, in so far as he detaches himself from it, is not he. His 'Anlage', sex, race, age, illness—even if it be schizophrenia—are all in some way he himself, in so far as he is inextricably tied to them all. But he can also confront every one of them; he can adopt an attitude in face of them and instead of identifying with them ('this is just how I am'), he can make them his business and by so doing for the first time fulfil what he actually is in himself. He then has to understand this reality of his, interpret it, get to know its content by bringing out the meaning of the given facts. He must question what Nature has added and what comes from him, he must ask what is meaningless and what may be meaningful and what are the actual functions he is given to fulfil. This interpretation that understands and appropriates meaning can never end. The knowledge which we have that is objective and compelling has only limited extent and beyond this the individual's comprehension and attitude towards himself make endless progression. Those categories and images of human existence which are derived from the human world put the individual on the track but the mode of his behaviour goes beyond the explicit knowledge of the moment. It is linked with his essence in a way that cannot be objectified and is the whole that arises from what is given, understood and created, and the manner of its rising is something that no observer can unearth: there may be refusal or self-limitation, love or hatred for one's own foundations, methodical self-discipline bent only on giving form and shape or an inner behaviour whereby man meets himself at last through his own contriving.

If we keep this brief sketch of the basic situation of human life before us, we have to accept the possibility—only rare cases show it clearly—of extremely meaningful behaviour, produced by the vicissitudes of an individual's historical existence, being exhibited by cases which we have initially taken as schizophrenics; this is all our science was able to see and we discover we have reached the limits of our knowledge. What we have called the attitude of the patient to his illness contains a polarity: *objective knowledge* on the one hand, relating to the morbid process, and on the other a *comprehending appropriation of it*, related to the foundations of the patient's own true existence. The objective knowledge is identical in meaning with medical knowledge. The patient may read books or be a psychiatrist himself and apply scientific concepts. But the '*appropriation*' is by contrast an act which is meaningful only in the midst of an in-between existence, which unfolds all the more plainly the more complete the knowledge happens to be. As scientists we should guard against making the average our measure for everyone. The possibilities that are universal in man as man lie hidden and hardly appreciable and only seek expression in rare cases. Existence itself provides the limits for human knowledge and from it arises that element in the individual which confronts each

illness as something other than itself but yet identifies itself simultaneously with what we commonly call the 'morbid' contents. The constant search for meaning, interpretation and inclusion, in respect of everything that seems objectively founded in the disease process, does not immediately signify lack of insight into the illness. Kierkegaard went to the doctor 'as a gesture to human institutions' and presumably also out of the urge to be fully and compellingly persuaded that he could accept as an illness what he had considered to be his sins. He was of course deeply disappointed. Presumably medical categories were as much related to what he was experiencing as the speech of Hottentots to platonic philosophy. It would have been no different in principle if he had been confronted with a psychopathology of the highest conceptual level. The secret contact with God, experienced in all seriousness and in clear consciousness, and in a way in which there could be no knowledge of what God said or intended, is not something to be juggled away in the form of a scientific knowledge of some natural event.

The psychopathologist, however, is always left with knowledge of this marginal nature. He is acting counter to reason should he postulate a fundamental change in Existence itself rather than some disease process which he could confirm empirically. Existence itself cannot be touched by the knowledge or experience of psychopathology.¹

¹ It would be extremely interesting to have a thorough knowledge of the phenomena in cases where there is self-interpretation and in which existential and therefore religious motivations play a part. We know little of Kierkegaard's contact with the doctors. Nietzsche's conception of himself in the context of his illness is fairly informative (reported in my *Nietzsche*, pp. 93-9). In the psychiatric literature see Gaupp, 'Ein cyclothymer Psychiater über seine seelischen Krankheitszeiten', *Z. Neur.*, vol. 166, p. 705.

CHAPTER VIII

THE TOTALITY OF THE MEANINGFUL CONNECTIONS

(CHARACTEROLOGY—CHARAKTEROLOGIE)

§ I. DEFINING THE CONCEPT

It is always of first importance in psychopathology that we should make unequivocal use of well-defined concepts. No concept, however, has to carry so many meanings or is put to such multiple use as the concept of personality or character.

(a) *What personality really is*

We see the personality in the particular way an individual expresses himself, in the way he moves, how he experiences and reacts to situations, how he loves, grows jealous, how he conducts his life in general, what needs he has, what are his longings and aims, what are his ideals and how he shapes them, what values guide him and what he does, what he creates and how he acts. In short, personality is the term we give to the *individually differing and characteristic totality of meaningful connections* in any one psychic life. Within this we now have to make a number of distinctions:

1. *Personality does not include everything meaningful.* For example, the way in which a sudden sense-perception attracts attention is a matter for general understanding and without relevance to personality, so too with the fascinating power of anything new, etc. Nor do we include in the personality any of those psychic connections which we look at *in isolation* and which *do not carry any meaning on* into the total context but are handled as separate fragments though we may well look at them from within, for their own sake. We just say that all such events have something impersonal about them, even though we understand their meaning. Where the psychic life consists exclusively of such fragments, as in fully developed psychoses, we do not speak of personality at all (though we may still notice something essentially individual in the background of the acute events, showing in the perplexity and the unexpectedly clear judgments).

The psyche, so far as we take it in general as *consciousness and experience*, is not the individual personality but simply the universality of every psychic existence. Personality or character first come into being through the complex unity of content in any one individual.

2. *A totality of meaningful connections does not always mean personality.* For example, an idiot may run away from some terrifying object. We under-

stand this and form some over-all picture of the meaningful connections in his psychic life, yet we hardly conceive of him as a personality. For an individual to be a personality he must have some *feeling of himself*, some *sense of the self as an individual*. We do not mean by this the abstract self-awareness which accompanies all psychic events in identical fashion but a sense of self that is aware of its own particular self in all its historical identity. This is *personality-awareness* as opposed to mere sense of identity. There is no personality without self-awareness. Characterology ends at the lower levels of psychic life, where the self-aware personality also ends. Animal characterology, whether of types or individuals (as with chimpanzees) is of a fundamentally different order. It is an analogous understanding of different types and modes of behaviour of which the creatures themselves are quite unaware.

3. *Not every individual variation is to be ascribed to personality*, and not those individual variations of the psycho-physical apparatus which form the substrate of the personality. Capacity for performance, memory-power, fatiguability, learning ability, etc., every such basic characteristic of the psycho-physical mechanisms, talents and intelligence, in short, all the working-tools of personality which condition its development but are not the personality itself, have to be kept rigidly separate if we want to differentiate within the personality the aspects that have no understandable meaning and the meaningful connections themselves. The close connection between intelligence and personality, even if it is of a reciprocal nature, should not lead us to regard them both as one. Intelligence is a working-tool and we test, measure and assess its power according to its performance. Personality is a connection in the self, aware of itself. The former is passive material, the latter is personal activity moulding this material according to the personal interests, aims and moods. The former is a precondition which makes personality possible in the first place and permits it to develop. The latter is a force which puts the tools to work and if they were not so used they would only deteriorate. The concept of dementia or mental defect as generally current relates to destruction of intelligence and personality.

Summarising we can say: personality is constituted from psychic events and manifestations in so far as these point beyond themselves to a single, fully understandable context, which is experienced as such by an individual who is clearly conscious of his own particular self.

(b) *How personality comes into being*

So far in our remarks personality or character has been conceived as something which is as it is. It has been there from birth onwards and essentially does not change but only reveals itself, it becomes aware of itself but does not produce itself. This however is only one aspect, which may mislead. Personality is just as much a *development with its consequences*, and attains reality in the world through every kind of situation and through the opportunities and objectives that spring therefrom. Personality has an historical basis

and is a *self-creation* of man in time. It is not merely the expression of something that has always been as it is, manifesting itself in time. In this sense personality only shows itself in the life-history, in as much as this takes in the whole course of the individual's life with all its possibilities and decisions.

Thinking about personality therefore is full of ambiguities as with all psychology of meaningful connection. In so far as it affirms *that something is so*, it turns into knowledge; in so far as it throws light on *what can be*, it works as a call to freedom.

(c) *The understandable personality and its opposite:*

As our knowledge of meaning grows we are forced up against the non-understandable. At any given moment the totality of meaningful connections is grounded in the non-understandable. From the external point of view, the non-understandable is the *reality of the world* which advances on each individual and determines his life from birth through what it gives or withholds, demands or lets pass. From the inward point of view it is the biologically given *Anlage* on the one hand and on the other it is the *freedom* of the individual as potential 'Existence itself'. This latter is not an object for knowledge nor can it be investigated, and as psychologists and psychopathologists we only catch a glimpse of the individual, in so far as he becomes an object for our investigation. The non-understandable element, which is the carrier into actuality of everything understandable, we try to grasp as something biological.

1. The meaningful connections, instinctual activities, emotional drives, reactions, acts, aims and ideals always call for the additional construct of an *Anlage* which manifests itself in these actual conscious psychic events and their expression. We also call this *Anlage* personality. By so doing we mean to convey the extra-conscious disposition that underlies the totality of the meaningful connections. This will indicate that, although the personality-*Anlage* is wholly understandable in its manifest connections, we cannot understand it in its actual existence as a whole, and as such it has to be explained, for example, by the laws of heredity and grasped as a constitutional entity.

2. That underlying factor of personality which we call its *freedom* is not an object but a limiting factor in personality research. We may say that one individual is a 'personality' and that another is not. Such statements are philosophical assessments and not empirical findings. They are meant to convey that the *truth of Existence itself* seems present in the person. Philosophically we may be able to throw some light on what are then the possibilities but we can gain no empirical knowledge of their actuality. From the ideas of Existence itself we can build ideals which philosophically we at once dismiss as false. By the expression 'personality' we are perhaps conceiving some ideal of maximum unity as a maximum wealth of particulars in the individual, and he approximates to this ideal unity all the time as he adapts to the actual circumstances of his life. Consistent thought and action, coherence, and reliability are all attributes of this ideal personality. Personality is then

evaluated in terms of the consistent thinker, of the individual with a resolute and consistent will, or an artistic style of life. So we come to speak of different types of ideal personality, for example the sage, saint or hero. But none of these concepts of personality concern us here.

Not only from the philosophical point of view but also in the interests of research we should be fully aware of the limits set to our investigations when we are confronted with the human individual. There are no prohibitions on research, it is true, and we must try to grasp whatever we can in fact grasp, confirm, examine and investigate. But we shall come to grief in our enquiry and go astray whenever we think we know too much or consider we can know the whole or the fundamentals. Where science is baffled radically, investigators may then know that they are entering an area where they no longer confront mankind as scientists but as mere fellow-men. The individual as 'Existence itself' is more than the totality of his meaningful connections and more than the sum of his biological *Anlage*. All our attempts to define the concept of personality or character have something in common. Personality is always something *inconclusive* and points on to *something else*. In subject-matter the psychology of meaningful connections remains mid-way between all the modes of the non-understandable, yet this only becomes manifest in fact through its operations. Accordingly, the personality which we understand points in the first place to the non-understandable from which it has arisen, that is the *constitution* and all kinds of biological determinants, and in the second place points to the non-understandable which the ever-changing personality both manifests and serves, that is *Existence itself*, the transcendental source and eternal goal of man. In personality we do not see any final Being-as-such, an end in itself. Empirically it can be at times the totality of what is understandable but always in such a way that something remains in the person whereby what is empirically extremely improbable always remains possible. At any moment freedom can have birth and give everything a different meaning. The personality as understood is not what an individual actually is but an empirical and inconclusive phenomenon. What an individual really is himself is his very Existence in the face of Transcendence, and neither of these are ever a subject for scientific enquiry. Existence itself cannot be grasped as personality but it reveals itself in different personalities, which in themselves can never be final.

§ 2. METHODS OF PERSONALITY-ANALYSIS

Analysis of personality has been practised throughout the years by psychologists, others who study mankind, philosophers and psychiatrists, all making use of similar concepts and similar methods.¹ These various efforts at personality-study differ from the biographical approach to personality in that they

¹ Analysis of personality (characterology) is an ancient pursuit: e.g. Theophrastus, *Characters*. Cp. also Bruno, *Das literarische Porträt der Griechen* (Berlin, 1896). Kant, *Anthropologie*. J. Bahnsen, *Beiträge zur Charakterologie* (Leipzig, 1867), 2 vols. (He is the author of the term

try to find out something *typical* that can be given a general formulation. The biographer on the other hand is confronted with the unending task of comprehending a concrete personality and here personality-study may help him to a certain extent. The business of personality-study then is to discriminate the types, the schemata which, in contrast to the concrete personality, stand out plain and clear no matter how they ramify, and it makes use of these, wherever possible, to give some conceptual form to the whole vast range of personality formation in human beings.

Each personality has an infinite reality and potentiality. At any given moment it is the form taken by its own historical contents, a form that has been shaped by fate, calling, function and effective participation in the actual cultural heritage. Thus man in his concrete and complex unity becomes subject-matter for the humanities and social sciences and is not even exhaustible by them. Our conceptual psychological analysis can only offer relatively crude means of orientation. We will now present the methods of such analysis:

(a) *Awareness of the possibilities of verbal description*

Language provides enormous resources on which to draw for the characterisation of human nature. Klages counted four thousand words in German that denote something psychic and concern aspects of personality, and he is certainly right in pointing out how the infinitely fine nuances of these various terms have got lost in the ordinary usage of the words and have to be rescued deliberately. Whereas the psychologist finds difficulty in securing sufficient terms for dealing with psychic mechanisms, he is here embarrassed with abundance and has difficulty in finding those differentiations of personality which can be taken as really fundamental and profound. No constructed system of personality characteristics is possible which will be comprehensive and generally valid. We can only work through the available analyses and appropriate to ourselves the language of poets and thinkers and in this way achieve some psychological grasp through direct understanding. Only so shall we learn to formulate what we have grasped and these efforts will help us to be flexible, cautious and free of bias. We can make ourselves aware of the way in which language, although in fact it works without any system, is itself permeated by an inexhaustible host of potential systematisations. Language usually holds an unnoticed sway in every psychiatric description—whether meagre or full—and ranges through all the dimensions of social, ethical and aesthetic assessments, quantitative assessments too, as well as the concepts of

*charakterologie'.) Klages, *Prinzipien der Charakterologie* (Leipzig, 1910); 7th and 8th edns., 1936, with the title *Grundlagen der Charakterlunde*. Cp. also p. 262 with its references to the psychology of meaning and p. 221 with references to the study of physiognomy and the theory of expression. There is an extensive and varied literature on this, degenerating into triviality, credulity, quackery and mere enthusiasm, which has increased in quantity since 1920. So far we have no clear, unambiguous science of characterology—or scientific study of personality. There is no method but a conglomeration of all sorts of interests besides scientific ones. Paul Helwig, *Charakterologie* (Leipzig, 1936), gives a good critical review.

the psychology of expression and physiognomy. To be aware of language is a continual reminder of the infiniteness of human nature.

The art of characterisation and personality analysis cannot be methodologically defined nor learnt but it depends on this mastery of language and therefore, at any given time, on the current cultural trends. It will change with general values and modes of thought and in particular with the range of possible human experience.

(b) *The concepts of personality-study are those of the psychology of meaningful connection*

We might say that all psychology of meaningful connection is personality-study, in so far as it concerns itself solely with the connection of what is meaningful in terms of the whole man and tries to grasp the particular quality of an individual.

According to the basic schema that prevails automatically, the meaningful elements are grounded in certain constant '*properties*'. The personality is then conceived as a sum of these properties or as a meaningful connection between them. Properties constitute the lasting foundation. Particular attitudes are thought to arise from a combination of such properties, and there develops an unending play of properties in combination. This sort of language may be unavoidable but as a conceptual foundation for personality-study it is misleading. It robs the personality of movement and, even more important, it removes the dialectic of opposites in everything meaningful.

Suppose we wanted to understand complete personalities as a *combination of properties* and therefore would like to know which properties we should understand as predetermined opposites, which properties were to be understood as linked with which and which were mutually exclusive, we should be landed with some remarkable experiences and learn that our aim was impossible. In every psychology of meaningful connection each contrasting pole is equally understandable and correspondingly the opposites are bound directly to each other. All living that is meaningful functions in opposites. The matter of our understanding dies, as it were, once it has been unilaterally and exclusively fixated at the one pole only. The power of living lies in uniting the opposites, in overcoming them through integration and not in a limited unilateralism. Courage lies in the overcoming of fear and he who has nothing to fear is no longer courageous.

As a result of this basic relationship of the contrasting poles, all the ideal types of '*properties*' and personalities that have been constructed tend to fall into *pairs of opposites*. Whereas empirical personality-study of the individual in his unceasing development may at any time confirm Goethe's saying, 'he is no closely wrought ingenious book but a man with his contradictions', the theoretical constructs, on which empirical research depends, are wholly characterised by such contrasting poles. This means however that these constructs are not actual personality-types but constructs of ideal types whereby

at times we are helped to understand certain connections. They concern perspectives of understanding, not material being. Such personality constructs, therefore, as have been achieved remain inconclusive so far as human reality is concerned. They are not final diagnoses of a man's quality but a challenge to everyone who would understand others as well as himself to look to the freedom of the potential self. A quality that is absolute in the sense of being finally established always denotes we have reached the limits of our understanding. The quality of a man can never be stated with absolute certainty as to the future and, so far as the actual manifestation has gone, can only be fixed in retrospect by ignoring the play of chance and free decision. Personalities are never whole and conclusive. If they were, they would be without life and potentiality, one-sided and stultified, grown into an automaton.

Thinking about personality therefore returns us via the 'ad hoc' assumptions about 'properties' to the fusion of these in meaningful movement. The turning of qualitative being into something with properties will however always remain a basic shortcoming of personality-study.

(c) *Typology as a method*

If we think of a property as something lasting, understandable in its manifestations, in modes of reaction and expression and the general behaviour of the individual, we are in process of developing a type. We form the property and all its consequences into a construct and viewing it as a whole recognise it as something obviously connected. If we then make one or several such properties the basis of a comprehensive totality and proceed to apply it to the person as a whole, noticing the meaningful connection between this and what the individual experiences and does, we are in the process of designing a personality-type.

Such types remain *ideal types* even if we have conceived them from our scrutiny of real people. Their general nature is revealed through the individual, it is not arrived at by deduction or abstraction, but duly perceived by omitting everything that does not belong. They do not come into being as statistical averages but remain purely formal. They only occur in reality as approximate forms, as classical borderline cases. Their truth rests on the inner connectedness of the meaningful whole; their reality, except in the rare borderline case, rests on the fragmentary emergence of the type which is limited in reality by other factors, not to be understood in terms of the type, which cannot therefore exert sole influence.

Every type is of universal application. But individuals lend themselves more or less readily to various types. The types are mutually related in such a way that contrasting types do not exclude each other in the actual individual but are bound directly to each other.

Thus the whole meaning of types makes it impossible for any one individual to be sufficiently characterised by any single type. What corresponds more or less to a type in the concrete individual is always only one aspect of

his nature. This is indeed clarified by the attempt at classification but it still does not suffice to describe the man as a whole.

'Type' carries quite another meaning when the term is used to convey a *real type* as against an ideal type. The reality of the type then rests on something that is not understandable, a biological source, a constitutional factor. As a result the type can only be established by making correlations of frequency and can only be partly understood.

Intermediate between the ideal and the real type lie *descriptions of character* based on experience. These have acquired a certain validity for the time being though the principles on which they rest are not really clear.

§ 3. ATTEMPTS AT BASIC CLASSIFICATION OF CHARACTER

Faced with the various classifications of personality we get an impression of endlessness. Almost every fresh contributor thinks he has grasped the essentials of human nature. He sets out his schema rather dogmatically and at first tends to convince uncritical readers. But there is a considerable difference in the various classifications according to the writer's cultural level, the vividness of his observations and in particular the depth of his metaphysics with which are linked his initial presuppositions about human nature. To represent all that has been thought in this field would need some historical account of the various human types which those who study personality have created. In every age certain forms intrude into the current philosophy as essential forms of human life, usually as ideal figures of good and bad, examples of contrasting ideals. We shall only remind the reader here of the enormous literature which embodies such ways of thought, and set out below what seems to be of general importance in all this:

(a) Single, individual forms

In the first place we have what constitutes the unfailing foundation of all personality-study, that is, the vivid perception of individual forms, which imprint themselves unforgettably on the memory and live on in our imagination. Figures from poetry, historical figures whose biographies are known, living people we have met, are all indispensable for us to keep in mind. This wealth of inner vision, which is there long before concepts arise but is remarkably fruitful, is a precondition for any thinking about personality and every psychopathologist needs to widen and deepen this vision constantly.

Scientific knowledge enters with the tendency to conceptualise and introduce some systematic order, along with the tendency to methodical comparison of ideas and experience. Systematic classifications are of several kinds: *ideal types*, general systems of *personality-structure*, and the setting up of *real types*.

(b) *Ideal types*

Typologies which are systems of ideal types outline the personality possibilities in a vast number of *polarities*: self-assertion and submissiveness, happy and sad, extravert and introvert, etc. This schema of opposites appears without exception in all typologies of personality.

The intention is to give pairs of opposites as precisely as possible, define their meaning and distinguish them and keep them apart from human reality. Most important of all, the opposing pairs are not allowed to flow together and be submerged in one contrasting unity.¹ To be ideal, a typology of personality would first have to make a systematic classification of all the possible polarities once they had been precisely defined, a mathematics, as it were, of the meaningful; after this was done it could go on to limitless empirical analysis.

The simple schema of opposites becomes more refined if the meaningful 'properties' ramify out into other dimensions from a single polarity. For example, polarities have been conceived where both poles have a positive value, e.g. frugality and generosity, and there are deviations from both poles, e.g. meanness and prodigality. Or in some systems, a Mean is conceived lying between two extremes, something moderate, genuine and life-enhancing. This in turn is either conceived of as undialectical, an unequivocal quantity avoiding the extreme, or dialectical, i.e. a comprehensive unity with inner tensions and including the extremes within itself as constant possibilities for deviation.

It becomes clear that in all these constructs of ideal types, the types that seek to be comprehensive and make a synthesis cannot be accurately described at any time, while the single type-polarities are unambiguous and clear. But this lack of ambiguity is bought at a price, namely that the single type has to be a deficiency-type and the single, well-defined characteristic acquires a negative value, run aground as it were, and what has become the manifest characteristic is nothing else but a human failing.

(c) *Personality-structure in general*

Klages made the most effective attempt to bring some order into personality-structure. His study of personality outstrips all the previous efforts. He differentiated between purely formal characteristics of personality, which he termed the *personality-structure*, and what he called the *personality-qualities*, including the instincts, drives and interests.

Within the *personality-structure* three distinctions are drawn:

1. The *tempo* of emotional excitability, i.e. the duration of the emotional wave, the strength of the reactivity. These constitute differences of 'temperament' and there are fluctuations between phlegmatic and sanguine.

¹ Psychiatric attempts to create a personality-classification suffer I think from creating *only one* pair of opposites, which then have to contain much heterogeneous material and become confusing although the central theory may be quite clear. Jung, C. G. *Psychologische Typen* (Zürich, Rascher, 1921); Kretschmer, E. *Körperbau u. Charakter* (Berlin, 1921).

2. The predominant *prevailing mood*. This fluctuates between melancholic and euphoric, between dyskolos and eukolos.

3. The *formal properties of volition*. There are fluctuations here between strength and weakness of will. Strength of will appears as an active force in all forms of energy and spontaneous action and as a passive strength in perseverance, tenacity, resistance and, reactively, in obstinacy and stubbornness.

Klages then proceeds to contrast these three structural forms with the *personality-quality*, its substance or essential content as it were. This he terms the system of *mainsprings* (the personality in the narrower sense as against temperament, prevailing mood and formal disposition of the will-power). This is the personality proper. It contains a polarity. Instincts are confronted by the will, conscious goals and purposes are set against the gratifications groped for by the instincts and, alongside the qualities of the world that are merely felt, there are consciously recognised and judged values. On the one hand there are contents, the material out of which the personality is forged, and on the other hand is the will which gives these contents form, inhibits, fosters or suppresses them but cannot add anything to them. The will, from the way it is experienced, always implies an element of control, self-maintenance, awareness and activity. But in all the instinctual drives there is an element of simple permissiveness, self-surrender, unawareness and passivity. On the side of the will and the drive to self-maintenance we find reason (realism, discrimination, sense of duty, conscience) and egoism (acquisitiveness, ambition, caution, craft). On the side of instinctual life and self-surrender we find enthusiasm (drive for knowledge, love of truth, thirst for beauty, love) and the passions (greed, lust for power, sexual drive, revenge).¹

Klages also most skilfully constructed a number of ideal personality-types lying outside this personality-structure. They are more concrete and truer to life than the theoretical structure which is simply an aid to reasoning when one is trying to classify. The great variety of ideal types is due to the many perspectives according to which man as a whole can be understood. Klages started from basic mood and sensibility, from the tempo and inner tensions of psychic life, from will-power and the mainsprings of the drives and their specific hierarchy.

In contrast to all this, as a last perspective, Klages takes the mode of operation whereby an individual becomes aware of his own self through *reflection*. The personality develops passively out of a given *Anlage* and over against this is the personality that develops reflectively, through the work an individual does on himself and through his own inner activity.

But every analysis of personality halts at the point where man reaches inner superiority over himself and can properly be himself. The individual, who

¹ My exposition does not represent Klages' teaching exactly. He rested everything on his metaphysics, according to which the Will (the spirit) enters life from without as a destroying force, as an absolute devil coming in to the full self-sufficiency of life. 'Personality' only exists in the transitional periods when life is not completely destroyed but in process of being destroyed. Klages' position here is a matter of faith and so cannot be disputed.

becomes matter for his own study without letting this drop to the level of being mere datum or falling himself prey to the devastating effects of reflection, can never be characterised in terms of psychological description.

Once the study of personality starts to pigeonhole people into pure types, it comes to grief. In the first place an individual can never be exhausted by any one type, since this only serves to delineate one aspect of him. In the second place every complete schema of types must be relative, only one out of many possibilities. Thirdly, personality is always part of its own situation which has a host of possibilities that can never be known absolutely. The personality is always in development and can never be sealed off. Speaking scientifically and humanly, with living people we cannot draw a line as it were and balance the accounts, so as to discover what a person really is. To circumscribe a personality-disorder (psychopathy) with the 'diagnosis' of a type, is doing violence to the situation and falsifies it. But in simple human terms, to classify and track down someone's personality implies a categorisation which, if we look at it closely, is insulting and makes any further communication impossible. We should not forget this point when we are trying to throw light on matters by conceptualising the human personality.

(d) *Real types*

These arise from the restriction which reality imposes. They take advantage of the ideal constructs of what is understandable but as soon as empirical observation enforces the confusing unity of the understandable and its opposite, they abandon the constructs. The weakness of the real types which have been formulated so far is that their reality-basis is in doubt. They compromise between meaningful constructs and theoretical developments from isolated biological observations. They are satisfying in a few classical cases, giving illustrative 'clinical pictures' but since they are inadequate or not applicable in the great mass of cases, they lack universality. There is no systematic classification of them as would befit their origin in given reality. They can only be enumerated. Thus *Kretschmer* devised three personality types, each moving between two poles, between excitable and sluggish (*schizothyme*), gay and serious (*cyclothyme*) and explosive and phlegmatic (*viscous*). The master-concept into which fall these three sets of polarities, fails because one can only enumerate the concrete sources for these meaningful observations. The true significance here is that underlying these real types there is a biological reality which one day we may be able to grasp (cp. the chapter on constitution). Such a reality as this is quite different from the phenomenon, since in the last resort the phenomenon can be there without the reality as we conceive it. For instance, Luxenburger only accepts schizoid personality-disorders (psychopaths) as such when there is evidence of some blood-relationship with a schizophrenic. There are also schizoid personality-disorders (psychopaths) where this hereditary position does not apply. 'Kretschmer's types if seen in biological proximity to schizophrenics, manic-depressives or hereditary

epileptics can only be regarded as genotypically related to these hereditary illnesses.'

§ 4. NORMAL AND ABNORMAL PERSONALITIES

There is no simple answer to the question when and why personalities are abnormal. We have to bear in mind that, speaking generally, 'abnormal' is not a matter of statement but an evaluation. The facts themselves give rise to this evaluation where the personality is considered as the totality of the meaningful connections. Personality characteristics vary according to the *degree of unity* or the amount of scatter in the meaningful elements in a given individual. The more scattered and disconnected these elements are the more abnormal the individual. Alternatively we observe that everything meaningful in the given unity achieves a certain *equilibrium and harmony* which together form a whole, then the more disharmony there is and the less equilibrium the more abnormal the individual (*déséquilibré*). Or we pay attention to the *polarities and their synthesis* in meaningful living and then the more one-sided the expression is the more abnormal we find it. These, however, are all extremely general points of view, so that we never find the norm fully expressed in any single individual.

The systematic principles indicated in the above paragraph are only to help in the actual perception and representation of exceptional personalities. They are not the source from which such perception and representation derive. Valuable results are obtained in psychopathology through types created by the intuitions of those who investigate and give us impressive and unforgettable delineations of personality that we can recognise. These personality-types are potentially innumerable and they are real types, designed with the help of a number of ideal types. We can only enumerate them, group them and use them as illustrative examples. This is a matter for special psychiatry, and we will comment briefly as follows:

We distinguish *two kinds of real types*: 1. Abnormal personalities, that simply represent dispositions which deviate from average and appear as *extreme variations* of human nature. 2. Personalities that are genuinely ill, where a change has taken place in their previous *Anlage* as a result of some additional process.

I. VARIATIONS OF HUMAN NATURE¹

Variations of human nature that deviate from the average cannot be called sick as such. Nor do we usually call the least common variations particularly abnormal. In practice we more often investigate those which come within the orbit of clinics and consulting rooms. 'Personality-disorder' (psychopathic personality) is the term which we use in this connection for all those 'who

¹ Attention should be drawn to the oldest and most basic of psychiatric contributions: J. L. A. Koch, *Die psychopathischen Minderwertigkeiten* (Ravensburg, 1891–3). Then to Kurt Schneider, *Die psychopathischen Persönlichkeiten*, 4th edn. (Vienna, 1940). Here there is clear orientation, unprejudiced views and ready access to the entire literature.

suffer from their abnormality or whose abnormality makes society suffer' (Kurt Schneider).

Classification according to the basic concept which characterises the group gives us the following: 1. *Variants of basic personality-disposition* which Klages differentiated according to the 'personality-structure'. 2. Variations of a supposed biological substratum which has been termed '*psychic energy*'. 3. Variants induced by the basic dialectic of all the meaningful elements, the dialectic of *self-reflection* (*self-reflective personality-types*).

(a) *Variations in the basic personality-dispositions*

1. *Basic dispositions of temperament.*¹ An abnormally excitable temperament (*sanguine*) reacts quickly and in lively fashion to every kind of influence, it lights up immediately but excitement dies down equally fast. The individual leads a restless life, and likes extremes. We get a picture of vivacious exuberance or of an irritable, troubled hastiness, a restless psyche with a tendency to extremes. The opposite pole is then a *phlegmatic* temperament. Nothing moves this individual out of his peaceful placidity. He hardly reacts at all and when he does, he does so very slowly with prolonged after-effects.

An abnormally cheerful (*euphoric*) individual bubbles over happily. He is blissfully light-hearted about everything that happens to him and is contented and confident. The happy mood brings a certain excitement with it, including motor-excitement. A *depressive* on the other hand takes everything hard, his mood is always clouded, he sees the worst of everything and tends to keep quiet and immobile.

2. *Basic will-power.*² Basic powers of will differ greatly from one man to another, independently of drive or content. *Weak-willed* individuals make any effort of will with much difficulty. They tend to let everything slide. Those who have *no will-power at all*, the drifters, simply echo any influence that impinges on them. They cannot resist and follow wherever they are led by opportunity or other people for better or worse. They may make a show of momentary energy but never stick at anything unless an unchanging environment keeps them to it. Otherwise they follow every fresh impulse evoked by a world that constantly transforms them. They change colour with their environment. *Strong-willed* individuals bring unusual energy and perseverance to all that they do. Their activity pushes everything else aside with a relentless assertiveness. It is as if they could not shake anyone's hand without crushing it, or take up a cause without realising it.

3. *Basic dispositions of feeling and drive.* An individual's nature is most decisively determined by the complexity or the poverty of his drives. Abnormal variations in the quality of the personality proper, of the whole system of instinctual and emotional dispositions, are more profoundly important for the

¹ Kretschmer gives an admirable portrait, *Körperbau u. Charakter*, 2nd edn. (1936), pp. 118-35.

² Birnbaum, *Die krankhafte Willensschwäche* (Wiesbaden, 1911). E. Grassel, *Die Willensschwäche* (Leipzig, 1937).

nature of the personality than all the other variations in structure, temperament and will-power. There is a more definite cleavage here between people with different dispositions than anywhere else. The most frequently investigated of these well-marked personality-variants is that of '*moral insanity*' (Kurt Schneider's 'affectionless' or 'unfeeling' psychopath). This term has been used to describe personalities who come at the end of a series of transitional states and exhibit the characteristics of the 'born criminal' to an extreme or rare degree.¹ They strike us as strange creatures, highly exceptional in many ways: their destructive drives are unaccompanied by any sensitivity for what is right, they are insensible to the love of family or friends, they show a natural cruelty alongside isolated displays of feeling that seem strange in the context (e.g. a love of flowers), they have no social impulses, dislike work, are indifferent to others' and their own future, enjoy crime as such and their self-assurance and belief in their own powers is unshakeable. They are completely ineducable and impervious to influence.

Another such type is the *fanatic* who devotes himself wholly to a single cause and is blind to everything else. He does this so unconditionally that he will unconsciously risk his whole existence on its behalf. Credulous belief, the exaggeration of some isolated purpose out of all context is a special interest of their existence. They are driven, harried people who get a specific and agonising pleasure from their identification with some solitary cause. Kurt Schneider differentiates the '*combative fanatic*' (aggressive fanatic) from the '*damped-down or more reserved fanatic*'. The former will assert their rights or their supposed rights and are 'querulants'. The latter merely tend to demonstrate and nurse their convictions. They are the born sectarians, cranks and representatives of esoteric doctrines for which they live with an inner self-assurance and proud contempt for everyone else.²

(b) *Variations in psychic energy (the neurasthenic and the psychasthenic)*

We speak of neurasthenic and psychasthenic syndromes. They may be characterised perhaps as follows:

1. *The neurasthenic syndrome*³ is defined by 'irritable weakness'. There is on the one hand exceptional irritability and sensitivity, a painful sensibility and abnormal responsiveness to stimuli of all kinds. On the other hand we find abnormally quick fatigability and slow recuperation. Fatigue is subjectively

¹ Longard, *Arch. Psychiatr.* (D), vol. 43. F. Scholz, *Die moralische Anästhesie* (Leipzig, 1904). Dubitscher, *Z. Neur.*, vol. 154 (1936), p. 422. Binswanger, *Über den moralischen Schwachsinn mit besonderer Berücksichtigung der kindlichen Altersrufen* (Berlin, 1905).

² Kolle, 'Über Querulant', *Arch. Psychiatr.* (D), vol. 95 (1931), p. 24. Stertz, 'Verschrobene Fanatiker', *Berl. klin. Wschr.*, vol. 1 (1919). Grohmann, *Die Vegetieransiedlung in Ascona* (Halle, 1904). 'Ein soziales Sondergebilde auf psychopathischer Grundlage', *Psychiatr.-neur. Wschr.*, vol. 1 (1904). Kreuser, 'Über Sonderlinge', *Psychiatr.-neur. Wschr.*, vol. 1 (1913-14).

³ Beard, *Die Nervenschwäche* (D), (Leipzig, 1883). Möbius, *Zur Lehre von der Nervosität. Neurol. Beiträge. Heft. 2* (Leipzig, 1894). Kraft-Ebing, *Nervosität u. neurasthenische Zustände* (Vienna, 1899). Müller, *Handbuch der Neurasthenie* (Leipzig, 1893). Binswanger, *Die Neurasthenie* (Jena, 1896). Bumke's *Handbuch*, vol. 5.

strongly felt. There are innumerable discomforts and pains, a dull feeling in the head, everything seems affected and the patient feels battered with intense feelings of fatigue and weakness which turn into lasting phenomena. This syndrome covers all those phenomena that are known as sequelae of fatigue, of exhaustion, overwork and excessive effort but no more than these, and provided such phenomena appear after the slightest stimuli or effort or remain as permanent accompaniments through life.

2. The *psychasthenic syndrome*¹ is less easily detected. The phenomena are many and varied and are held together by the theoretical concept of a 'diminution of psychic energy'. The diminution shows itself by a general low level of psychic resistance to experience. The individual prefers to withdraw from his fellows and not be exposed to situations in which his abnormally strong 'complexes' rob him of presence of mind, memory and poise. Self-confidence deserts him. Compulsive thoughts arrest consciousness or chase through it and he is tormented by unfounded fears. Indecision, doubts, phobias, make activity impossible. A host of abnormal psychic and emotional states are scrutinised and analysed by a compulsion-like self-observation. This results unavoidably in an inclination to do nothing and daydream, and this makes all the symptoms worse. There is occasionally a rush of intoxicating happiness from an impression made by personalities that are idolised but imperfectly understood, or by some quite ordinary landscape which suddenly seems most magnificent, but usually this is paid for by a painful relapse into morbid symptoms. The psyche generally lacks an ability to integrate its life or to work through and manage its various experiences; it fails to build up its personality and make any steady development.

On rare occasions syndromes such as these occur as states of genuine exhaustion or as concomitant phenomena of disease processes. (Some of Janet's cases of psychasthenia are obviously in part schizophrenic.) But they are so closely linked with meaningful contents of the individual life-history that they appear more as personality-variants than syndromes, and as such can be characterised by the diminution of psychic energy and in fact are often linked with some somatic and physiological weakness though they may also occur without this.

Thus one could say that all the variations of personality and temperament may occur as psychasthenia. They may be termed this when there is a prominent element of weakness, a lack of energy and a reduction in effectiveness, when drives are weak and faint, emotion less vivid, the will powerless and performance in any direction grows modest. The best way to describe this type is to make use of the analogy of deficient psychic energy. There is no doubt that something of this sort does exist among the congenital variations.

There are a number of peculiar phenomena which in a mild degree are widespread and can at times also occur as symptoms of phasic and other illness but which we are accustomed to call symptoms of personality-disorder when

¹ Janet, *Les obsessions et la psychasthénie*, 2nd edn. (Paris, 1908).

they are both numerous and troublesome and when there is no manifest illness but something like an illness that dominates the individual's whole life. To these belong compulsive phenomena, the carriers of which are called anankasts (on the basis of the uncertainty of the self, according to Kurt Schneider), also depersonalisation and derealisation, etc., the carriers of which are called psychasthenics.

(c) *Reflective personalities*

The personalities we have depicted so far may be understood in terms of a constitution which they have always had. The so-called reflective personality is to be distinguished from these as a personality-formation resulting from awareness of self, from attention directed to one's own nature together with the purposive wish to be 'like this or that'. To this group belong, for example:

1. *Hysterics.* In psychiatry the term hysterical has several connotations: physical symptoms (hysterical stigmata), transient abnormal psychic states with altered consciousness (accidents mentaux) and hysterical personality. It is unfortunate that the same term is given to them all, particularly as hysterical personality is ordinarily used to cover very heterogeneous material. Janet rightly says: 'Hysteria can affect all kinds of people, good and bad. We must not ascribe to the illness personality-trait that would have been there anyhow.' Hysterical personality is common enough but it is not always linked with hysterical mechanisms. Moreover, the types of personality which are called hysterical are very varied.¹ To characterise the type more precisely we have to fall back on *one basic trait*: Far from accepting their given dispositions and life opportunities, hysterical personalities crave to appear, both to themselves and others, as more than they are and to experience more than they are ever capable of. The place of genuine experience and natural expression is usurped by a contrived stage-act, a forced kind of experience. This is not contrived 'consciously' but reflects the ability of the true hysteric to live wholly in his own drama, be caught up entirely for the moment and succeed in seeming genuine. All the other traits can be understandably deduced from this. In the end the hysterical personality loses its central 'core' as it were, and consists simply of a number of different exteriors. One drama follows another. As it can no longer find anything within, it looks for everything without. It wants to experience something extraordinary with its natural drives. It does not rely on the normal processes of life but wants to use these for aims that make the simple drive uncertain or get lost altogether. Through unnecessary and exaggerated expressions it tries to convince itself and others of the existence of some intense experience. It is attracted to anything external that offers strong stimulus, to scandal, gossip, famous personalities, anything impressive, extravagant, or extreme in art or outlook. Hysterical personalities have to ensure their own importance and so play a role and try to make themselves interesting every-

¹ Cp. Kraepelin, for his description in his *Lehrbuch*; also Klages, *Die Probleme der Graphologie*, pp. 81 ff.

where even at the expense of their calling or integrity. If unnoticed for even a brief period, or if they feel they somehow do not belong, they grow unhappy. Such situations immediately make them aware of their inner emptiness. They are therefore extremely jealous if others seem to trespass on their own particular position or sphere of influence. If they cannot otherwise succeed, they will get attention by falling ill and playing the part of a martyr, a sufferer. Under some circumstances they will be reckless with themselves and inflict self-injury; they have a wish to be ill, provided they reap the reward of some corresponding effect on others. In order to heighten life and find new ways of making an effect, they will resort to lying, at first quite consciously but soon this becomes unconscious and they come to believe themselves (*pseudologia phantastica*)¹: there are self-accusations, accusations against others of invented sexual assaults, a pretence to strangers that they are important personalities, very rich or of high rank, etc. In all this the patients not only deceive others but themselves as well. They lose awareness of their own reality and their fantasy becomes their reality. But there are certain distinctions to be drawn. In one case we find complete unawareness of falsehood—'I did not know I was lying'. In another case we find parallel awareness 'I was lying but could not help myself'.² The more the theatrical aspects develop the more these personalities lose any genuine, personal affect. They become unreliable, are no longer capable of enduring emotional relationships and never reach any real depth. All that is left is a stage for imitative and theatrical performances, the perfect artifice of the hysterical personality.

The nature of hysterical personality has long been known to psychologists with understanding. Shaftesbury used to speak of 'enthusiasm that is as it were second-hand'. Feuerbach describes a 'feigned sensibility which seems to tickle the inner senses compellingly with something that is not really felt but only imagined as felt'. 'In such a state the individual tries to deceive himself and others with a mere grimace of feeling, and as this grows habitual he ends by profoundly poisoning his surest source of truth, his inner feeling. Deception, lying, falsehood, treachery and everything that goes with it—these are all seeds of enormous growth in a psyche which is used to falsify its own feeling and, moreover, they very easily suffocate any genuine feeling. This explains why a feigned sensibility can be reconciled not only with a definite coldness but with downright cruelty.'

2. Hypochondriacs. It is abnormal for the body as such to play an important part in the individual's concern. The healthy person lives his body and does not think about it. He pays no attention to it. The mass of physical suffering is largely due to psychic reflection rather than any manifest physical illness. Excluding what might be due to a labile physical constitution (asthenia) and what are typical somatic accompaniments of psychic events, we find we are left with a whole field of physical suffering which arises from self-observation and

¹ Delbrück, *Die pathologische Lüge* (Stuttgart, 1891). Ilberg, *Z. Neur.*, vol. 15 (1913). Stelzner, 'Zur Psychologie der verbrecherischen Renommisten', *Z. Neur.*, vol. 44 (1919), p. 391.
² Wendt, *Allg. Z. Psychiatr.*, vol. 68, p. 482.

worry and which steadily increases as the body becomes more and more the centre of an individual's life. Self-scrutiny, expectation and dread, all disorder the bodily functions, give rise to pain and cause sleeplessness. The fear of being ill and the wish to be ill lead to a constant reflection on the body and together turn the conscious life into a life with a sick body. The person is not physically sick but still he is not simulating. He feels he really is sick, that his body has in fact changed and he suffers like any sick person. The 'invalid imaginaire' is in some peculiar way really ill by reason of his own nature.

3. *The self-insecure personalities* (Schneider, whose description I follow here) or the *sensitive personality* (Kretschmer): In these cases a continuously heightened sensibility is imposed on a reflective awareness of insufficiency. The self-insecure individual finds every experience a disturbing one because he experiences it with heightened sensitivity instead of working through it naturally and giving it some appropriate form. In his own eyes his performance is not sufficient. His position vis-à-vis others always seems to him under question. Actual or merely imagined failure becomes a matter for self-accusation. He will look for the fault in himself and does not forgive himself. When working over his experiences inwardly, he does not repress so much as have an extra battle with himself. He leads a life of inner humiliation and defeat brought about by outside experiences and his interpretation of them. The helpless urge to get some external confirmation of this inner grinding self-depreciation makes him see more or less intentional insults in the behaviour of other people. This may reach the degree of delusion-like ideas (without these becoming delusion proper). He suffers immensely from every external slight for which he once more seeks the real reason in himself. Self-insecurity of this sort leads to over-compensation for feelings of inferiority. Compulsive-like formality, which is rigidly adhered to, strict social observances, lordly gesture, exaggerated displays of assurance, are all masks for the inner bondage. Demanding behaviour covers the actual timidity.

II. PERSONALITY-CHANGE DUE TO A PROCESS

We differentiate abnormal personality-types that are *Anlage*-variants, as described above, from sick personalities in the narrower sense, where the change has been brought on by a process. The fact that most mental illness is accompanied by a marked change in personality has given rise to the statement: mental illness is an illness of personality, but we can see mental patients suffering from false perceptions or even delusions, and yet not showing any noticeable change in their personality at this particular stage. Further, we find acute psychoses that lead to total fragmentation of psychic life into a number of unconnected acts where one can no longer speak of a personality at all, yet one can unexpectedly trace the natural, unchanged personality, temporarily veiled, for which one can have empathy. It shows itself in the patient's perplexity and in the occasional questions and judgments he puts forward.

All the personality-changes brought about by a process have in common the *limitation* or *disintegration* of the personality. The term 'dementia' used in such cases implies disturbance in intelligence, memory, etc., and also a change in personality.

(a) *Dementia due to organic cerebral processes*

Certain character traits seem due sometimes to processes of this sort. Thus we find jocularity (*Witzelsucht*) with certain brain-tumours, 'gallows-humour' in alcoholics, religiosity, habitual lying and pedantic meticulousness in epileptics, and euphoria in multiple sclerotics.

Such traits can be explained partly in the same way and using the same concepts as apply to other changes. The process *removes the acquired inhibitions*, instinctive impulse is translated into action at once without any counter-image or counter-tendency. Once ideas are evoked, they take immediate effect. A paralytic, for example, can easily be made to cry and then laugh by the evocation of opposing ideas ('incontinence of affect').

Disintegration goes furthest in the known organic cerebral processes such as Paralysis (and similarly in severe arterio-sclerosis, Huntington's chorea and other organic cerebral diseases).

(b) *Epileptic dementia*

Epileptics who are victims of a progressive process show typical changes in their nature.¹ The slowing down of psychic events (down to the level of the nervous reflexes) shows itself in increasing difficulty of comprehension and the enormous prolongation of reaction-time. To this is added a tendency to perseverate. The affect tends to linger on and stereotypies develop. The loss of spontaneity and activity is accompanied by an elementary, urgent but aimless restlessness. Egocentric touchiness and a craving for constant approbation leads to increasing irritability and explosive reactions. Brutal motor discharges may occur in patients who otherwise are quite inoffensive. There are also descriptions of the so-called 'clinging' patient and attitudes of ingratiating effusiveness. Nervous tension and empty affect complete the picture. The constrictedness of the patients which makes them appear taut, rigid, pedantic and circumstantial can look like conscientiousness, conservatism and solidity etc.

(c) *'Dementia' in schizophrenia*

Among the personalities which are due to a process, those of the schizophrenic group deserve special mention. Many chronic mental hospital patients belong to this group. Variation in personality may range from a very slight alteration in the individual due to a reduction in understandability, to almost

¹ K. H. Stauder, *Konstitution und Wesensveränderung der Epileptiker* (Leipzig); Max Eyrich, 'Über Charakter und Charakterveränderung bei Kindlichen und Jugendlichen Epileptikern', *Z. Neur.*, vol. 141 (1932), p. 640.

complete fragmentation of his personality. It is not easy to see any common factor. Earlier psychiatrists tried to characterise something which they called 'affective dementia'. Nowadays we lay additional emphasis on the lack of integration in thinking, feeling and volition, and on the inability to recognise reality as reality and take it properly into account (Bleuler's 'autistic thinking', that is, thinking turned in on itself and on its phantasies with no regard for reality). At the same time, the tools of intelligence remain intact. It is easier to describe the common factor in subjective terms, that is, in terms of the effect on the observer, rather than try to do so objectively. All these personalities have something baffling about them, which baffles our understanding in a peculiar way; there is something queer, cold, inaccessible, rigid and petrified there, even when the patients are quite sensible and can be addressed and even when they are eager to talk about themselves. We may think we can understand dispositions furthest from our own but when faced with such people we feel a gulf which defies description. Also, they do not find those things puzzling which for us are quite unintelligible. They may run away from home for a trivial reason which seems quite adequate for them. They do not draw the obvious consequences from facts and situations, they have no adaptability and show a puzzling angularity and indifference. One such type is the hebephrenic personality, which has been characterised as an hypertrophy and an arrest in development of the awkward traits of adolescence. If we study the nature of these people closely, we find we have to create a large number of types which we shall not distinguish here. The mildest personality change consists in a growth of coldness and stiffness. Patients lose agility, grow much quieter with less initiative.

How the schizophrenic personality views the change. Some patients with a mild degree of illness will talk about how their nature has changed. They are 'less excitable', 'their interest is shallower but they talk much more'. They notice that they keep on talking and cannot stop but show no kind of agitation. They sometimes observe that they are staring into the corner for no particular reason and that their general performance is suffering. Some can only say that they feel 'a profound change' has taken place. They feel 'they are not as flexible as before' and not so excitable. Hölderlin has expressed this knowledge of the schizophrenic change in himself in simple and moving words:

Wo bist du? Wenig lebt ich, doch atmet kalt
 Mein Abend schon. Und stille, den Schatten gleich
 Bin ich schon hier; und schon gesanglos
 Schlummert das schauernde Herz im Busen.

(Where art thou? So short my life,
 Yet comes my cold evening.
 I am here like the shadows, like them
 I am silent and my shuddering heart
 Has already ceased singing and sleeps in my breast.)

Later on, in the advanced state of his illness, he wrote:

Das Angenehme dieser Welt hab ich genossen
Der Jugend Freuden sind wie lang! wie lang! verflossen,
April und Mai und Julius sind ferne.
Ich bin nichts mehr, ich lebe nicht mehr gerne.

(I am no longer party to this world's delight,
The happiness of youth fled long, how long, ago,
April, May, July I cannot reach,
Now I no longer live and have no joy.)

PART III

THE CAUSAL CONNECTIONS OF PSYCHIC LIFE

PART III

THE CAUSAL CONNECTIONS OF PSYCHIC LIFE

(EXPLANATORY PSYCHOLOGY—ERKLÄRENDE PSYCHOLOGIE)

We understand psychic connections from within as meaning, and we explain them from without as regular if not essential accompaniments and sequences.

(a) *Simple causality and its difficulty*

In causal thinking we link together two elements, cause and effect. If we are to put precise questions about the causal relationships the two elements must first be perfectly clear and unconfused: for instance, alcohol and delirium tremens; season of year and changes in suicide rate; fatigue and reduction of performance together with spontaneous sensory phenomena; thyroid disease and excitability, anxiety and restlessness; cerebral haemorrhage and speech disturbance, and so on, present us in each case with two definite sets of facts of which we call one cause and the other effect. Concept-formation in psychopathology as a whole serves to give shape to these elements of causal thinking. Even such an infinitely complex subject as that totality of meaningful psychic life, which we called personality, can itself become an element in causal thinking; when we enquire for instance into the heredity of certain well-defined personality-types.

However, in itself this one-track relationship between cause and effect is completely obscure. Between the two lie an infinite number of intermediary events. The effect does not occur always but only with greater or less frequency (the minimum for allowing a causal relationship). The consequences of such causal thinking are soon apparent:

1. *The same phenomenon has a number of causes*—be they simultaneous or on different occasions. However, where various possible causes for an illness have been enumerated without our really knowing the effects of any one of them, this is usually a sign of our ignorance of the actual causes: as for instance when almost every physical illness, constipation, poisoning, exhaustion, etc., used to be counted as a cause of amentia. We find not only that the syndrome of amentia can occur without any one of these causes but also that there is no certain knowledge as to what psychic effects these physical causes ordinarily have. *The more causes we state, the less we know of the causal connections.*

2. *The search for intermediary causes.* We look for intermediary causes in order to pass from the first-noticed, external and remote cause of the phenomenon and approach the more immediate and direct cause. For instance, we

notice the very varied effect of chronic alcoholism; this may manifest itself as simple, alcoholic dementia, as delirium tremens, as alcoholic hallucinosis or as a Korsakow psychosis. Here between the direct effect of the alcohol and the disease which has been brought about by the chronic drinking one must assume a number of intermediary links (the product perhaps of a metabolic toxin) each of which in its own way may be thought to call forth a particular disease. We then differentiate alcohol as the more remote cause and the hypothetical toxin as the direct cause. Direct causes must naturally have much more uniform and regular sequences than remote causes, but *nowhere do we know any real, direct cause.*

3. *The concept of 'cause' is highly equivocal:* it not only embraces mere *conditioning* due to lasting circumstances, but also *precipitating factors*, and the *force* that takes decisive effect. The conditioning might be a lasting and exhausting stress with a steady drain on life; the precipitating factor might be some severe, emotional shock, while the deciding force might be the hereditary disposition determining which type of psychosis will appear. Obviously the meaning of 'cause' is entirely different in each case. That we do not keep these meanings apart and remain satisfied with mere possibilities is why talk about causes so often replaces knowledge of causes. Untested conclusions drawn from the 'post hoc' to the 'propter hoc' never bring knowledge. Moreover, we not only talk of causes when some effect is unavoidable, but when some effect is merely possible. So too we talk of conditioning, not only when there is a *conditio sine qua non*, but when we are dealing with circumstances that may only possibly be contributory. The commonest error of all used to be that, in mental illnesses, what was already a symptom of the illness tended to be taken as a cause (Kant had already noticed this mistake); particularly was this so when severe emotional shocks, impulsive 'sins', etc., were considered to be the cause for the onset of an illness.

In order to overcome these difficulties we first of all need definite and discriminating thinking, so that our eyes are sharpened for the recognition of causes that are real but not at all obvious. Such causes should not be discussed simply as possibilities but must be demonstrated by concrete findings (e.g. comparison of case-records, calculating incidence, etc.). Exact methods such as these not only confirm or refute causes that are already generally accepted, but will bring to light hidden ones that so far have not occurred to anyone. Many things are then clarified, but this sort of knowledge raises increasing difficulties of indeterminacy and to overcome this we have to *take a completely different, biological framework in exchange for the purely mechanical one of causal relationships.*

(b) Mechanism and organism

One-way causality is an inevitable category of causal apperception but it does not exhaust life's possibilities. The living event is an infinite *interplay of cycles of events*, which morphologically, physiologically and genetically are

complex configurational unities. Life, it is true, makes use of mechanisms (and causal knowledge of living things must comprehend these mechanisms) but the mechanisms themselves are created by life, conditioned by life and are transformable. Compared with the automatism of a machine, life is a running self-regulation of the machinery itself, in such a way that we find the final regulating centre nowhere else but in the infiniteness of everything living and then we only find it in the form of an idea. Hence external influences on the organism impinge on partly predictable mechanisms. They do not however impinge as a whole on any one physical mechanism which remains the same all the time but on an individual organism which lives and changes in the course of time. It is therefore understandable that the same original external causes may have quite different effects in different individuals. The same 'precipitating cause' may bring about the onset of different psychoses, such as a depression or a schizophrenia. Another example would be the individually varying effect of alcohol, which shows itself in the many different forms of intoxication.

In order to penetrate deeper into causal relationships we have to embark on two quite different courses. Broad causal relationships have to be analysed and grasped more clearly; what is crude has to be refined and intermediary causes must be interpolated. But all this happens meaningfully only where we make a framework of observation, and where we have an increasing grasp on the complex unities, within which the causal relationships take place and acquire their pre-conditions and limitations. Causal questions spring from the whole; their answers have the form of a mechanistic causality.

What within the framework of mechanistic causal relationship creates difficulties in the form of indeterminism and contradiction, becomes in the framework of biological thinking a natural manifestation of the actual causal relationships.

i. The concrete phenomenon is part of a living whole and it never permits the isolation of a simple fact, a simple cause which operates like a cannoning billiard-ball; it can be conceived only as a *complex event* taking place among a *host of conditioning factors*. The mechanistic model of a one-way causal relationship has to be replaced by the model of an infinite living network—a vast reciprocity. Whenever a single cause is put forward as the decisive one, this immediately becomes questionable when looked at closer. It remains at best a 'conditio sine qua non' but it is very rarely sufficient in itself to bring the phenomenon about.

The statement 'the more causes, the less knowledge' holds only for the knowledge of mechanistic causes when this has been formulated in terms of possibilities. But the activation of every mental illness is in fact very complex. Our knowledge of causes, therefore, will involve multiple factors, but we shall hold all this multiplicity together in a hierarchy of related cycles. (We will investigate this again in Part IV.)

In causal knowledge which turns away from the whole to the simple, one-

way relationship of cause and effect, the actual cause is considered to be *the final factor of all*, which activates a whole number of conditions that may otherwise be present without anything happening. But this final factor could only take effect because all these preconditions were really there. Thus the specific bacterium brings the illness about, but only if it is met half-way, as it were, by all the necessary conditions in the individual. If these are absent, the bacterium does no harm. If the bacterium is missing, the unfavourable conditions will never be known. Without the infusion of the final cause the whole event never takes place, but nevertheless it is not just produced by this final factor. It is in multiplicity, the unending multiplicity in the fabric of causal relationship, that the reality of life lies.

2. Causal relations do not run only one way, but take reciprocal effect; they extend in this circular fashion so that they either build life up or as 'circuli vitiosi' foster a process of destruction.

Now biological causality is not added to mechanistic causality as something fresh and new. All known causality is of a mechanistic character. But real events show us mechanical causality in such reciprocal entanglements that, to lay hold of it, we must build up the multiple dispersions and combinations into some structural pattern.

It is then from the standpoint of the whole that we must explain how one and the same cause may have entirely opposite effects, how it can excite and paralyse, heal or make ill, make happy or sad, etc., depending on its own intensity and the differences in the constitution of the whole.

It is an absolute necessity for the psychopathologist *to see life* the way biologists do. This opens a world of which the reality of psychic life is a part although not identical with it. A study of biology, which is taken for granted in medical training, needs clarity in first principles. This implies that one must not only acquire up-to-date empirical knowledge but make an intimate study of the thought of the great biologists.¹

(c) *Endogenous and exogenous causes*

The basic phenomenon of life is its self-realisation in an environment which it moulds from its own inner resources, on which it depends and by which it is in its own turn moulded. In so far as we divide the whole unity of life into outer and inner world and both are broken down into factors, we attribute the phenomena of life either to causal factors of the outer world, which we call exogenous, or to those of the inner world, which we call endogenous; against the *outer influences* we set the *inner disposition*. As life always consists in the interplay of inner and outer, no phenomenon can be exclusively endogenous. Inversely, all exogenous influences unfold their characteristic effects within an organism, and the particular fashion of this will always

¹ Two excellent works on the history of biology: Em. Rádl, *Geschichte der biologischen Theorien*, 2nd edn. (Leipzig, 1913), vol. 1; (Leipzig, 1909), vol. 2. Erik Norderskiold, *Die Geschichte der Biologie* (Jena, 1926). Philosophically Kant's *Kritik der Urteilskraft* stands unsurpassed.

appear as an essential factor. In spite of that we do right to differentiate between effects that are in the main endogenously conditioned and those which are in the main conditioned exogenously.

1. *Concept of environment.* Environment means the entire world in which the individual lives. It is the physical environment acting on the body and through it on the psyche. It is the environment made meaningful through the sense and nature of things, through situations and through the Being, Will and Acts of fellow-men, all of which take effect upon the psyche and through it on the body.

We subdivide the *causally active physical environment* into a large number of well-defined factors and examine the effect of these exogenous causes—for instance, poisons, times of day, seasons, infections, somatic illnesses.

2. *Concept of Anlage.* Anlage is the sum-total of all the endogenous pre-conditions of psychic life. It is therefore so extensive a concept that whenever we use it in the individual case we should know which particular Anlage is meant.

We have to distinguish between the *innate* Anlage and the *acquired* disposition, because the potentialities of the organism and of the psyche are conditioned in the first place by what is innate in them both. Subsequently, however, these are conditioned by all the events that have occurred so far, by illnesses and experiences, in short by the life history as a whole, which modifies the individual disposition continually or else transforms it in the catastrophe of illness.

We also have to distinguish between the *visible* Anlage and the *invisible* disposition. The former is the morphologically and physiologically visible constitution; the latter is the potentiality which only reveals itself in the presence of certain stimuli and dangers.

Further, we have to differentiate between *physical* and *psychic* disposition, between the permanent disposition and that which only appears at certain times of life, etc.

Just as we subdivide external conditions and classify them, so we have to find particular elements in the Anlage and construct smaller units within it. In one word, here as everywhere in scientific work we have to analyse. How are we to arrive at particular elements in the Anlage which will not be arbitrary constructs but elements of real significance? Only by studying the Anlage through many generations in different families. Two facts guide us: *individual variation* and *inheritance*. By examining the *trend of the variation* and the *inherited similarities* we may hope to arrive at real entities in the case of which we can speak not of the Anlage in general but of specific Anlagen.¹

3. *Interaction between Anlage and Environment.* Syphilis is the cause of General Paralysis, but only about 10 per cent. of syphilitics develop this condition. A dangerous life-situation or a disaster at sea will affect one person by

¹ For the concept of Anlage see Ferd. Kehrer and E. Kretschmer, *Die Veranlagung zu seelischen Störungen* (Berlin, 1924).

paralysing him, another by activating him. When there is personality disorder (psychopathic personality) and the person cannot cope with life in general, catastrophe may make him prove himself and show a presence of mind superior to that of another otherwise healthy person who does not know what to do. Chronic smoking seems to bring about circulatory and nervous disturbance in one person but not in another. Illness is a reaction of the Anlage to the influences of the environment. The significance of exogenous versus endogenous factors only recedes when we come to the borderline case. For instance, Huntington's chorea or innate mental deficiency will appear without any relevant environmental influences. Inversely, General Paralysis remains tied to syphilitic infection and alcoholic psychoses to poison, although the Anlage makes an essential contribution. The exogenous factor is the sole one only in cases of pure destruction such as death from some devastating head-injury. Usually the relationship of endogenous/exogenous is extremely complex and its relevant significance can only be estimated approximately. Thus in schizophrenic and manic-depressive psychoses, the endogenous factors are in the foreground while in the psychoses due to infection more weight is given to the exogenous factors.

No psychic event is conditioned purely by the Anlage, but there is always the interaction of a particular Anlage with specific external conditions and events. The change in the external conditions can be grasped directly but the Anlage is always something we have to construe. Only too often when the concept is used in quite a general sense it is simply a cover for ignorance. Just as, when we talk of the milieu, we specify the external conditions, so, when we use the concept of Anlage, we must try to define the types of Anlage as narrowly as possible. We can never ask in relation to a *whole complex event* (e.g. a non-organic illness, a personality, criminality, etc.) whether this was brought about by the *milieu or the Anlage*, but all we can achieve is a partial separation of the factors that belong to the Anlage and those that belong to the milieu by making a careful analysis of the particular elements and remembering constantly that we are trying to judge the matter as a whole.

We cannot assume that the human organism or its psychic life is everywhere the same; rather it is that different individuals react to the same poison, for instance, in very different ways. It is obvious, therefore, when we examine the *effects of external causes* we should never forget the Anlage. We never find effects which recur in exactly the same way in everyone. No matter how constant the connection we shall find certain exceptions; there are qualitative differences in the effects and there are effects which occur only in a limited number of individuals.

On the other hand, since the inherited Anlage needs the environmental conditions in order to make itself manifest, we must also enquire into these conditions in the case of the *endogenous illnesses*; for instance, we find that among uniovular twins, where one was schizophrenic, the other usually but not always fell ill too.

4. *The relation of exogenous-endogenous to kindred pairs of concepts.* The concepts endogenous and exogenous bear different meanings according to whether they are used for physical or psychic illnesses. All the factors that are exogenous for physical illness (e.g. poisons, bacteria, climate) are also exogenous for psychic illness, but as regards the psychic disposition, we call exogenous all physical illnesses, even the somatically endogenous cerebral disorders.

For example: (a) General Paralysis is a cerebral illness exogenously caused by syphilis and in turn this illness acts as an exogenous factor which destroys the psychic life. (b) Tumour is an endogenous cerebral process which acting as an exogenous factor affects the psychic disposition.

In this sense everything *somatogenic* is by definition *exogenous* and everything *psychogenic* is *endogenous*. But within the psychic event itself we distinguish what is *reactive* from what is *autochthonus* in analogy with exogenous and endogenous (Hellpach: reactive and productive abnormality). Psychic reactions which arise from fateful experiences and external events are analogous to what is exogenous whereas phases and processes which arise from inner causes at certain times without any external event are analogous to what is endogenous.

(d) *Causal events are extra-conscious events*

It is common to all causal connections that something which is not understandable clearly reveals itself in them as something necessary. The causal element can only be established *empirically*; we can theoretically make it comprehensible by devising an extra-conscious base which however is not evident in itself.

It is in the nature of all causal investigation that, as it advances, it penetrates deeper into the *extra-conscious foundations* of psychic life, whereas the psychology of meaning remains by definition within consciousness and ends at the point where consciousness ends. In investigating causes we have to construe an extra-conscious basis for the phenomenological units, for the meaningful connections or for whatever it is we have taken as the unit of investigation. Thus we use concepts such as extra-conscious dispositions and extra-conscious mechanisms. But we can never develop a comprehensive psychological theory from concepts such as these. We can only make use of them for the investigation on hand to the extent that they seem to be helpful.

We are guided in this by *the basic conception* that all causal connections and the entire extra-conscious substructure of psychic life have their foundations in somatic events. The extra-conscious element can only be found in the world as something somatic. We suspect that these somatic events take place in the brain, particularly in the cerebral cortex and in the brain-stem, and we conceive them as highly complicated biological processes. We are very far removed from their discovery. We do not know a single somatic event which we could consider to be the specific basis for specific psychic events. All the crude

destructions which have been observed as causes of aphasia and organic dementia are simply destructions of the remote determinants of the psychic event and in principle this is the same as intact muscles being the condition for any volitional act, and intact sense-organs for perception. Everything which we know of the brain can be related to physiology in the somatic sense; nowhere do we know of any findings which we can evaluate directly in psychological terms. It is rather that in the crudest psychic changes we find an intact brain—or such minimal findings and spread among so many people that we can hardly use them to explain such gross psychic changes. Inversely, we find—though relatively seldom—severe changes in the cerebral cortex of persons who show hardly any psychic abnormality at all.¹ The numerous changes in the brains of mentally ill people are completely uncharacteristic for the specific psychic events. General Paralysis, which is regarded as the only mental illness with a known characteristic cerebral pathology, does not allow us to relate any of the cerebral lesions to the particular psychic changes. General Paralysis is rather a process which affects the entire nervous system, like arteriosclerosis, multiple sclerosis, etc. The majority of cerebral processes usually have some psychic effects; General Paralysis has them constantly and excessively. Most known psychic abnormalities can appear in General Paralysis as in many other cerebral processes, but in General Paralysis the psychic destruction comes into the foreground early.

Thus, although we postulate that all psychic events, normal and abnormal, do have a somatic base, this has never been demonstrated. We should be particularly wary of regarding known cerebral processes as such direct bases for particular psychic events. In the state of our knowledge, therefore, it is permissible to by-pass the direct yet unknown somatic base and speak of the *effect of known cerebral processes on psychic life*, just as we speak of the effect of metabolic disorders, poisons, etc. This gives meaning to the frequently expressed view that the specific psychic disposition of the individual conditions the specific type of psychic reaction to the cerebral disease process. It has indeed been believed that the same physical illness or the same cerebral process could cause a periodic psychosis as well as a dementia. While this view is quite unsupported, it is nevertheless known that, for example, where there is the same cerebral process one patient may react in the first place with hysterical symptoms, another with affective anomalies and a third with symptomless dementia. It is obvious that these differences appear mostly at the beginning of processes, whereas the final stage becomes more and more similar as a result of the general destruction.

In many psychic disturbances and personality disorders (psychopathies)

¹ This is shown by a few cases which surprise the anatomist. A well-known example is senile dementia. Cerebral changes in old people generally and in senile dementes are qualitatively identical. Demented individuals show in the most severe form changes that are found in healthy old people. But sometimes severe changes are found in healthy old people and relatively minor changes in dementes. There is no parallel to be drawn between the severity of the psychic defects and that of the anatomical change.

we find nothing at all in the brain which could offer a direct or more remote basis for the events. In spite of this it can hardly be doubted that every peculiar psychic event will also have its own peculiar somatic determinants. But these somatic events that underlie personality disorder (psychopathic personality), hysteria and perhaps many psychoses which are still counted as dementia praecox (psychic processes), cannot be conceived as any different from the supposed physical foundations in the brain that underlie diversities of character and endowment; that is, we are an infinite way away from making them a possible object for investigation.

These views are opposed by another one which held sway in previous decades but has lately lost in importance. It could be formulated as '*mental illness is cerebral illness*' (Griesinger, Meynert, Wernicke). This declaration is as dogmatic as its negation would be. Let us clarify the situation once more. In some cases we find connections between physical and psychic changes taking place in such a way that the psychic events can be regarded with certainty as consequences. Further, we know that in general no psychic event exists without the precondition of some physical basis. There are no 'ghosts'. But we do not know a single physical event in the brain which could be considered the identical counterpart of any morbid psychic event. We only know conditioning factors for the psychic life; we never know *the cause* of the psychic event, only *a cause*. So this famous statement, if measured against the actual possibilities of research and the actual findings, may perhaps be a possible, though infinitely remote, goal for research, but it can never provide a real object for investigation. To discuss statements of this sort and try to solve this problem in principle indicates a lack of critical methodology. Such statements will vanish from psychiatry all the more quickly in proportion as philosophic speculations vanish from psychopathology and give place to a philosophical maturity in the psychopathologist.

Historically looked at, the prevalence of the doctrine 'mental illnesses are cerebral illnesses' has had *helpful* as well as *harmful* effect. It has helped research into the brain. Every hospital has its anatomical laboratory, but it has harmed psychopathological research proper. Unwittingly many a psychiatrist has been overcome by the feeling that if only we had an exact knowledge of the brain, we would then know the psychic life and its disturbances. This has led psychiatrists to abandon psychopathological studies as unscientific, so that they have lost whatever psychopathological knowledge had been gained up to then. Today we have reached a situation where anatomical research and psychic research maintain independent and parallel existences.

Certain concepts in everyday use are clarified once we are aware that causal events are to be conceived as extra-conscious:

1. *Signs and symptoms.* The extra-conscious element which we cannot perceive directly is recognised by a sign or symptom. All the phenomena of psychic and somatic life are conceivable as signs or symptoms, when we consider the underlying event in its causal aspect. If the extra-conscious element is

a known physical process, the psychic phenomena are then signs or symptoms of this process.

Signs and symptoms are phenomena that can be recognised as identical when they recur. On what does this identity rest? The answer involves the whole teaching on causes. Identity is due, for instance, to the presence of the same *exogenous causes*, such as poisons or type of somatic disease; or it may be due to the same *localisation* of the various disease processes, which take effect on a particular part of the brain and damage, irritate, stimulate or paralyse it; or to the same *disposition*, etc.

If the phenomena are looked at as signs or symptoms in relation to the basic causal event, then a differentiation is made according to their proximity to the ultimate cause. Basic signs or symptoms (primary symptoms, axial symptoms) are distinguished from accessory symptoms (secondary symptoms peripheral symptoms). Similarly we differentiate the ultimate causes of the symptoms into pathogenic (which actually bring the phenomena about) and pathoplastic (which only give them form).

2. '*Organic-functional*'. The extra-conscious mechanisms which are added hypothetically to the psychic experience as an explanation can never be demonstrated physically in any direct manner. However, we find a large number of manifest physical phenomena (cerebral processes, intoxications and physical changes in the organs, which supposedly must also have an effect on the brain), and these appear to us not as directly parallel events nor as immediate causes but as more remote causes of psychic events. Those psychic changes which can be attributed to *manifest physical* causes of this sort are termed *organic*. In organic mental illnesses one can by present-day methods either demonstrate the cerebral changes or on the ground of other physical phenomena expect to find them in the foreseeable future. We give the term 'functional' to those psychic changes for which no physical cause can be found and where at present there is in the somatic sphere no real ground for supposing that such causes exist, and where such a supposition can only rest on the postulate that there must be physical causes for all psychic changes.

However, the dichotomy 'organic-functional' has several not unrelated meanings: 'organic' implies the morphological, the anatomical and what is physically manifest; 'functional' implies the physiological, what manifests itself only in the form of a happening and in bodily performance, without morphological change. Further, 'organic' implies what has happened irreparably, incurable illness; 'functional' implies the reparable event and a curable illness.

The opposition of the two is obviously not absolute. What starts psychogenically and manifests itself functionally can become organic. What is organic can manifest itself in some reparable functional event. But the opposition of organic/functional itself is always related to somatic events.

(e) *Causal knowledge must not be made into an absolute*

From the point of view of somatic and neurological research, psychic dis-

turbances, where there are known cerebral processes, are taken merely as 'signs and symptoms'. The great practical importance of recognising the physical processes which most readily, and in the future will perhaps uniquely, admit successful therapy and radical cure, has led many to accept this viewpoint as the only one. They believe they have recognised the 'essence' of psychic illness in the physical illness. In the case of the psychiatrist who is also a psychopathologist such a viewpoint would be a betrayal of his own activities. He does not wish to investigate cerebral processes which are already explored by neurologists and cerebral pathologists; he wishes to examine psychic events. But he is of course highly interested in the extent to which *particular* causes of psychic events have been *demonstrated* so far, how complex psychic disorders and their course originate individually in a cerebral process, how such organic illnesses may be diagnosed and how they are caused. And it is of course particularly important for a doctor to know these underlying physical conditions.

Our need to establish causality is most profoundly satisfied by laws which are of the most simple and necessary character. These promise the greatest therapeutic power but only if the respective causal relationships are a subject of real empirical knowledge and not just theories or conceivable possibilities. The tendency to make causal speculation the main thing has a disastrous effect on our empirical knowledge of the varied forms of psychic abnormality. The world of objective knowledge—causally inexplicable though it may be—is abandoned in favour of empty constructs. Our thirst for knowledge, however, finds another specific satisfaction quite apart from the consideration of causes. This is to view the phenomena and the configurations of psychic life in an orderly and penetrating way.

The significance and limitations of causal knowledge are perhaps most clearly seen in relation to *therapeutic possibilities*. Causal knowledge, which grasps the non-understandable as it arises necessarily from its causes, can influence therapy decisively by measures in which the psyche which is wanting help need take no active part. We cannot foresee what may become possible on the basis of serological, endocrinial and hormonal research. Injections may perhaps bring about effective therapy without any personal engagement of doctor and patient and may be repeated identically from one case to the next and produce mass-effects. A complete contrast to this is the therapy in which the doctor becomes personally engaged and through the patient's activity affects both his environment and attitude and makes possible those inward reversals and decisions which become the source of cure.

Between these two fundamentally opposite therapeutic poles there are many intermediary stages. On the one hand, there is mere doing, on the other stimulation and encouragement; on the one hand, there is drilling the patient, on the other there is education; on the one hand, there is the creation of certain conditions, on the other a radical reshaping. Among all these varied polarities knowledge of cause and knowledge of meaning each has a place of its own.

It is actually difficult to recognise causes, but where the knowledge in general does exist its application is relatively easy and it becomes a mass phenomenon. In contrast, it is generally easy to grasp what is understandable but the application is hard, as there is no deduction from the general; the occasion is always rather a new, historical source for concrete understanding in the personal form of this doctor and this patient. It is the most intense presentation of what is entirely individual.

Causal thinking impinges on what is alien, not-understandable and on what can be manipulated; understanding of meaning impinges on myself in the other and on what is closest to me in the other.

If we have clarified to ourselves all that has been stated here purely schematically, the following insights emerge: all categories and methods have their own specific meaning. It is nonsense to play off one against the other. Each can realise itself fruitfully if it preserves its independence, accords with its facts and observes its limitations. But if we turn it into an absolute, this will end every time in empty claims, ineffective discussion and attitudes which destroy any free approach to the facts. In relation to causal events in particular, it is a basic impulse of knowledge to advance constantly in the direction of a more profound and compelling causality. Hope may lend wings but the goal is difficult and calls for patience. But however far our causal knowledge goes, we shall never be able to know the event simply in itself and as a whole, and so be able to manipulate it. Causal knowledge is always faced by something which no matter how we operate it implies that in the end all the well-being of man is still dependent on something decisive in himself, which is only approachable if we understand.

(f) *Review of our causal knowledge*

We have divided this into three chapters. In the first we shall go through the *individual causal factors*, which up to now have been the object of our knowledge (we see the individual as a body with its psyche in its own environment). In the second chapter we shall show the significance of heredity for psychopathological knowledge. Heredity is a causal factor of the greatest importance for everything living and it dominates and encompasses everything living because it determines all the other causal factors (we see the individual in the context of the generations and as a manifestation of inherited Anlage). In the third chapter we shall discuss the ideas—the theories—which have been formed about extra-conscious events and which lead and mislead all our causal thinking (we conceive some event which will underlie all the phenomena).

In its explanations psychopathology is everywhere dependent on biology, in its widest sense, for basic ideas and points of view and in particular on human anatomy, physiology, neurology, endocrinology and genetics. We shall briefly touch upon these relationships in our presentation.

CHAPTER IX

EFFECTS OF ENVIRONMENT AND OF THE BODY ON PSYCHIC LIFE

Body and psyche as a unity, as separate entities and in their mutual relationship, have to be investigated from several radically different points of view (see p. 191). In this chapter we shall record those manifest somatic findings and physical environmental factors which have a demonstrable effect on the psyche. To speak of the body in general and the psyche in general will lead us nowhere because these are generalities and too indefinite to give a clear meaning to anything we may say about them. The important thing is to grasp the *definite* corporeal elements and the *definite* psychic phenomena so far as they can be empirically established and then see what effects the bodily factors may have.

From the causal point of view all bodily effects on the psyche go via the brain. We presuppose—and experience so far confirms this—that there is no direct causal effect of the body on the psyche but only one via the brain. If the entire body is psychically relevant, it is only so in a causal sense if there are pathways to the brain, where the effects can find their points of attack. But how we are to conceive the start of these effects upon the psyche is fairly obscure. Description will range from causal factors in the environment to the effects of the brain on the psyche. We shall see that there is a wealth of interesting fact but we never reach the psyche itself, because we can never traverse the realm of ‘intermediary causes’ lying between body and psyche. In demonstrating the empirically verifiable relationships between body and psyche, we are always reaching across an empty gulf. If one says: the psyche is in the body as a whole—the psyche is in the brain—the psyche is in a certain place in the brain—the psyche is nowhere—each several statement expresses an experience. Each sentence has its own truth. But looked at from the causal point of view should one want to make some general, scientific assertions about the relationship between psyche and brain, the way ascends to the brain, to localisation in the brain and then disappears.

§ 1. ENVIRONMENTAL EFFECTS

The environment is continually influencing all life and the psyche as well: from the psychopathological point of view, mention should be made of the phenomena which have been observed to result from *changing times of day, change of season, weather and climate*. Where the *maximum demands of life* lead

to exhaustion or a revolution in the total life-pattern the type of environment is non-specific.

(a) *Time of day, season, weather, climate*¹

We know very little about the influence of meteorological factors on psychic phenomena. Such a relationship is, however, a conspicuous one and particularly so with pathological psychic events. We must of course keep apart *direct causal* effects on the psyche via the body, which are the subject of this present chapter, and the *indirect* effects which act via the *meaningful* impressions made on the psyche by such things as landscapes, for instance, or the weather or climate. Here there is a wide field of possible presentations, understandable moods and varying contents, which come to our awareness through poetry and art, rather than through any scientific study.

1. *Time of day.* As regards time of day, we have observed the frequent worsening of the depressive state in the morning, and of the dementia-like and delirious states in the evening. Depressives can feel very ill in the morning and quite well in the evening.² Further, we know of the typical nocturnal delirium, restlessness and anxiety and wandering about in the case of seniles, who are quite sensible during the day. There are also epileptics who only have their seizures at night.

2. *Seasons.* On the question of the significance of the seasons, we have figures which yield annual frequency curves for a series of phenomena. Thus suicides and sexual crimes and, it seems, all activities attributable to an increase in psychic activity are most common in May and June. The admission rate of mental patients is also greatest in the spring and summer. Various observers have agreed over the annual curve of hospital inceptions. A detailed analysis of this at the Heidelberg clinic³ showed the curve for the rural areas was more characteristic than the city-curve, and that the curve for women was more characteristic than that for men. As age increases the relationship to the seasons lessens. First admissions (that is, the early cases) show the characteristic curve. Everything seems to suggest that it is not so much the social circumstances but the atmospheric influences that determine the annual curve.

3. *Weather.* The dependence of some nervous and rheumatic complaints on the weather (increasing during moist weather and deep barometric readings) can only be explained in part as a direct effect on the body. As many nervous people are sensitive to the changes in the weather, psychic factors also play a part. Abnormal psychic states—for instance, before a thunderstorm or snowfall—are however definitely of a causal character and are not meaningfully determined.

¹ Hellpach, *Die geopsychisch Erscheinungen*, 3rd edn. (Leipzig, 1923); 4th edn. *Geopsyche* (Leipzig, 1935).

² On time of day, Bingel, 'Über die Tagesperiodik Geistenskranker, dargestellt am Elektrodermatogramm', *Z. Neur.*, vol. 170 (1941), p. 404.

³ Hanna Kollibay-Uter, *Z. Neur.*, vol. 65, p. 351. E. Meier, *Z. Neur.*, vol. 76, p. 479 (aus Burghölzli).

4. *Climate.* When we consider the pathogenic effects of some climates we are not including the pathogenic organisms that exist there. It is not known what effects the climate as such may have; whether, for instance, 'tropic-frenzy' or neurotic disturbances in the tropics find encouragement from the social milieu of the colonies, or not.

(b) *Fatigue and exhaustion*

The lowering of physical and psychic functions through exertion of them is called fatigue; when effects are harmful this is called exhaustion. Physiology envisages that *fatigue* is brought about by an accumulation of paralysing metabolic products, which can be washed away by the bloodstream within a brief period. Exhaustion however is due to excessive consumption of vital substance which has to be rebuilt. In fatigue one notices numerous subjective phenomena:

Inner flight of ideas: irrelevant ideas race through the mind in disordered fashion or inversely one cannot get away from particular thoughts, ideas and images (particularly memory-images that are affectively toned). The phenomena become so vivid that they approximate to sensory phenomena; images become like pseudo-hallucinations, thinking like speaking; spontaneous sensations also appear. One often hears the 'sounds of bells' or other such false perceptions. Volitional memory fails; the co-ordination of ideas and volitional movement diminishes; there is increased motor excitability, tremor; sometimes everything is dominated by a certain heightened but unmotivated mood.

Some effects of fatigue have been demonstrated *experimentally*:

Work-performance was measured (calculation, etc.) and the relationship noted between fatigue and hunger and between fatigue and reduction of sleep, etc.¹ At the same time a lowering of the performance, an increased distractibility and a tendency to flight of associated ideas were observed.

Weber found *inverse behaviour* of the *blood-supply to the organs* during fatigue; he found this a transitory phenomenon in otherwise normal people during the phase of fatigue and a lasting one in neurasthenics. If the brain-worker is fatigued one finds that when working the volume in the arm increases, while the volume in the head, the cerebral volume, decreases, the carotid narrows instead of widening.

If one connects a *galvanic current* in such a way that the anode is on one eye, the proband notices a *flash of light* when the current is of a certain intensity and the observer may notice a movement in the other pupil. If in normal people one measures the strength of the galvanic current at which the light-flash occurs (degree of sensitivity to light) and the strength of the current at which movement of the pupil becomes visible (sensitivity of reflex) these two values work out at something like 1 : 3. This finding of *Bumke's* was used by *Haymann*² as a basis for the examination of a number of patients. He found in exhaustion states of every kind (constitutional

¹ See Kraepelin's *Psychologischen Arbeiten* (Aschaffenburg, Weygandt).

² Haymann, *Z. Neur.*, vol. 17, p. 134. Bumke, 'Ein objektives Zeichen nervöser Erschöpfung', *Allg. Z. Psychiatr.*, vol. 70, p. 852.

and acquired neurasthenia, after physical illness, in hysteria) the ratio of 1 : 3 increased up to 1 : 30 or 1 : 40. In the four traumatic neuroses which he examined he found normal ratios; as also in the functional psychoses.

In earlier times a great deal of significance used to be ascribed to fatigue as a causative factor in acute psychoses, but now we are more inclined to deny the existence of any genuine 'exhaustion psychoses'. We only have, on the one hand, *increased fatiguability* which can reach a very high degree, and on the other *varied expressions of fatigue*, depending on the personal constitution at the time of the individual who gets fatigued. It is particularly in personality disorders (the psychopathic states), which are rooted in the Anlage, that fatigue will show itself in extremely different ways: climbing in the mountains may bring on a depression or any physical exertion may bring on phenomena of depersonalisation; exhaustion may help to develop a long-prepared delusion of reference (an overvalued idea); a tendency to cry, irritability and vexation, apathetic states, anxious feelings, compulsive ideas may arise; in a word, the entire army of psychopathic phenomena.

Finally, all kinds of endogenous psychoses can be '*precipitated*' by exhaustion as by much else. In the first World War no psychoses were observed during the most severe exhaustion, but exhaustion could prepare the ground for pathological reaction where there were violent emotional upsets.¹

Even though there are no exhaustion psychoses proper, we do find characteristic states in individuals, who by nature show abnormal fatiguability and who are exposed for a long time to great exertion, deprivation, stress, miserable living and poor nourishment. Such people do not have a moment when they are not tired. They suffer from countless psychopathic phenomena connected with their Anlage. If they fall ill from a curable endogenous psychosis precipitated by their exhausted state, the psychosis sometimes shows a peculiar 'asthenic' colouring, similar to that in all psychoses which occur in the course of severe physical illnesses (signs of weakness, faintness, along with a poverty of expression).

§ 2. POISONS

The effects of drugs and poisons on the psychic life can be relatively easily investigated because the cause seems obvious and experiments can be instituted in humans readily enough. Investigations can take three directions:

(a) *Firstly*, we may try to obtain a vivid idea of the *subjectively experienced* phenomena and how they appear after a certain poison has been taken. We may notice the differing effect of one and the same poison on different people and on one and the same person at different times; we can also notice the different effects of different poisons. Examples of the former are the varied types of alcoholic states and hashish intoxication; of the latter, the different effects of

¹ For bibliography on exhaustion in war and its consequences see Korbsch in Bumke's *Handbuch*, vol. 1, pp. 312 ff.

alcohol, hashish and morphine. In the larger doses all poisons bring about changes of consciousness (intoxication, loss of consciousness, coma) or sleep.

In individual cases the *immediate* effect of poison is so deviant from the average and so severe that we speak of a *pathological toxic reaction*. The best-known example is the pathological alcohol-reaction. Even relatively small amounts bring on a clouding of consciousness in the form of twilight states with automatic actions or other abnormal states which often terminate in a deep sleep and for which the affected individual is deeply amnestic. The same persons also suffer very often from other types of pathological reaction (infections, accidents, experiences, etc.). Others cannot tolerate the smallest amounts of alcohol but immediately show symptoms or rapid psychic change and have to avoid alcohol completely (*alcohol intolerance*). Alcohol intolerance can be either inborn or acquired (through head-injury, etc.).

Experiences during intoxication are of great interest. They are not only remarkable phenomena as such, which arouse our curiosity as to the nature of the experience and which can work ruinous harm, but they are also as it were 'model-psychoses' (Beringer), where the experience resembles that of the acute psychoses, particularly of the schizophrenic types, much more than do the experiences of dream or fatigue. The literature concerning these phenomena is uncommonly interesting.¹ James writes: 'Around our waking consciousness—which is only a particular kind of consciousness—lie other potential forms of consciousness and the wall between is thin. We may go through life without suspecting their existence but if the necessary stimulus is applied they need only the slightest touch in order to reveal themselves.' In phenomenology patients' self-descriptions of their intoxicated states report a host of phenomena. But it is just the isolated individual description of the phenomena that leads us on to ask whether there is not some connecting principle. The many states of intoxication—even if we allow for the very considerable deviations due to persons and poisons—are widely similar and point to something they have in common.

(b) *Secondly*, we investigate performances that are measurable objectively, such as apperception, association, the actual work performance, etc.,

¹ Cp. the self-descriptions in particular of Moreau de Tours: *Du hachisch et de l'aliénation mentale* (1845). Th. de Quincey, *Bekanntnisse eines Opiumessers*. The collection of Baudelaire's. Serko, 'Im Mescalinrausch', *Jb. Psychiatr.*, vol. 34 (1913), p. 355. Mayer-Gross, 'Selbstschilderung eines Kokainisten', *Z. Neur.*, vol. 62, p. 222. Kurt Beringer, *Der Mescalinrausch* (Berlin, 1927). F. Fränkel and E. Joel, 'Der Haschischrausch', *Z. Neur.*, vol. 111, p. 84. On other poisons, Joseph Baum, *Beitrag zur Kenntnis der Kampferwirkung*, pp. 8–12. Diss, Bonn, 1872. (Everything in the street seemed in tumult and the victim was himself embroiled. Letters moved when read. He had 'sensations of devastation', heard deafening noises, until he became unconscious. On waking he knew nothing about the camphor but immediately remembered it by its smell. Everything seemed fresh and new as if he had just been born. He did not know where he was nor what objects were for.) H. Schabelitz, 'Experimente u. Selbstbeobachtung im Bromismus', *Z. Neur.*, vol. 28, p. 1. (In chronic bromide poisoning a hypomanic state develops with great disturbance of registration and attacks of fatigue. Auditory illusions. Light phenomena when the eyes are closed. At first facilitation of the motor act of speech then disturbance in the word-set. Following abstinence: ideas of reference and a state of depression.) A summary of material on bromide poisoning, see Amann, *Z. Neur.*, vol. 34, p. 12.

and how they may be modified by the influence of some particular poison. This 'pharmaco-psychology'¹ developed by Kraepelin has found characteristic differences in the modification of performance after the intake of various poisons. Thus it was observed that alcohol quickened motor-performance initially but there was an immediate fall-off in apperception-performance. After the intake of tea, however, apperception improved and motor performance remained unchanged. Hardly any of the results stand up to keen criticism as the relationships are for the most part so complicated. The refinement of investigatory methods has advanced much further than the simple collection of results of general psychopathological interest.

(c) The third direction for enquiry relates not to the immediate toxic effects but to those *lasting after-effects* that follow repeated intake, be it unnoticed (e.g. lead poisoning) or taken as a gratification (alcohol, morphine, hashish).² This is the proper field for clinical observation. Thus we find lasting *personality change* after protracted misuse of alcohol, morphine or cocaine, etc., and transient *acute psychoses* which occur as the consequence of prolonged intake of poisons. It is of principal importance that not all individuals by far experience the same effects; for instance, we see people who can tolerate an incredible amount of alcohol over long periods without any noticeable harm. On the other hand it is noteworthy that the effects of one and the same poison on different individuals often show so much similarity that they can be recognised with almost complete certainty from the psychic factors alone. Thus delirium tremens is one of the most typical psychoses known to psychiatry.

The causal relationships between chronic intoxication and psychosis are complex. We are not dealing with direct effects of poisoning but it is very likely that intermediary links are involved which up to now are unknown to us (metabolic disturbances, toxin formation, vascular changes are all suspect). Sometimes there is the addition of other causal factors such as trauma, infection, etc. In any individual case the causal connection can only be regarded as unequivocal if typical psychoses occur which are commonly seen following the poison concerned. In other cases there is always the possibility that we are dealing with a psychosis of quite another type arising in a person who in addition shows chronic poisoning.

In the *psychoses which result from chronic poisoning* we find certain common features as well as many differences. These common features are in part related to the psychotic phenomena that appear in cerebral processes and other exogenous organic illnesses (Bonhoeffer):

1. Transient states of clouded consciousness with numerous false-perceptions, disorientations and anxiety (*deliria*), which clear up with full insight.
2. *Physical symptoms* which are signs of disease in other organs, characteristic sometimes for the varying poisons.

¹ Kraepelin, *Über die Beeinflussung einfacher psychischer Vorgänge durch einige Arzneimittel* (Jena, 1892). Further investigations in Kraepelin's published *Psychologischen Arbeiten*.

² P. Schroeder, *Intoxikationspsychosen* (Leipzig and Vienna, 1912).

3. *Epileptiform seizures* during the acute state.

4. Lasting changes in personality which consist in a coarsening of the emotional life, a narrowing of interest, disinhibition of instincts, shiftless loss of will-power. This results in social deterioration, excessive irritability, callous behaviour along with protests of innocence and complete irresponsibility, particularly in relation to promises of future abstinence. The latter changes are observed almost only as the effects of stimulants such as alcohol, opium, morphine and hashish. The individuals involved are usually those who suffer from personality disorders (psychopathic personality) and who as a result become 'addicts'.¹ With the other poisons (CO_2 , ergot, lead, etc.) we observe simple states of psychic weakness with features of the Korsakow syndrome but without the personality traits that go with addictions.

§ 3. PHYSICAL ILLNESSES

In one and the same individual we can observe a physical illness and a psychic abnormality but the two need not be connected any more than a morbid cerebral process and a psychosis have to be linked when occurring in the same individual. We should distinguish the following possibilities: there may be a known noxa which is the cause of the physical and the psychic distress; for instance, polyneuritis and Korsakow syndrome may both be caused by alcohol. Or there may be an unknown noxa doubly responsible; for instance, in some catatonics, responsible for the progressive disturbance of nutrition in spite of feeding and for the psychotic inanition. Or the physical illness can be supposed to be the consequence of the psychic one; for instance, gastric complaints as a result of severe emotional upset or cyclothymic depression. Or the physical illness and the psychosis may be entirely independent of each other; for instance, cancer and dementia praecox. Or there may be a statistical correlation pointing to some hereditary link; for instance tuberculosis and dementia praecox. Finally, *the physical illness may be one of the causes of the psychic distress*. It is this last relationship to which we will now turn:

(a) General medical illnesses

Almost all physical illnesses have some effect on the psychic life. But the psychic life in its turn also effects the physical state (as we discussed in somato-psychology). A circulus vitiosus sometimes arises here. A heart disorder develops from the fear of falling ill; once it is somatically established it increases the fear. A 'neurotic overlay' can occur where the symptoms were at first somatic and this fosters the illness. Increased sensibility, attention focused on the illness and its possible symptoms and in particular the unwitting suggestion by the doctor all act together to create a picture in which direct physical consequences can no longer be separated clearly from those that are

¹ On addiction see Rieger, *Festschrift für Werneck* (1906). F. Fränkel and E. Joel, *Der Kokainismus* (Berlin, 1924). H. W. Maier, *Der Kokainismus* (Leipzig, 1926). M. G. Stringaris, *Die Haschischsucht* (Berlin, 1939).

more or less psychically conditioned. Although this vicious circle is possible there are nevertheless a host of purely somatic illnesses and we want to find out how they affect psychic life.

We must always distinguish *causal* connections from *meaningful* connections. Physical illnesses either operate causally by affecting the physical substrate of the psyche in the brain, usually in some unknown way (toxins, inner secretions); or they operate in a way that is comprehensible in terms of the mode of life forced on the individual by his illness and in terms of his feelings, experiences and life as an invalid. We can frequently observe these effects in every kind of long-stay sanatorium inmate and chronic patient; for instance, narrow-mindedness, restriction of their horizons, sentimentality, the so-called institution-dementia, egocentricity and egoism.

Slight *psychic changes* occur as a *direct effect* in every physical illness: diminished ability for performance, increased fatiguability, a tendency to spontaneous mood-changes or spontaneous feelings of vexation or euphoria. Sometimes the beginning of an infectious illness can first be recognised by the change in mood, particularly with children. While these phenomena rarely appear in well-balanced, psychically robust people, they have a rich and varied development in other individuals, who are therefore called 'nervous'.¹

In some groups of illnesses the psychic sequelae have attracted particular attention. With *heart-patients*² severe physiological states of anxiety have been observed as a result of circulatory disturbance and anoxia of the tissues. Angina pectoris is linked with overpowering physical fear but it is remarkable that in serious heart cases there is sometimes no sense of illness or only a very slight one, whereas in neuroses which centre on the heart, this sense is always acute.

In pulmonary tuberculosis³ the illness itself does not seem to have any specific significance and neither the euphoria nor the increased eroticism have been demonstrated as causally conditioned by the illness. Even the reduction of performance is sometimes remarkably slight. We find great sufferers from tuberculosis who were creative right up to a short period before their death. Change of environment and of situation, however, have inevitable consequences for the patient which can be portrayed as a 'sociology' of tuberculosis. In sanatoria an atmosphere develops specific to the institution due to the way the place is run and the mode of life there and the occupational possibilities. In the patient-community a world arises of its own with particular customs, gossip, cliques, intrigues and erotic relationships. Because of the long-drawn-out treatment and segregation from the business of the world, patients run the risk of many difficulties on return. They tend to hold on to their illness even when from a physical point of view they are cured.

(b) *Endocrine disorders*

Among all internal diseases the endocrine disorders are of the greatest

¹ Self-descriptions by doctors of their own illnesses and their attitude to it have been collected from autobiographies, case-records and questionnaire by A. Grotjahn, *Aerzte als Patienten* (Leipzig, 1929).

² Braun, 'Die Psyche der Herzkranken', *Z. Psycholog.*, vol. 106 (1928), p. 1. K. Fahrenkamp, 'Psychosomatische Beziehungen beim Herzkranken', *Nervenarzt.*, vol. 2 (1929).

³ G. Kloos and E. Näser, *Die psychische Symptomatik der Lungentuberkulose* (Berlin, 1938).

importance for psychiatry, because they have become the starting-point for hypotheses that try to explain psychic illness biologically in a most comprehensive way. It is necessary to obtain a clear picture here of the biological factors concerned.¹

1. *The over-all physiological picture.* The life of the organism is a vast unit. The unit is guided by inter-connected physical systems—the cerebro-spinal nervous system, the vegetative nervous system and the hormones of the inner secretory glands. The cerebro-spinal nervous system directs the body in its intercourse with the environment and achieves the vital optimum for it in its environment. The vegetative nervous system (sympathetic and parasympathetic) looks after the vital optimum within the inner milieu of body-function. The endocrine glands, which have a multilateral relationship to each other, execute a totality of function in regulating both nervous systems by means of their 'messengers', the hormones, and in being regulated in their turn by the two nervous systems. What is referred to as hormonal integration of function into a unified whole comes about through the interplay of these three systems. They regulate each other. In short the whole of life is regulated on the one hand through the nervous systems, a universal presence of messages and linkages transmitted by the nerve-fibres, and on the other hand through the hormones, a universal presence of stimuli and inhibition attained via the blood-circulation. The organic unit, the structural blueprint, can be seen in the morphology of the body but it only becomes actual in the physiological unity of function, in the significant concord of the regulating factors. We cannot say where in the three regulating systems the final centre lies from which guidance emerges. It is arguable whether such a centre exists. Sometimes one, sometimes another of the three systems takes the lead, according to clearly discernible connections. The unit is not to be compressed into any one of the three. Every attempt to intrude an absolute unity of a supposedly final character will be annulled by the formation of further units, rendering our physiological knowledge inconclusive. The unit of hormonal and nervous control is an infinitely complex whole of which only a very few aspects are understood.

The *endocrine system* (also called the inner secretory or hormonal system) functions in the interplay of the glands: the hypophysis, the sex glands, the thyroid, the parathyroid, the suprarenals, the pancreas, etc.

The *hormones*, which they produce, belong to the class of effective substances. Effective substances are those which have no nutritional effects but are stimulating and regulative substances. Effective substances which are introduced from outside along with food are called vitamins. Effective substances which are produced in the organism itself are called hormones (i.e. activating substances). Ferments are substances the presence of which is required for

¹ I base myself principally on the following: Arthur Jores, *Klinische Endokrinologie* (Berlin, 1939) (from which I take my formulation). G. Koller, *Hormone* (Berlin, 1941, Sammlung Göschen). H. Marx, 'Inner Sekretion'. In *Handbuch der inneren Medizin*, von Bergmann, Staehelin, Sallé (Berlin, 1941), vol. 6.

certain chemical reactions, usually reductions, to take place, whereas hormones only act on the living substance. It is common to all these substances that they can deploy their function to an extremely slight extent. Some of them are chemically known and can be synthesised (among the hormones, adrenalin and the sex-hormones; some of the vitamins also).

The regulations effected by the hormones as messengers are innumerable. They concern metabolism most of all, then growth, maturation, reproductive processes such as menstruation, vasomotor behaviour, intestinal activity and so on.

The hormones are not specific for human beings but to a large extent the same in all vertebrates. However, the vital significance of unity of function increases as we approach the human level. Operative removal of the hypophysis in the lower vertebrates produces consequences that are hardly visible. In mammals it causes disturbances but in man it causes death. Endocrine illnesses are practically unknown except in humans.

This whole field of research signifies a revival of humoral pathology on an undisputed empirical basis. No longer do we have, like the Greeks, a completely hypothetical mixture of juices as the basis of temperament, but a number of specific and manifest effects have been recognised and have thereby opened up an enormous field for further research. The quotation from Goethe that 'blood is a very special juice' now carries with it a most unexpected connotation.

2. Methods of investigation. This present picture of a working whole was obtained by combining various methods of investigation—clinical observation, physiological and pharmacological experiments, examination of the blood and metabolism. The co-operation of specialists, clinicians, pharmacologists, physiologists and chemists alone produced these impressive results. Pathological/anatomical examination of the glands, therapeutic observation on the giving of gland-extracts or pure hormones, pharmacological analysis of endocrine-vegetative systems, serological observations, and experiments with animals have all expanded internal medicine to an enormous extent.

3. Known endocrine diseases and their psychic symptoms. The vast field covered by these illnesses—Graves' disease, myxoedema, tetany, acromegaly, Cushing's disease, etc.—cannot be entered upon here. The following results in general are of particular interest to psychopathology:

(aa) A control of outstanding importance is exercised by the *Hypophysis* and somewhat surprisingly this gland has its seat in the brain in the Sella turcica (it has become part of the brain and is linked to it by fibre tracts). 'All correlations in the endocrine system run via the glandotropic hormones of the anterior lobe of the hypophysis . . . there is no disturbance in the activity of an endocrine gland which is not followed by a morphological alteration in the structure of the hypophysis . . . there is hardly one event in the organism which has not been shown to be influenced by the hypophysis . . . blood-formation, protein metabolism, blood pressure' (Jores).

(bb) When there is endocrine disease, regulation fails and hormones are

produced in wrong quantities or at the wrong time. Neuro-endocrine regulations are in a continually *labile state*. The system, as it were, constantly regenerates itself out of the lability with infinite and subtle modifications accompanied by varying states of physical-psychic change. This lability makes endocrine illness possible. 'We find fluid transitions between declared endocrine diseases and normality and we speak of a thyreotic, acromegaloid or tetanoid constitution' (Jores). The question is whether there are some simple, quite manifest starting-points for disturbance or whether we are dealing with an infinitely varying, complex event. The *hereditary Anlage* plays a large part, not so much in respect of the specific illness as of the readiness for endocrine disturbance in general; this is indicated by the increased frequency of metabolic disturbance and endocrine disease in families. Endocrine diseases are 'due a good deal to the insufficiency of the vegetative system, the expression of a wrong relationship between the psycho-physical demands and the capacity for performance of the neuro-endocrine system' (Jores).

(cc) Endocrine diseases effect changes in the patients' *body-build, expression and nature*. Thyroid disorder in the form of myxoedema causes clumsiness, heaviness, apathy, tired look; as Graves' disease it results in haste, restlessness, anxiety and excited look. Patients with acromegaly are usually 'good-natured patients, somewhat dull, sluggish and slow, and they have a distinct awareness of the changes in their nature. Increased excitability has only been reported rarely' (Jores).

Compared to the frequency of psychic changes *psychoses proper* are rare in endocrine disturbances. Reinhardt says: diseases of the secretory glands can all lead to mental illness but their practical significance for psychiatry is minimal.

(dd) It is often quite impossible to say where lies the *primary cause* of disturbance in the connection between the central and vegetative nervous systems and the endocrine system. There is no agreement as to whether Graves' disease is a primary disorder of the thyroid or a primary vegetative neurosis or both in one, or whether it can occur in both forms.

(ee) *Metabolic diseases*, which also alter the general physical appearance, are supposed to be causally linked with this system. The causal connection has been demonstrated for diabetes (pancreas), for some cases of adiposity but not for arthritis or gout. The role of the nervous system and of the psychic factors in these illnesses becomes comprehensible because of these connections.

4. *Endocrine changes in psychoses*. Increasing knowledge of the diseases due to endocrine disturbances has directed attention to the physical bases of psychic disturbances from a new angle.¹

Psychiatry unfortunately can produce no results to match. If we want to

¹ Cp. W. Mayer; 'Über Psychosen bei Störung der inneren Sekretion', *Z. Neur.*, vol. 22 (1914) p. 457. Walter and Krambach; 'Vegetatives Nervensystem u. Schizophrenie', *Z. Neur.*, vol. 28 (Untersuchung der pharmakologischen Wirkung von Atropin, Pilokarpin, Adrenalin im Vergleich mit Normalen). Summary given by Stertz; 'Psychiatrie u. innere Sekretion', *Z. Neur.*, vol. 53, p. 39.

gain some standpoint from the summaries presented, we are faced first of all with ruinously contradictory data.¹ There are a vast number of isolated findings but methodologically speaking they only have the value of individual test cases and not that of a systematic investigation. In formulating hypotheses, however, there is a danger that in our use of empirical physiological and clinical findings and stimulated by them, we may really be surrendering to a fantasy that runs in the tracks of the old humoral pathology.

Great hopes were² placed on the application of the Abderhalden method but were not fulfilled. He set out to differentiate the organic and functional psychoses³ by assessing the deterioration of individual organs (such as the thyroid, brain, sexual glands). It seems possible to find some organ deterioration in all illnesses, although the frequency varies, sometimes high in hysterics, but rare in otherwise healthy people. Endocrine processes seem to play a part everywhere. We have a great deal of medical knowledge regarding the specific disturbances related to the thyroid, the hypophysis, etc., but up to the present there are no conclusive findings to indicate the essential significance of endocrine disturbances for the psychoses. We only have hints which one cannot turn into anything empirically certain: a temporal relation to sexual events in manic-depressive insanity and schizophrenia (in the latter there is sometimes an initial increase in sexual drive followed by its disappearance); then there are morphological and functional changes in individual cases which are reminiscent of known endocrine disturbances.

There have been other disappointments. On the assumption that psychoses were conditioned by hormonal failure, ovarian extracts were given. But there was no general confirmation of the splendid therapeutic results so obtained. There were operations, sex-glands were removed or the thyroid in schizophrenics. It is remarkable how these drastic procedures first achieve favourable results and then in due course peter out silently as methods that are in fact ineffective. A rational therapy in clinical medicine presents us with something quite different; for instance, the treatment of tetany by the giving of parathyroid extract. Where there is an absence of clear causal connection, conclusions as to therapeutic effect are always questionable. Pathological-anatomical examinations were carried out on the glands of psychotics but the findings were quite unspecific for the psychiatric syndromes. Proof of endocrine causation for the psychoses has never been brought forward, except in the very rare cases of genuine psychosis in Graves' disease, etc. But it can hardly be doubted⁴ that something somatic of essential importance takes place in the psychoses.

¹ Kafka and Wuth, Bumke's *Handbuch der Geisteskrankheiten*, vol. 3.

² Abderhalden, *Die Schutzfermente des tierischen Organismus* (Berlin, 1912). Fauser, *Dtsch. med. Wschr.*, vol. 2 (1912); vol. 1 (1913). *Münch. med. Wschr.*, vol. 1 (1913). *Allg. Z. Psychiatr.*, vol. 70, p. 719.

³ Ewald, *Die Abderhaldensche Reaktion mit besonderer Berücksichtigung ihrer Ergebnisse in der Psychiatrie* (Berlin, Karger, 1920).

⁴ K. F. Scheid *et alia* (pp. 210ff.) reports on Gjessing's new and important investigations. They

There are some interesting self-observations in hypoglycaemic states (in deep insulin-therapy) made by doctors:¹ hunger-sensations, fatigue, apathy, increased irritability, over-sensitivity to noise, feelings of blankness, phasic changes in the level of consciousness, misinterpretations of situations, abnormal perceptions.

5. The endocrine system is involved in all physiological and pathological events but the specific endocrine diseases entice us to use them prematurely as simple analogies to explain the as yet unknown connections. The temptation is all the greater because a secondary involvement of this sort is almost always present.

Endocrine diseases change the shape and habitus of the body. Hence constitutional types are conceived as essentially endocrine-types, though there is no definite, empirical foundation for this. All constitutional types are then taken to be of the same order as the dysplastic, eunuchoid, and other specific constitutional types conditioned by the endocrines, but up to now the variations in healthy bodily types can in no way be correlated with variations in endocrine function (in spite of the attempts of Jaensch and his school). There is no basis for any explanation of body-types in terms of endocrine causation.

Endocrine diseases change the psychic life and in rare cases bring about symptomatic psychoses. Hence it is mistakenly affirmed that the cause of endogenous psychoses lies in unknown endocrine diseases and that character-types are the result of endocrine variations. Against this it must be stated that empirically there is a clearly defined group of endocrine disturbances affecting the body and the psyche, but beyond that, in spite of all assertions that endocrine changes play a part everywhere, there are no empirical grounds for supposing that endocrine causation is essential to the endogenous psychoses, personality disorders and personality. Such a view has led to the remark that a biological mythology is now replacing the former brain-mythology. In view of the mysterious underlying events in psychosis and personality disorder and in view of the somatic, functional manifestations that appear in them, where one used to speak of 'metabolic disease', the term 'endocrine disease' is now employed.

(c) *Symptomatic psychoses*

The term 'symptomatic psychosis' is given to those psychoses which come about through the effect of physical illness on the somatic substrate of the psychic life. If one conceives psychotic states which have been brought about by physical illness as reactions to the illness, and then surveys the extraordinary multiplicity of these reaction-types, we can differentiate in principle, if not exactly, the *exogenous* from the *endogenous types* of reaction.²

no longer claim complete insight into the somatic basis of psychosis but offer indisputable special findings for certain limited clinical entities. They no longer endlessly investigate particular cases but make methodical clinical analyses of certain psychotic diseases and their course.

¹ Wiedekind, *Z. Neur.*, vol. 159 (1937).

² Bonhoeffer, 'Zur Frage der exogenen Psychosen', *Neur. Zbl.* (1909), p. 499. Also Specht, *Z. Neur.*, vol. 19 (1913), p. 104.

Bonhoeffer called those reaction-types exogenous which occurred only or almost only as a result of manifest physical causes (e.g. typical deliria, Korsakow syndrome) and termed those endogenous which occurred without any such external cause (e.g. hallucinosis, twilight states, amentias, etc.).

If we try to classify the symptomatic psychoses,¹ we find that from the *aetiological* point of view almost all physical illnesses have at some time provoked psychic disturbance; from the *symptomatic* point of view an enormous variety of clinical states, and indeed almost all clinical symptoms, can at some time be provoked by exogenous causes (exceptions up to now are, for instance, paranoid syndromes in the narrower sense).

Symptomatically we differentiate *acute* states (e.g. infections) from more *lasting* states (e.g. after-effects of infections or sequelae of chronic physical illness). Among the acute states, the most common are the delirious, amentia-like pictures; among the chronic forms, the 'emotionally hyperaesthetic infirmities' (Bonhoeffer) and the Korsakow syndrome. Between the typical clinical pictures presented by cerebral diseases and those which appear subsequent to poisoning and physical illness, there exists a remarkable parallel. They all become manifest with the help of physical causes.

Specific syndromes for certain types of physical illness, such as typhus or even just 'fever', have *not been found*. At times one may suspect symptomatic psychosis if one examines the mental state only. But one needs the physical examination if one is to make a definite diagnosis of the illness.

Symptomatic psychoses occur in only a relatively small number of cases of physical illness. That the illness has such an effect must depend on the *Anlage* of the patient. This has been clearly shown in encephalitis lethargica. It occurs predominantly with patients who have a loading of psychic and somatic deviations, and in 'degenerate families'.²

Besides cases which fall into the known categories of physical illness, mental hospitals are familiar with a series of *acute psychoses which are the accompaniments of very severe physical illnesses* that lead to death, but can never be diagnosed, even at post-mortem examination. In the history of psychiatry they have been called 'delirium acutum', and such conditions as acute general paralysis, severe chorea and other infections were distinguished from this group. But there still remain a number of cases of an unknown kind.³ To these must be added the recently investigated *acute febrile schizophrenia*,⁴ which has been studied in its physiological aspects (metabolism,

¹ Bonhoeffer, *Die Psychosen im Gefolge von akuten Infektionen, Allgemeinerkrankungen u. inneren Erkrankungen* (Vienna, 1912). Summary in Bumke's *Handbuch*, vol. 7. Westphal, 'Zum klinischen Aufbau der exogenen Psychosen', *Z. Neur.*, vol. 164 (1938), p. 417. Westphal tries to analyse the clinical picture in exogenous, constitutional and reactive symptoms.

² Jentsch, *Z. Neur.*, vol. 168 (1940).

³ Cp. Weber, 'Über akute tödlich verlaufende Psychosen', *Msch. Psychiatr.*, vol. 16 (1904), p. 81.

⁴ K. F. Scheid, *Febrile Episoden bei schizophrenen Psychosen* (Leipzig, 1937).

destruction and reconstruction of the blood corpuscles) and has been segregated as a somatic group. Here the physical illness, which is often fatal, is clearly seen from the symptoms, but no 'axial-symptom' can be recognised nor any internal disease be diagnosed.

Oddly enough, physical illnesses do not merely have harmful effects on psychic life but, in the case of some psychotics, they can bring about improvement and on rare occasions *cure*.¹ It has several times been observed that during an attack of typhus severe chronic catatonics, who have been inert for years, become accessible and themselves again; in short psychically more healthy. Once this is over, they relapse into their previous state. In some obscure psychoses (probably belonging to the group of schizophrenic processes) lasting cures have been observed in rare cases following a severe physical illness such as erysipelas or typhus.

If one gathers all the facts together, the *differentiation of true symptomatic psychoses* is not always a simple matter.² Symptomatic psychoses are only those psychoses which are linked with a known somatic illness as cause and are therefore closely connected with the course of the illness as regards the time-relationships. Usually these psychoses improve or disappear before the somatic illness is over. Diagnosis cannot be ascertained with confidence from the psychic symptoms alone. Occasionally, though rarely, one finds schizophrenic symptoms in the symptomatic psychoses, and now and then, though still rarely, we find Bonhoeffer's predilection-types in the acute schizophrenias. We must distinguish: (1) *illness* which merely *accompanies* the psychosis—as for instance any physical illness can befall a schizophrenic as it can a healthy person; (2) *physical illness* which *precipitates* a psychosis of another aetiology (a schizophrenia, a manic-depressive phase, or one or other of the puerperal psychoses); (3) *physical illness* which although we do not really know its nature is *an essential part of the same disease process which appears in the psychosis* ('febrile episodes' in schizophrenia): rise of temperature goes parallel with a worsening of the psychic state, whereas illnesses that are mere accompaniments can sometimes brighten and improve the psychic state.

(d) Dying

Death cannot be an experience. Whoever has an experience is still alive. As Epicurus said: 'If I am, then death is not; if death is, then I am not.' But what is experienced in the somatic process that leads to death is of such a kind that it can also be experienced, if in the end there is recovery (e.g., the devastating fear of death in angina pectoris). This elementary fear of death is somatically conditioned and is also present in animals; that which lies at the base of

¹ Friedländer, *Msch. Psychiatr.*, vol. 8 (1900), p. 62. Summary of previous work. Becker, 'Über den Einfluss des Abdominaltyphus auf bestehende geistige Erkrankung', *Allg. Z. Psychiatr.*, vol. 69 (1912), p. 799.

² K. F. Scheid, 'Zur Differentialdiagnose der symptomatischen Psychosen', *Z. Neur.*, vol. 162 (1938), p. 566.

it often, but not always, leads to death. Only man can know death, and the fear of death, like every other experience, gains a new aspect because of this knowledge, which can perhaps play a part as regards the course of the illness.

Lange reports the following: 'The important thing is whether someone wants to live or looks for death as a solution. Only in the former case will the struggle be protracted and painful. It is not so much a struggle for air, that is terrible, but the struggle to maintain consciousness. One can observe how the dying person pulls himself out of the increasing darkness into consciousness again and again and thereby into fresh agony. On a few rare occasions I have experienced this in an unforgettable way with some Russians dying of phosgene gas, with a war-comrade who was bleeding to death and once in a cardiac patient. As far as I can see, the original personality is of decisive significance in the actual death struggle. Only vigorous, energetic people are in danger of dying such a death, and even in these cases the increase of CO₂ poisoning, the growing darkness, the slow ebbing of life, bring in the end a struggle with death that is purely physical.'

Somatically death is not a sudden matter but a slow process. But a sharp break can come with loss of consciousness, cessation of breathing or of the heart-action. Death is present where these states are irreversible, although a large number of cells are still alive and can be kept alive experimentally. In persons who have been decapitated the heart keeps on beating for a short time.

But whatever may happen physically (convulsions, etc.)—consciousness is lost and there is no more experience. Hence every report on dying persons refers to their attitude to death not the death itself. The psychic manifestations of dying people are phenomena preceding death and belong to the psychology of meaningful phenomena. The reports we have are of the greatest interest.¹

§ 4. CEREBRAL PROCESSES

(a) *Organic cerebral diseases*

The demonstrable cerebral processes, the so-called organic cerebral diseases, produce changes in the psychic life almost always, though there are exceptions.

For psychiatry the most important of these processes is General Paralysis of the Insane.² There are also the organic cerebral illnesses of foetal life and of early childhood, the result of which is idiocy; brain tumours of every kind (gliomas, cysts, cysticercosis, etc.), abscesses, encephalitis, meningitis, brain injury, haemorrhage and softening, widespread arterio-sclerotic processes, Alzheimer's disease with its ana-

¹ Oscar Bloch, *Vom Tode*, 2 vols. (Stuttgart, Axel Junker o. J. (pre-1914)). Ludwig Robert Müller, *Über die Seelenverfassung der Sterbenden* (Berlin, 1931).

² See Hauptmann, 'Klinik u. Pathogenese der Paralyse im Lichte der Spirochätenforschung', *Z. Neur.*, vol. 70 (1921), p. 254, for the complexity of the causal problem and the attempts made to distinguish specific psychic types as causal in respect of the state and course of the illness.

tomical characteristics, cerebral lues, multiple sclerosis, Huntington's chorea *et alia*.¹ All these cerebral processes have been *discovered and differentiated one from the other exclusively on the grounds of physical symptoms* and can only be diagnosed with confidence by means of physical, neurological signs.

(b) General and specific symptoms

Alongside the neurological symptoms *specifically* related to a particular illness (choreic movements, nystagmus, intention-tremor, scanning speech, fixed pupils, etc.), there are general neurological symptoms which are not typical for any particular process: e.g. convulsions, pressure symptoms, etc. The actual *psychic* changes are probably not specific for any particular organic cerebral process, although sometimes certain changes appear with characteristic frequency. Thus in the course of General Paralysis there is always a severe *general dementia*, while in arterio-sclerosis this is rare and there is more of a '*partial*' dementia while the original personality remains relatively preserved. If however one compares the phenomena of cerebral processes with the remaining psychoses, the cerebral processes are found to have certain characteristic symptoms, which appear in many or all of them. Thus we see the following groups of symptoms frequently recurring in the *mental state* of the organic cerebral illnesses:

1. *States of torpor.* In these states patients can be at any level ranging from clearest consciousness to deepest coma. Blankness (empty consciousness), inclination to sleep, difficulties in concentration, and in comprehension, slow reaction, flatness, fatiguability, difficulty in orientation never amounting to wrong orientation are all characteristic for these states. In addition we often find: 2. *Delirious states.* Consciousness is not empty; there is no tendency to sleep but a confused state with disorientated, fragmented experiences; the patient pursues illusionary preoccupations, wanders around the house, looks for things, fiddles with the bedcovers, etc. Often there is subsequent amnesia. 3. The *Korsakow syndrome* is characteristic for organic cerebral processes. The main features are disturbance in registration with disorientation and many confabulations. 4. Finally, the organic cerebral illnesses bring about an *alteration of character*, which can be interpreted as a loss of the individual's former, normal degree of inhibition: there is a yielding to instinctual drives and a lability of affect, so that laughing easily alternates with crying. In addition one observes on the one hand euphoric, on the other irritable, sullen, resentful moods. Some patients like this can be immediately aroused by the slightest contradiction and show a formidable outburst of anger. Intelligence is weakened by a failing of memory and powers of registration, but it is often impaired in itself, so that patients lose their judgment and do not realise they are blind or paralysed. 5. There is a characteristic 'cerebral symptom-complex' after head-trauma:² headache, giddiness, disturbance of memory and particularly of registration, anomalies of affect (in part a dulling, in part

¹ Redlich, *Die Psychosen bei Gehirnerkrankungen* (Vienna, 1912). Detailed treatment in the psychiatric and neurological texts. C. v. Economo, *Die encephalitis lethargica* (Berlin, 1929)—for a summarised presentation of the disorder discovered by v. Economo and of great importance for problems of psychopathology.

² Horn, 'Zerebrale Kommotionsneurosen', *Z. Neur.*, vol. 34 (1916), p. 206.

an explosiveness), over-excitability of the higher sense-organs, intolerance to alcohol, tenderness of the skull to pressure or tapping; relevant histological changes have not been found.

Besides these characteristic phenomena, organic cerebral illnesses can occasionally show, particularly in the initial stages, almost every known morbid psychic phenomenon. This statement does not apply to certain series of subjectively experienced events belonging to schizophrenic psychic life (which can be investigated phenomenologically). The objective symptoms of catatonia, however, have been repeatedly observed.

Even if there are no specific psychic symptoms for *particular organic cerebral processes*, there still remains the question whether there are specific psychic symptoms according to *the place in the brain* affected by the process. The question is of the greatest fundamental significance. It is the question whether *any elements of psychic life can be localised at all*. The answer to this will decisively determine our basic conception of the psychic life of man. Ever since this question has been formulated, therefore, it has excited the attention of psychologists and psychopathologists to an exceptional degree.

(c) *The history of the theory of localisation*

It is by no means self-evident that the brain is the seat of the psyche. As late a worker as Bichat (1771–1802) taught that the seat of the intelligence was in the brain, but that of the emotions lay in the organs of the vegetative life, in the liver (anger), stomach (fear), gut (joy), heart (kindness). Already in 500 B.C. Alcmaeon knew that the brain was the organ of perception and thought. But how the brain and psyche are related and what is the meaning of such statements as 'the psyche has its seat in the brain', these are questions which, looked at closer, lead to antinomies. In earlier times men naïvely assumed a 'pneuma'—the finest matter, as it were—which at the same time was the psyche. The 'pneuma' was visualised as something which could spread through brain and arteries as quick as lightning and was present everywhere at the same time, yet confined to a certain place. Descartes linked the psyche to the pineal body, though he conceived of it as something quite immaterial, while Sömmering located the 'pneuma' of the psyche in the liquid of the cerebral ventricle. Kant's retort was that it was impossible to conceive the psyche as something material, no matter how fine, and it could not possibly have any seat in space. There might be instruments of the psyche, but no seat for the psyche. Such an instrument however—he replied to Sömmering—would have to be structured and could never be a liquid. What Kant said is still true today. It remains, however, only a critical insight and not a matter of positive knowledge.

It was not any speculative attempt to solve the whole problem at one stroke that advanced our knowledge but definite and concrete experiences, which however were almost always immediately linked with generalisations that tended to become absolute.

Gall first set out systematically to enquire not after the seat of the psyche as such, but after the localisation of particular psychic properties (character traits) and functions within the highly differentiated brain. It was remarkable how, both in his case and characteristically with later research workers in this field, magnificent discovery went along with the most sterile speculation. Gall discovered the crossing of the pyramidal tracts and explained the hemiplegias in connection with the focal cerebral lesion on the opposite side of the brain—a discovery which will stand for ever. He distinguished verbal ability from mathematical ability, a psychological insight which is correct if slightly vague. He localised these abilities along with a wealth of other character properties, which he then classified according to their definite location on the brain-surface, and he thought he could discover in the palpable shape of the skull whether they were more strongly or more weakly developed (*Phrenology*). This teaching dissolves into nothing but it nevertheless made him the father of the psychological idea of localisation, which he had verified so brilliantly in the field of neurology.

Most of his views lacked foundation and this made him an easy target for attack. *Flourens* (1822) took up the exactly opposite position. Ablation experiments on the brains of animals went to show that all psychic functions suffer if brain matter is destroyed and that, after the initial shock has passed, the remnant of the brain carries out all normal functions. The brain it was said has a homogeneous structure and localisation does not take place. The Academy in Paris established a commission, which included such eminent workers as Cuvier and Pinel, to test Gall's theories and finally dismissed them. They explained the brain as a homogeneous, glandular organ.

However, the magnificent successes of later research countered the findings of these sober and critical scientists and supported the basic theory of the fantastic Gall (localisation of function and differentiation of brain-substance). *Broca* (1881) observed and described speech-disturbances indisputably associated with the destruction of certain cortical areas in the left hemisphere. *Hitzig* and *Fritsch* (1870) showed that certain cortical areas produced highly differentiated motor effects when stimulated electrically. Ever since then *localisation has become a fact*. The question is only *what* is localised. In neurology a large number of definite findings are now available. Neurological symptoms acquire a certain specificity due to the localisation of processes in certain parts of the brain. A whole body of teaching on problems of neuro-physiological localisation has been developed in a magnificent manner as a result of clinical observation combined with physiological experiment. The question now is in what sense are *psychic* disturbances localised?

In the enthusiasm aroused by the rapid success of these neurological discoveries, and being himself a contributor to them, Meynert designed a comprehensive chart of brain–psyche activity. The unthought-out postulate—the principles of which were hardly conscious—ran as follows: the objects of observation in psychopathology (psychic phenomena, experience, character-

properties, meaningful connections, etc.) must be conceived in terms corresponding to the spatial events in the brain or, to put it differently, the structure of the psyche, as we variously conceive it in our psychological thinking, must be embodied in the structure of the brain; or, put differently again, the structure of the psyche and the structure of the brain must coincide. This postulate has never been proved. It cannot be proved, because it is meaningless. What is heterogeneous cannot coincide, but at best the one can only be used as a metaphorical expression of the other. The postulate arose from the need to have some manifest objects in space, but in psychological thinking and in research proper such a need can never be satisfied. It also arose from the tendency of our age towards positivism and the natural sciences.

Meynert's chart proved fruitful for our knowledge of the brain. His concept of the whole structure of the central nervous system, the sensori-motor fields of projection, the association-systems, etc., remains valid anatomically. Like Gall, he linked real insights with a rich crop of fantasy but with quite different content. He explained all psychic events by expressing them in terms of brain-structure and brain-physiology, thus his imagination masqueraded quite unscientifically in a scientific disguise.

Griesinger's statement 'mental illnesses are cerebral illnesses' was now to find its concrete fulfilment. The basic view seemed to have won through successfully when *Wernicke* took it up. This genius fell into the trap of his own teaching on aphasia. He discovered sensory aphasia and its localisation in the left temporal lobe. He devised a schema based on association psychology in which an analysis of speech performance and speech comprehension was to coincide with a topographical distribution in the cortex of the left temporal lobe (1874: 'The syndrome of aphasia'). What he denoted as the 'psychic reflex arc', 'the psychic focal lesion', appeared to be demonstrated in the field of aphasia. His concept indeed brought order into the chaos of phenomena and enriched and clarified clinical understanding, but at first the large number of contradictions were overlooked. 'The analysis of aphasia provides us with a paradigm for all other psychic events.' With this statement, the schema became the starting-point for basing the whole of psychiatry on principles of cerebral localisation. The original idea was mistaken but it was fruitful (as happens so often when fundamental errors are taken up and elaborated by outstanding people). Pupils of Wernicke, such as Liepmann and Bonhoeffer, made one discovery after another, but while their attitude was to adhere to what could be empirically and as far as possible somatically demonstrated, they sacrificed the original basic idea. The imaginative aspects could now be quietly dropped. But the example of Wernicke himself helped to bring back a good deal of this once more in the general readiness to construct localisation hypotheses as with Kleist, in whose case the idea still has retained all its power of discovery.

In respect of this whole movement it is of great factual and historical

interest that the earlier outstanding personalities of science, who knew the material facts of the localisation theory in its main features and had in part contributed to it themselves, were the *principal opponents of any localisation of psychic function*: (in particular Brown-Séquard, Goltz and Gudden) and that v. Monakow has joined their ranks as a modern representative¹ of this attitude.

(d) *Relevant facts for the localisation theory*

Clinical data, the structure of the brain and the pathological-anatomical findings are three groups of facts which are investigated separately. Insight into the localisation of phenomena can only be obtained if we relate all three together. But while the refinements of research tend to separate these fields more and more and make it increasingly difficult to relate them to each other, localisation apparently becomes much clearer if we use a broad approach.

1. *Clinical data.* We have the confusing wealth of phenomena that follow brain-injury, or that occur with tumours and organic cerebral processes. These have been clinically observed in individuals and from time to time have been compared with the topographical findings at post-mortem or during operation for tumour.²

(aa) We examine striking and specific *disturbances of performance*, and ask which place in the brain is regularly found to be affected when they occur. In cases of aphasia, apraxia, agnosia, in most instances we find crude destruction of certain areas in the brain; thus in motor aphasia there is destruction in the third left frontal convolution; in sensory aphasia it is in the left temporal lobe, in psychic ('soul') blindness it is in the occipital lobe, etc. The 'reduction of perceptual activity' can be localised on the cerebral surface for the various sensory fields.

The *present-day view*, according to which such findings are classified, is as follows:³ The cerebral cortex is divided into sensory and motor projection fields. The visual field is in the occipital lobe, the auditory field in the temporal lobe, the sphere for touch is in the parietal lobe, the sphere for labyrinthine and muscle reception is in the frontal lobe, etc. Ever near and in direct contact with these areas are the fields which, should they be destroyed, produce the agnosias and apraxias, the sensory and motor aphasias. If the latter disturbances are called psychic, then according to Kleist all the fields will have a tripartite division into sensory, motor and psychic spheres. But the question is in what sense these apraxias, aphasias and agnosias can be called psychic. Further, the localisation is only crude. The more precise investigation of performance, which Head extended far beyond the original schema of Wernicke, has not produced any more refined localisation.

¹ Modern views on the problem of localisation: v. Monakow, *Die Lokalization in Grosshirn* (Wiesbaden, 1914); K. Goldstein, *Die Lokalisation in der Gehirnrinde. Handbuch der normalen u. pathologischen Physiologie von Bethe, Bergmann, etc.*, vol. 10 (Berlin, 1927), pp. 600 ff.

² Karl Kleist, *Gehirnpathologie, vornehmlich auf Grund der Kriegserfahrungen* (Leipzig, 1934): assesses the literature and sets out all the material in a comprehensive manner.

³ K. Kleist, *Gehirnpathologie* (Leipzig, 1934), summary, pp. 1364 ff.

(bb) A question arises about the localisation of *experienced phenomena*. But if we go through the varied modes of abnormal psychic existence revealed to us by phenomenology and ask where in the brain do particular phenomena appear, such as delusions, falsifications of memory, *déjà vu* phenomena, etc., we get no reply. We know nothing of any specific base for these particular phenomena. We only have a few interesting observations in regard to false perceptions.¹ These have been seen to appear as strictly dependent on diseases of the peripheral sense-organs and on diseases affecting the occipital lobe. We have no knowledge of any one necessary and specific cause of these false perceptions. On the contrary the few observations made so far suggest that false perceptions are fundamentally different from each other in their origins and are of many kinds. The link between false perceptions and particular areas of the nervous system, that is the link running from peripheral sense-organ to cerebral cortex, does not however imply any specific localisation, but only the linking-up of everything sensory with the physiological apparatus of perception in general.

(cc) It is characteristic of those symptoms which can be related to particular places in the brain that their real *psychic nature may be doubted*. They are still really a disorder in one's 'tools' or motor-sensory signs of irritation and failure of a complicated kind which are present in the experience as its substance but do not belong to what is primarily psychic.

It is a different matter if we take our *start from certain large cerebral areas* and ask which psychic disturbances occur when they are impaired. We can then see psychic changes of all kinds up to changes in personality but in such a variety of ways that we cannot easily report any really reliable facts. We have selected a few examples.

In our division of the cerebral cortex we give the term 'primary cortical areas' to the projection fields which have been localised and which order the motor impulses for the various body areas; they are also the first to receive sense-perceptions, so that all the others remain as secondary areas. When compared with those of animals, even the apes, these secondary areas in man are much more extensive than the primary areas. In these secondary areas agnostic and apractic disturbances (cerebral blindness, deafness, aphasia and apraxia) are still localised in proximity to the corresponding primary fields, although they are less well defined than the elementary functions. There remains a large area of cerebral cortex which is unoccupied. We ascribe the higher psychic life to these areas and to the remaining mass of cerebrum. The cerebrum—compared with the brain-stem—is the predominant main mass. One would like to be able to localise in it and also in the brain-stem.

*Frontal lobe.*² Of all the parts of the cerebrum the frontal lobe, which has

¹ Cp. my reference to false perceptions, *Z. Neur.* (Ref.), vol. 4, pp. 314 ff. Pick, 'Über die Beeinflussung von Visionen durch zerebellar ausgelöste vestibulare u. ophthalmostatische Störungen', *Z. Neur.*, vol. 56, p. 213.

² A summary in H. Ruffin, 'Stirnhirnsymptomatologie u. Stirnhirnsyndrome', *Fschr. Neur.*, vol. 11 (1930), p. 34.

no projection areas, is particularly linked with the psyche. It is possible that this view is unconsciously fostered by the foremost position which it holds behind the forehead.

The most characteristic symptom of frontal lobe lesions, which sometimes will suggest the diagnosis very quickly to the expert, is the *lack of drive*. It is a frequent finding and Beringer¹ in particular has observed it from the psychological point of view and described it in a case of bilateral frontal lobe tumour cured by an operation: the patient is conscious, sees, hears and grasps all that goes on around him, replies to questions quickly and appropriately, does not give the impression of being at all paralysed or dulled in any way and would not be conspicuous to any occasional listener, though conversation is never helped on by him. If left to himself he sinks into inactivity. In his ordinary everyday activity, he starts when requested but immediately comes to a stop. If he starts to shave himself at 8 o'clock, he still is not ready at 12 and is only half-dressed. Razor in hand, he shows some shaved patches in the dried-up soap on his face. Nothing happens within him. His state is one of empty consciousness; he presents the picture of someone without background to his life, he is not bored, he does not suffer and faces everything as a spectator. If asked how he is, he says he is content, he does quite well. Asked about his illness, he will say 'Something is out of order, but what it is I don't know.' Much more is paralysed than just his drive. There are no emotions; the specifically human psychic behaviour is blocked in its entirety; there is an emptiness of thought and experience, in which neither past nor future plays any role. There remains an intact physical organism with a self that is pure form; a form which can perceive, comprehend, remember and register, but without the least spontaneity; it cannot participate and remains in a colourless, indifferent placidity.

In cases of frontal lobe injury many other psychic disturbances have been described. Whereas loss of drive is supposed to depend on lesions of the frontal lobe convexity, the basal cortex (orbital cortex) is supposed to bring about *changes in personality*—silly, euphoric and irritable behaviour, disinhibition, asocial behaviour, loss of critical judgment, and loss of insight into situations —while thought and earning performance remain intact; in addition there is a tendency to viciousness and malice at others' misfortune and the constantly quoted jocularity (though if one counts the cases this has only been observed in a very small minority).

*Brain-stem:*² While destruction of the cerebellum does not produce any psychic phenomena, this is not at all the case with the relatively small brain-stem. Observations of the last decade have brought to light psychic brain-stem symptoms and views on the brain-bound nature of psychic life have been very greatly influenced thereby. The whole wealth of our psychic life is probably closely involved with the enormous bulk of the cerebrum but the brain-stem

¹ Beringer, 'Über Störungen des Antriebes bei einem von der unteren Falxkante ausgehenden doppelseitigen Meningeom', *Z. Neur.*, vol. 171 (1941), p. 451.

² Summary: Reichardt, 'Hirnstamm u. Psychiatrie', Ref. 1927, *Msch. Psychiatr.*, vol. 68, p. 470. A. Bostroem, 'Striäre Störungen', in Bumke's *Handbuch der Geisteskrankheiten* (1928), vol. 2, p. 207.

seems to fulfil certain elementary and necessary functions which support the entire psychic life. The character of these functions, though in constant flux, shows certain essential features that are unmistakable. Specific observations in encephalitis lethargica and in Parkinson's disease, as well as in tumours and general physiological investigations, give us the basis for an over-all picture.

Goltz' famous *decerebrated dog* (the entire cerebrum was surgically removed without the animal perishing)¹ has shown us what is possible without the cerebrum and merely with the help of the brain-stem, waking and sleeping, standing and running, eating and drinking, reaction to light and trumpet-sound, anger at stimulus.

The *over-all picture of brain-stem disturbances* from the corpus striatum downwards is a clinical one and not precisely localised, usually only localised in the brain-stem in general. Brain-stem symptoms are as follows:

Hyperkineses: Muscle twitching, involuntary spontaneous movements (chorea), associated movements, ballistic movements, convulsive contractions, athetotic movements, tremors. *Akinesis*: Parkinsonism: slowing of voluntary innervation, muscle-rigidity, tendency to certain postures; poverty of spontaneous movements, wooden appearance, disappearance of gesture, mask-like face, automatic body-movements, loss of associated movements; without any paralysis, the body sags forward, the shoulders droop, the mouth hangs open; inability to carry out several movements simultaneously, for instance, moving forward while using a broom. This over-all picture of Parkinsonism seems to be *purely motor, not psychic*. But these symptoms not only have consequences for the psyche (e.g. compensating for the loss of involuntary spontaneous movements by voluntary ones); there are also disturbances with a *psychic* character of their own.

(a) A general *psychic slowing down*, which gives an impression of chronic *somnolence*. This has been tentatively localised in the grey substance around the ventricles and a lesion of the 'waking centre' suspected, which is distributed through the entire grey substance of the ventricle.

(b) The absence of spontaneous expression is due to the fact that the *direction of drive* which is usually involuntary in our movements fails to take place, both as regards physical movement and the thought processes. The failure affects both habitual movements and instinctive movements. A *driving impulse* is indispensable, the intention of the will alone is incapable of producing movement. The existence of this drive only becomes clear to us through observation of such patients. The drive is the involuntary turning of the attention. As such it is an ultimate and irreducible fact. If it is absent, the patient has to help himself by act of will. What is no longer possible for him by involuntary spontaneity is now carried out intentionally, but only in part and clumsily. The patient can deliberately restore his sagging posture but as soon as his attention is diverted from this, he sags again. As every act of will requires some drive for its realisation in severe cases we find even the act of will that can break through the akinesis is absent. Finally, in the last stages, the only things that help are stimuli from outside (when required or ordered the patient can still do what he cannot manage to do by himself) or affectively toned ideas such as fear. Both these make that possible which can no longer come about spontaneously. At

¹ Goltz, *Arbeiten in Pflügers Arch.* (1884-99).

times patients can make use of this by working themselves up into a state of excitement and thus enforce the willed behaviour.

The difference between this latter disturbance in drive and the loss of drive in frontal lobe disorders is shown by the accompanying symptoms. However, apart from that we should be able to distinguish these two phenomena that bear the same name. *Frontal disturbance of drive* is rooted in the personality, as it were, and therefore is not conscious, and shows itself in the thinking and willing. *The striatal disturbance of drive* is still something which the patient encounters, he is aware of it, it is rooted in the apparatus and can momentarily to a certain extent be overcome by will-power and exertion. Careful psychological analysis, such as Beringer initiated, may clarify this and perhaps discover the margins where extra-conscious elementary functions can be indirectly discerned.

(c) *Phenomena of reiteration and compulsion* have been observed. A patient constantly repeats the Paternoster until in the end there only remain rhythmical movements of the lower jaw (Steiner). A perpetual whistling or a compulsive bawling may occur. Speech leads on to a repetition of sentences, often in an increasing tempo in the form of compulsive speech.

(d) Particularly in children and adolescents—not only in the acute stages of encephalitis but in the later ones—there has been observed a general *disquiet*, a motor restlessness, an aimless going to and fro; naming and touching things, attacking people with requests but without any real affect, then massive *rages* with violent *attacks* on others. These states differ from states of mania in the unhappy mood and in the discomfort of the patients who appear to be alternatively malignant and importunate. A change of personality occurs which is thought to be typical.

(e) In the striatal symptoms it was thought that a fact had been learnt which could give a comprehensible localisation to the *catatonic disturbances of schizophrenia*. This expectation, however, has not been fulfilled. Some very rare cases are probably a combination of encephalitis lethargica with schizophrenia. If the catatonic phenomena have an anatomical base this must be of a different character than that of the striatal symptoms. The phenomena which at first sight appear similar have always proved to be different when analysed in detail: in schizophrenia, stupor consists in immobility but not in striatal poverty of movement as in encephalitis; in catatonics the lack of facial expression is not rigidity of gesture; in the case of passive movement and negativism, resistance is an active resistance, not the rigidity of encephalitis; it is a retention of the given posture and not a lack of spontaneity.

These disturbances in brain-stem lesions present an unmistakable and striking picture which has many variations. The loss of crudely localised functions indicates to us a relatively obscure link in the structure of our somato-psychic life, which extends beyond the neurologically exact individual performance and penetrates far into the psychic sphere. We have touched upon the insoluble problem of 'the drives' and their effects. Consciousness is somehow dependent on the brain-stem, which is able to render the entire cerebrum unconscious and from which a *sleeping-waking regulation* comes into being.

Finally there appear to be many *vital feelings* bound up with the brain-stem, which may be supposed to be an intermediary link between the purely vegetative-physiological event and the psychic phenomenon. Nowadays we

like to use the collective term 'vital personality' or 'depths of the person'. 'Morbid changes in brain tissue, localised round the third and fourth ventricles, are often accompanied by peculiar cravings and desires'.¹ We may recall the physical accompaniments of affects, also hypnotic effects on bodily events. In the affects vital feelings appear as something elementary and somatic, which is at the same time psychic and linked with the drives.

Paralysis of the entire brain function. Kretschmer² describes a syndrome which he considers to be a manifestation of non-function of the entire cerebral cortex, while the brain-stem function remains intact, a state comparable to that of Goltz' decerebrated dog (in pan-encephalitis, gunshot wounds in the brain, lues cerebri, transient phases in severe arteriosclerosis).

The patient lies awake with his eyes open. No somnolence. Although wide awake, he is unable to speak, recognise anything or carry out meaningful actions (paragnosia and parapraxia). Swallowing and other reflexes are present. The gaze is unfocused. Being addressed or being shown objects arouses no meaningful echo. He remains in accidental postures, either actively or passively induced. Sensory stimuli may be responded to with twitching but the flight and defence reflexes are absent.

(dd) *General points regarding clinical localisation.* Investigation in order to localise unequivocal clinical findings proves extremely difficult. Clearly circumscribed cerebral lesions have to be related to clearly defined psychic defect-phenomena and changes. But, in the first place, comparable, identical cases are rare (one case by itself does not prove much and can be accidental); in the second place, localised lesions, particularly tumours, exert distant effects on quite remote parts of the brain because of pressure, and although there is deficiency in function while the pressure lasts there is no lasting change in the brain-tissue. In the third place, a disease process usually affects wide areas and produces many simultaneous localisations. Therefore a large number of observations have produced good results in relation to pure neurology, but in relation to psychic phenomena, although they show the close connection between brain and psyche, so fail to establish any system of laws or create such indefinite ones, that, as clinical observations grow, every temporarily convincing system has again to be discarded. The psychic phenomena are certainly not accidental; indeed as a matter of fact the investigator is convinced of the opposite. But whenever he believes that he can formulate some law, it eludes him among the complexity of the connections.

The *aphasic, apraxic and agnosic disturbances* serve as models and indeed are the cardinal point of all discussions on localisation in the psychic sphere. In order to grasp the theoretical significance of this localisation, we need to know the following facts: 1. That in individual cases these symptoms are found without any destruction in the relevant parts of the brain, rather the lesion

¹ Meerloo, *Z. Neur.*, vol. 137.

² Kretschmer, 'Das Apathische Syndrom', *Z. Neur.*, vol. 169 (1940), p. 567.

seems to be in the neighbouring parts. 2. That the extent of the symptoms has no regular relationship with the crude destruction. In order to grasp this incongruity we differentiate between *residual symptoms* which follow a local destruction and are in principle permanent, tied to a particular focus, and *temporary symptoms* which disappear though sometimes this is after a long period. We seek to explain the temporary symptoms as due to distant effects or shock, and recovery as due to the disappearance of these effects or the compensatory appearance of other functions or parts. This differentiation rests on the empirical finding that brain lesions show a far-reaching reactivation after the disease process as such has been abolished. However, the localised residual symptoms about which up to now we can be certain are destructions of primitive neurological functions: paralyses, ataxias, sensory defects. It is extremely hard to determine what in the aphasic, apraxic, and other disorders is merely temporary and due to the effect of the focus on the whole brain, or at any rate on wide areas of it, and what is residual and firmly localised. In any case we cannot really talk of the localisation of such complex formations in the psychic sphere as language, behaviour, etc. But such an assumption suggests that the more remote specific conditions for these psychic performances are linked with certain places in the cerebral cortex. At present it is impossible to define and express the underlying functions which are thus localised. In other words, *it has been impossible up to now to localise psychic function or to find any one case which will give such a theory valid foundation.* The scientific situation therefore is as follows: on the one hand we observe crude focal cerebral lesions; on the other we observe disturbances of function that are partly psychic (speech and action), which—usually but not always—appear together with these focal lesions. Microscopically we can study the anatomical destruction closely and make an exact analysis. We can also analyse the disturbance of function in a most interesting way with the help of performance tests and the analysis of deviant reactions, involving association-mechanisms, perseveration, etc., and the establishment of which performances are preserved and which disordered. But *between the two aspects of these more detailed analyses no relationship can be found, nor can we define any one elementary function through our analysis which can be localised as such.* In principle it is not impossible to find such elementary psychic functions which could then be ascribed to particular places or physiological mechanisms but in fact this is a matter for the distant future.

In the literature the theses on localisation of psychic function are of such a kind that the author has to say 'one assumes that . . .' Assumptions are the ground for those systems of cortical areas which inscribe on a number of 'geographically' divided fields: jocularity, increased irritability, personality-change, depressive or euphoric disturbances, etc.

Here a differentiation has to be made: *topographical diagnosis* on the basis of typical psychic symptoms in the clinical picture is not the same as a knowledge of the *laws of localisation of such psychic entities* as particular modes of

experience, performances, personality traits, etc. The importance of the psychic picture among others in the clinical topographical diagnosis cannot be doubted but there is no law of localisation; we cannot make it a matter for calculation nor do we know on what the psychic phenomenon rests.

2. Brain structure. All our ideas on the localisation of psychic entities have behind them the knowledge of the macroscopic and microscopic structure of the brain. Morphologically the brain is no uniform glandular mass. Rather there unfolds before us a vast wealth of varied form, tracts and systems which are minutely structured to the point of invisibility. Investigators must overcome unusual technical difficulties if they are to give the total picture in section or colour.¹ What formerly had appeared as homogeneous, later turns into a great variety of structures. Thus Brodmann marked out the cerebral cortex into 60 areas, according to size, number, shape and arrangement of the nerve cells (cyto-architecture) and Vogt marked out 200 areas, according to the different distribution of fibre-tracts in the cortex (myeloarchitecture). The differentiation of cell-forms and cell-structure is almost infinite.² Anatomical differentiation advanced with the help of animal experiments: cutting of fibres and ablation bring about degeneration of fibres and cells in the areas concerned. Thus we can recognise which parts belong together as well as the independence of certain areas. In this way Nissl recognised that there are layers in the cortex which live their own life, even after all projection fibres have been severed, while other layers in the same area degenerate.³

The study of cerebral structure is always accompanied by a perpetual lack of satisfaction: we get to know what we cannot comprehend. We see forms the function of which we rarely know. We impress our minds with shapes, tracts, groupings of grey and white masses, learn a large number of names, and yet feel stupid when faced with learning and visualising what we cannot comprehend. We have further to reflect that all morphology of brain function is still crude in relation to the obscure, ultra-microscopic chemical-biological processes of life, and that, finally, the apparently inexhaustible number of shapes, configurations and systems visible in the brain-structure are nevertheless only visible to us as the corpse of the brain, as the crude, dead and ruined remnants of life.

All experiences such as these fill us with respect faced as we are with the secret of the spatial foundations of psychic life. It is one of the basic postulates of our biological thinking that *we take this morphological marvel as one of brain-structure*. The brain is a unique organ, wholly incomparable to any other. Its extraordinary shape and organisation—as revealed in its cytoarchitecture—make us think again and again of something equivalent to psychic

¹ B. Kihn, 'Die Lage Der histopathologischen Technik des Nervensystems in der Gegenwart', *Z. Neur.*, vol. 141 (1932), p. 766.

² Cecile and Oskar Vogt summarise their life-work in *J. Psychiatr.*, vol. 47 (1936); vol. 48 (1938).

³ Nissl, *Zur Lehre der Lokalisation in der Grosshirnrinde des Kaninchens*, S. ber. Heidelbg. Akad. Wiss. Math-naturw. Kl., 1911.

life but with no definite correspondence demonstrable anywhere, particularly as regards structure. The reality of psychic life remains incommensurable with anything that is spatially visible, even though in its spatial aspects the brain must have the closest relationship to the psyche.

At this point we have reached the limit of what is for us a spatial phenomenon. The many variously formed layers of the cortex, the cell-bodies and nerve-fibres, all show us spatial extremes, representing the psyche which we want to reach but which in this way we will never reach. We stand before this picture as before the cosmic nebulae. Both show us something in space that is ultimate, something that gives evidence and indicates, something which is itself impenetrable and points beyond itself to something else.

3. *Pathological-anatomical findings in the brain.* There are crude, anatomical findings such as tumours, softening, haemorrhages, thickening of membranes, atrophies, etc. The crudest finding of all is the *size of the brain*.

It was hoped to find in the healthy brain a relation between *size of brain* and *intelligence* but the statistical findings are indefinite.¹ In the animal series up to man, man has the largest relative brain-weight. Negroes on the average have a slightly less brain-weight compared to the white or yellow races; women have slightly less than men. These are facts which are by no means easy to interpret. Numerous brains of outstanding individuals have been examined without any meaningful result.² There are great men with very large and very small brains, and there are also average people with unusually large brains.

In pathological conditions the brain can be enlarged or diminished. We speak of *brain-swelling*. This is recognised in the relationship between brain-volume and capacity of skull, the norm of which is about 90 : 100. The nature and causes of brain-swelling are not known. Oedema of the brain and brain-swelling are different as to their nature. We are concerned with a crude pathological-anatomical concept which includes heterogeneous material.³ Increase in brain-weight is found in some acute psychoses which give a picture of amentia and in death due to status epilepticus. In many of the functional psychoses and epilepsies, etc., there is no alteration, while diminution in brain-weight occurs in Gerneal Paralysis, senile dementia and in a proportion of cases of dementia praecox.

There has been a much greater wealth of *microscopic* findings, inflammations, degeneration, new growths, atrophies, and innumerable morphological changes.⁴ One of the major results was the definite recognition of General Paralysis from the microscopic picture of the cortex. Histopathologically a clinical disease-entity was established (Nissl and Alzheimer). But this meant

¹ Bayerthal, *Arch. Rzssenbiol.* (1911), pp. 764 ff. *Z. Neur.*, vol. 34, p. 324.

² Cp. Klose; for references, 'Das Gehirn eines Wunderkindes', *Mschr. Psychiatr.*, vol. 48 (1920), p. 63.

³ Reichardt, 'Über die Hirnmaterie', *Mschr. Psychiatr.*, vol. 24. 'Über Hirnschwellung', *Z. Neur.* (Ref.), vol. 3, p. 1. Krueger, 'Hirngewicht u. Schädelkapazität bei psychischen Erkrankungen', *Z. Neur.*, vol. 17 (1913), p. 680. Schlüter, *Z. Neur.*, vol. 40. de Crinis, *Z. Neur.*, vol. 162. Riebeling, *Z. Neur.*, vol. 166.

⁴ Cp. Nissl's *Einführungsaufsatç zu seinen histologischen u. histopathologischen Arbeiten* (Jena, 1904), vol. 1.

a purely somatic discovery. Nothing could be discovered in the way of psychic localisation or of anything parallel to the mental course of the illness nor could any suitable questions be definitely formulated. Only the fact that other psychoses also show histological changes points to the relationship of these psychoses to the brain but only too often this finding is ambiguous.

We cannot at present speak of a correspondence between *clearly analysed psychic functions* and anatomically finely divided areas, yet it is beyond doubt that there is a *relation between cerebral illnesses and psychoses*. This fact which has been accepted for a long time as an established, if crude, finding is the reason that psychopathology shows so much interest in the detailed follow-up of cerebral research. Histology teaches us on the one hand to do without brain-mythologies, once so popular with older psychopathologists, and on the other hand to hope that with its help physical illness will be defined more clearly. Knowledge of the complexity and variety of histological pictures is of educational value to the psychopathologist should he ever feel inclined to think about his subject in general terms.¹

There has grown up here a whole world of pictures and forms which we usually neglect because we cannot see their direct application and it is just here that the whole question of localisation should find clarification, further development and decisive answer.

In any case research into the visible structure of the brain retains its own independent value: 'Cellular pathology has already been declared out of date, but what we see shows us the importance of cell-theories for the understanding of life-processes. Even performances that are more or less humoral appear to be cell-bound, and all physiological interpretations, if they want to have any standing, must remain linked with the idea of morphology. Anatomical methods are based on morphology, its theory is the perception of organic form. We are not compelled to stop at the mere seeing of forms nor at the question of their genesis.'²

(e) Basic questions raised by the theory of localisation

The facts which point to the localisation of psychic entities are unsatisfactory. There is the constant belief that some localisation has been reached but when we want to grasp it decisively it becomes elusive. So far, in contrast with neurological localisation all localisation of psychic entities remains crude;

¹ Franz Nissl, *Beiträgen zur Frage nach der Beziehung zwischen klinischem Verlauf und anatomischem Befund bei Nerven- und Geisteskrankheiten* (Berlin, 1913 ff.). This book presents its material vividly and the contrast is clearly worked out between our knowledge of the finest detail and the lack of any correspondence of this detail with the clinical picture; such a relationship only exists in the crudest form between brain disease and mental illness. In another place (*Allg. Z. Psychiatr.*, vol. 73, p. 96), Nissl speaks about the limits of histological knowledge: 'We have no difficulty in the separate recognition of General Paralysis, senile dementia and arterio-sclerosis and a few forms of cerebral syphilis, but in the majority of post-mortem cases in mental hospitals, brain pathology has so far failed us. We do find regularly very manifest changes in particular tissues, but cannot do much with them or keep these characteristic histopathological pictures in separate groups corresponding to the clinical syndromes.'

² Spielmeyer, *Z. Neur.*, vol. 123 (1929).

anatomical findings just as much as the fixing of the psychic phenomenon remain fluid and approximate. In the second place, where the facts are exact and well defined, both psychological and histological research arise and all localisation is broken up. Therefore, the theory of the localisation of psychic entities evades any clear presentation of manifest findings. Nevertheless, the two groups of facts, though separately explored, press continually for an answer to the question of their relationship. The aim remains to find the links between psychological observation and the anatomical brain findings, following the example of neurology which has established the relationship between anatomy and function on the principle of localisation. The localisation of neurological and physiological functions (patellar-reflex, respiratory centre, motor-cortical areas, etc.) has succeeded to an extraordinary degree and the localisation of neurological illnesses forms one of the exact areas of medicine. But as soon as we come to the psyche the clear picture fades. In all the textbooks of physiology and neurology we notice the sudden somersaults and silences once the patient is reached. When we come to the problem of psychic localisation, therefore, it is more important for us to understand the *general position of research* than to point to the findings.

Driving the argument to a fine point we may say: in psychological matters we do not know *what or where to localise*. There are *three main questions*:

1. *Where are we to localise?* In the first place in particular *areas of the brain substance*, in the macroscopically delineated parts of the brain and cortical areas and in the microscopically visible cortical layers and cell-groups. This anatomical theory of localisation proceeds in terms of 'centres' of function. But these are all 'centres' which, *if impaired*, distort function and not centres the *positive function* of which we have thus got to know. Perhaps these centres are only places in which lie certain undefinable conditions of function and not the function itself. All these centres are only demonstrated as centres of disturbance, not centres of performance. They must be circumscribed places which if impaired give rise to disturbances because they are not directly replaceable. These localisations, therefore, are distinguished by the fact that disturbances arise immediately after relatively circumscribed changes have taken place in them, whereas in other areas alterations in function do not become obvious, even after massive losses of brain substance. Perhaps the reality of function itself depends on an infinite number of relationships between the many parts and is nowhere essentially localised in a centre. The interplay of anatomical parts and physiological functions forms a whole, within which, when there are particular lesions, they replace each other and compensate for each other; a whole within which they stimulate each other, facilitate and inhibit each other in an infinitely complex structure, which so far has only been recognised in part as regards the neurological connections and as far as psychic connections are concerned remains mere metaphor.

In the second place *in systems*, which extend morphologically through the whole nervous system and have their own inner connections. The question is

not crudely anatomical, but asks to which of these systems as a complex unity does the unit of function and disturbance belong? These systems however are known in respect of neurological functions and to regard them as a basis for psychic phenomena is once more to make use of mere analogy. This may well be assumed and can sometimes be elaborated more concretely but in no case can an anatomical system be shown to be a basis for psychic events.

In the third place we may localise in places which we have determined by means of *pharmacological experiments*, and which we may also demonstrate in part morphologically. There is so to speak a chemical localisation, which has, as it were, become pharmacologically clear in the differentiations of the nervous system. But no matter how suggestive a comparison may be drawn with the psychic effects, say, of poison, any demonstrable localisation of the psychic phenomena is missing.

2. *What units are we to localise?* What we feel or think to be a unit of performance, experience or self-awareness is still not thereby a localisable, functional unit. What is localised always reveals itself to be a psychic tool, not the psyche itself. We cannot say what it would mean if the personality, its nature and character-properties, or even just the experienced psychic realities as such, were localisable and laid open to disturbance by local changes.

On the other hand research into localisation offers the significant task of discovering 'elements' or units of function which would never have been discovered in any other way and of detecting factors in the function which have only become clear through the disturbance. This is perhaps the case with 'drive', which is localised in the brain-stem and (in another sense) in the frontal lobe, so too with the functions which have been differentiated in speech, in apperception and in action. But the elementary life-function which has thus been grasped—the 'basic function'—must itself be extra-conscious and manifest itself only in the experience of 'drive' and in the performance of speaking and acting.

We always see a hierarchy of functions or a hierarchy of psychic tools. In the investigation of these we come closer to the psyche but still we only discover what serves it or what conditions it, we never discover the psyche itself.

3. *What kind of relationship is there between function and focus?* The old idea that centres are the seat of function itself has been abandoned for a long time. Focal centres are the precondition but not the substance of function. To be 'linked' with a focus means that function cannot take place without that centre but it does not mean that the function takes place through it. In order to imagine this precondition for function more precisely, we can call on a number of possible theories: In any total event, the centre is merely a link that is irreplaceable. In such a centre a switchover or exchange takes place that can only happen there. Some kind of common activity is interfered with when the switchover is disturbed. When a centre is impaired disinhibition occurs of what has been regulated and inhibited by this centre. Usually, however, it is not clear how we should imagine the relationship between the psychic dis-

turbance and the centre, what it is that really disappears and how the disturbance takes effect. Every theory is an hypothesis, a way of expressing oneself, a use of metaphor. In fact all that we have learnt so far about such relationships remains quite crude, on the one hand brain findings with indistinct demarcations and on the other hand complex psychic disturbances. Every relationship remains indefinite and approximate and, so far as it can be shown to exist, is concerned with complex performances on the one hand and large brain areas (such as the cortical areas, brain-stem) on the other. We cannot understand how psychic and localisable functions interact. Everything psychic is always a total event, it is not composed of partial functions but functions are the tools it uses and, when these are affected, the event in its totality becomes impossible.

(f) *The questionable aspect of localising psychic material*

No one so far has succeeded in breaking down psychic life into parts that can be localised. In psychology even the simplest phenomena are so complex from the neurological point of view that in order to bring them about the whole brain is necessary. All the different centres that have been defined represent remote conditions for the psychic phenomena though it always remains obscure which of the conditioning or partly conditioning functions is linked to these centres.

Let us summarise results: 1. The facts of the *anatomical* structure of the brain, in themselves of so great interest, have no *consequences* so far for psychopathology. They only show us the enormous complexity of those physical foundations of psychic life which must be conceived as remote, not direct, foundations. 2. *Elementary psychic functions* that could be localised are unknown. 3. The facts on the localisation of complex morbid phenomena (aphasia, etc.) are uneven. Up to now they can only be utilised diagnostically and cannot be analysed in such a way that psychological analysis of the failures in performance can be related to a more refined anatomical analysis of brain lesions.

In this connection the following points are illuminating: the idea that *different psychic disturbances* could be *caused by a different localisation of the same disease process* is purely theoretical and has no basis in fact. One has as much right and the same impossibility of proof if one makes the individual psychic disposition responsible for the difference. Both views are probably right. The psychiatry which rests on the basic idea of localisation of psychic function comes to grief over the fact that up to now—and perhaps for always—the elements found by psychological analysis and the anatomical localisations arrived at by brain research have no relation whatsoever to each other. The fact the same disease-processes are localised variously in the nervous system cannot be paralleled with, let alone related to, the fact that the psychic disturbances in the same organic illness are themselves various.

Whenever we consider the relationship between brain-findings and psychic disturbances we have to remember that *brain-findings need by no means be*

connected in every case with psychic disturbance; there are accidental, coinciding phenomena, which are, however, of heterogeneous origin, e.g. histological findings in changes due to the death-struggle. Further we have to remember that *in principle cerebral changes may also be the result of primary psychic phenomena, though such an effect has not been empirically demonstrated.* That in every case the cerebral phenomenon is the cause whereas the psychic phenomenon is the result, and not the other way round, is just as much supposition as the previous statement that all mental illness arises out of the psychic life. Psychopathology must keep both these possibilities open.

The statement that 'all mental illnesses are cerebral illnesses' and all psychic events only symptoms is nothing but dogma. It is only fruitful to look for brain-processes where one can *show* them anatomically and histologically. It is futile to contrive localisation, of ideas and memories for instance in the cells, or of association of ideas in the fibres, and even more so to devise some hypothetical picture of the whole psyche represented as a system of localisation in the brain. To do so is to imply that we are making an absolute of cerebral events, taking them as the very substance of man and considering all human events as brain events. From the psychological point of view cerebral diseases are just one of the causes of psychic disturbance among many. The idea that everything psychic is at least partially conditioned by the brain is correct but is too general to mean anything. As far as psychopathology is concerned, every psychopathologist will agree with Möbius, who says: 'The histologist should not dominate the clinic, because an anatomical classification of illness is stupefying.'

CHAPTER X

HEREDITY

We shall try to give a historical presentation of all the magnificent yet difficult, fascinating yet confusing insights that have been gained into the heredity of psychopathological phenomena. The broad outlines of the historical development will at the same time show their logic. The most important step in the science of heredity has been that of genetics developed by biologists since 1900. Since that time all thinking on heredity has come closer and closer to the concepts of genetics. We have, however, a wealth of facts established both before and after that date in which the concepts of genetics play no part. Today the latter are used for the interpretation of almost every case but the actual facts as found are independent of this interpretation.¹

§ 1. THE OLD BASIC CONCEPTS AND THEIR GENEALOGICAL AND STATISTICAL CLARIFICATIONS

(a) *The basic fact of heredity*

From ancient times it has been a matter of wonder that children were similar to or identical with one or the other parent in their behaviour and gestures, in their general characteristics and sometimes even in the subtleties of their nature. Men noted the uncanny identity even at the earliest age, sometimes in the most trivial features, and observed the recurrence as well as the high incidence of mental illness in families.

At the same time it was seen how completely parents, children and siblings could differ. Parents do not recognise themselves in their children and say 'they are different from us'. Characteristics of grandparents come to life again in their grandchildren. Long-lost characteristics of past generations peer through once more. We speak of atavism. Mental patients have healthy children, healthy parents have sick or defective ones.

Thus even initial impressions are surprising. They show the erratic and unpredictable nature of the facts as observed. It becomes apparent that there must be complex connections between the hereditary processes and the development of the individual Anlage. Heredity as such however—and this concerns the psychoses as well—cannot be disputed. The force of ever-recurring

¹ Psychopathological heredity: for detailed summary, Entres, in Bumke's *Handbuch*, vol. 1 (1928), pp. 50–307. For schizophrenia, Beringer, Bumke's *Handbuch*, vol. 9 (1932), p. 34. Luxenburger, 'Die Vererbung der psychischen Störungen', Bumke's *Handbuch*, Eg-Bd. (1939). Günther Just, *Handbuch Erbbiologie des Menschen*, vol. 5. *Erbbiologie u. Erbpathologie nervöser u. psychischer Zustände u. Funktionen*, summarised by Just and Lange (Berlin, 1939). A general orientation is given by E. Rüdin (München, 1934). *Erblehre u. Rassenhygiene im volkischen Staat*. Luxenburger, *Psychiatrische Erblehre* (München, 1938). An excellent brief study.

observations in particular cases encouraged scientific research in spite of almost insurmountable difficulties. The fact of heredity is certain; the problem lies in the what and the how.

The significance of impressions gained in the course of chance observations can only be clarified by research. There are two methods whereby we can verify the facts of heredity. These are the methods of genealogy and statistics. Genealogy gives the concrete picture of heredity as evident in families and kin-groups. Statistics show numerically, in abstract fashion, the actual extent of heredity in large numbers of cases.¹

(b) *The genealogical point of view*

We obtain family trees by means of an intensive investigation of suitable families (a parent-couple with all their offspring through several generations) and draw up tables of descent (an individual with all his forebears) which allow us to see the hereditary connections in individual cases.² In some instances investigation has been extended to entire villages and the family tree has been traced through centuries. In so doing mental illness was of course only considered indirectly.³ The aim is always to obtain a concrete historical picture of particular families and family groups. The advantage is the acquisition of the total picture with all the details as well. The disadvantage lies in that there need be no general application of what has been found in the individual case. Certain family trees which show an increased incidence of mental illness are very impressive. They give the true historical picture but

¹ Methodical investigations into heredity in man were carried out by Galton: *Hereditary genius* (London, 1869). All our basic ideas on human heredity are found in Galton's writings: the heredity of psychic characteristics (genealogical research), the problem of the relationship between environment and hereditary disposition (twin research), the idea of influencing heredity by improving the chance of favourable hereditary qualities (eugenics), the idea of the self-destruction of outstanding heredity dispositions as the cause for the disappearance of cultures (e.g. the Greeks). Other early works: de Candolle, *Histoire des sciences* (Genf, 1873) (Leipzig, 1911). Dugdale (1876) (see following footnote). Old collected observations: Prs. Lucas, *Traité philosophique et physiologique de l'hérédité naturelle* (Paris, 1847–50). J. Moreau, *La psychologie morbide dans ses rapports avec la philosophie de l'histoire* (1859). Th. Ribot, *L'hérédité* (1871) (1895).

² Dugdale, *The Jukes* (New York, 1876). H. H. Estabrook, *The Jukes in 1915* (Washington, 1916) (a kin-group stemming from a female tramp who died in 1740; in it occur a vast number of prostitutes, drinkers, criminals and psychotics. Roemer (*Allg. Z. Psychiatr.*, vol. 67, p. 588) traced the genealogy of a family in which an accumulation of hereditary factors (intermarriage) led to countless cases of epileptoid disposition, psychic epilepsy and convulsive attacks. Joerger, *Psychiatrische Familiengeschichten* (Berlin, Julius Springer, 1919). Cp. Berze, *Machr. Psychiatr.*, vol. 26, p. 270. Bischoff, *Jb. Psychiatr.*, vol. 26. Schlub, *Allg. Z. Psychiatr.*, vol. 66, p. 514. Frankhauser, *Z. Neur.*, vol. 5, p. 52. Oberholzer, 'Erbgang und Regeneration in einer Epileptiker-familie', *Z. Neur.*, vol. 16 (1913), p. 105. Pilcz, *Jb. Psychoanal.*, vol. 18. Dannenberger, *Klin. psych. u. nerv. Krankh.*, vol. 7. Kalkhof and Ranke, *Z. Neur.*, vol. 17, p. 250 (chorea Huntington). Wittermann, 'Psychiatrische Familienforschung', *Z. Neur.*, vol. 20 (1913), p. 153. Heise, 'Der Erbgang der Schizophrenie in der Familie D', *Z. Neur.*, vol. 64, p. 229. Johannes Lange, 'Genealogische Untersuchungen an einer Bauernsippeschaft', *Z. Neur.*, vol. 97 (1925). R. Ritter, *Ein Menschenschlag (eine Vagabundensippe durch die Jahrhunderte)* (Leipzig, 1937).

³ Ziener, *Arch. Rassenbiol.*, vol. 5. Lundborg, *Medizinisch-biologische Familienforschungen innerhalb eines 2232-köpfigen Bauergeschlechts in Schweden* (Jena, 1913). Rosenberg, 'Familien-degeneration und Alkohol. Die Amberger im 19. Jahrhundert', *Z. Neur.*, vol. 22 (1914), p. 133.

they teach us nothing about the kind of hereditary connection nor do they prove anything as regards the probability of inheritance of illness in the majority of cases.

Genealogy has an attraction simply because of its concrete illustrations. One can see the tragedy of families, kin-groups and entire villages as it unfolds through the generations; one can also see the accumulation of talent as, for instance, in the kin-group of the Bachs, displaying a musical talent for centuries, or of the Bernoullis with their mathematical talent, or of the Titians, Holbeins, Cranachs, Tischbeins, etc., with their artistic gifts.

(c) Statistics

We collect as large families as possible, count the sick and healthy members, define mental illnesses and other detectable mental phenomena and compare the figures thus found from various points of view. We aim at finding general laws or at the least certain averages. Here the advantage is that in this way we can get to know the way things go in general; the disadvantage is that concreteness gets lost in sheer numerical obscurity.

The basic problem of statistics lies in *what* is to be counted (whether school reports, questionnaire results, findings from records and documents—crimes, suicides—psychoses, character traits, etc.); further there is the problem whether the fundamental facts are reliable, whether we are dealing with something which on repeated observation can be identified by anyone; that is, whether it is something that can really be counted. We may also ask how the figures are obtained and with what are they to be compared, etc. At first sight statistics is an apparently simple and compelling method. In actual practice it may lead us into a labyrinth of difficulties and deceptions. The manipulation of statistics demands a specialised training and critical powers of a high order.

Here is *an example*: Mass statistics on heredity in general have been achieved with extraordinary labour. It was hoped that fundamental insights would be gained all at one stroke. Thus the mass statistics of Koller and Diem have for some time had an enlightening but also a restricting effect.¹

Diem examined the loading of healthy and mentally ill persons. But he did not reckon loading as such but subdivided it into rather crude disease entities on the one hand and on the other into types of relationship (loading in parents, indirect and atavistic loading, loading in collaterals). The table below was the result:

Summary comparison of some of Diem's main figures taken from his' statistical comparisons regarding hereditary loading in the mentally healthy (1,193 cases) and the mentally ill (1,850–3,515 cases) expressed as a percentage of the total number of probands (see Diem, loc. cit., pp. 362 ff.).

¹ Koller, *Arch. Psychiatr. (D)*, vol. 27 (1896), p. 268. Diem, 'Die psychoneurotische erbliche Belastung der Geistesgesunden und der Geisteskranken', *Arch. Rassenbiol.*, vol. 2 (1905), p. 215, 336.

The probands showed the following loading:

Probands	In relatives: All degrees of kin. Total loading			In parents. Direct line		In G.P.'s, Uncles/Aunts. Indirect and Atavistic		In siblings. Collaterals	
	Healthy %	Ill %	Healthy %	Ill %	Healthy %	Ill %	Healthy %	Ill %	
Any element at all	66.9	77	33.0	50/57	29	12.2/ 15.7	5	7.3	12.7
Mental Illness . . .	7.1	30/38	2.2	18.2	4.0	10.9	1.0	9.3	
Nervous illness . . .	8.2	7/8	5.7	5.0	1.3	0.2	1.2	0.8	
Alcoholism . . .	17.7	16/25	11.5	13/21	4.9	1.8	1.3	0.9	
Apoplexy . . .	16.1	4	5.9	3.2/4.7	9.7	0.7	0.5	0.2	
Senile dementia	6.3	2.0	1.4	1.6	4.8	0.4	0.1	—	
Character-anomaly	10.4	10/15	5.9	8/13	3.7	0.7	1.0	1.5	
Suicide	1.1	1.0	0.4	0.5/1.0	0.6	0.3	0.1	0.2	

From this it emerges that the total loading is not very different as between the healthy and the ill probands (66.9 : 77 per cent). (As a result of this finding, it follows that all statistics about heredity are valueless unless they are subdivided into separate groups.) But when it comes to loading in the direct line sick persons are significantly more loaded than the healthy (i.e. from the parents) as well as collaterally (from the sibs). Sick people are significantly more loaded than healthy people with mental illness in the narrower sense than by character anomalies. The indirect loading also shows this difference. As regards apoplexy and senile dementia it is surprising that the healthy group seems more loaded. In relation to nervous illness and alcoholism differences are only small. If therefore it is said of anyone that he has hereditary loading this means nothing at all, since both healthy and sick people are similarly affected. On the other hand loading through parents in the direct line and through mental illness means a more marked disposition in the individual.

Diem emphasised that according to his investigations hereditary loading no longer hangs like the sword of Damocles over anyone whose relatives display any psychic anomalies. 'Mental illness can be inherited but this does not always happen and does not have to happen. Inheritance of something pathological is not some eternal and inescapable fate continually demanding its victims from a family so affected. It is possible that things will settle down and my figures show that this can happen to a very large extent.'

Rüdin raised objections to this work: the loading elements were not differentiated according to clinical disease-entities (only mental illness as such was investigated); no account was taken of the ratio of healthy and sick persons within the individual families. Further, this kind of mass investigation cannot bring us any closer to the solution of the problem of the heredity of mental illness because the mode of inheritance (in the sense of modern biological genetics) is not taken into account. It is true that this way will not lead us any further. We have a rough over-all view from which emerge the above-mentioned almost self-evident generalities and the critical negative attitude which doubts whether we can find out anything more definite about heredity at all.

(d) *Constant and inconstant heredity*

Observation reveals that the same mental illness does not always recur in families from one generation to another but that mental illness in general occurs more frequently in certain families than in others. It is possible to visualise that a uniform hereditary element manifests itself in a polymorphous way so that there is not so much a hereditary disposition for certain mental illnesses but rather a disposition to mental illness in general. This vague theory of a *general disposition* to *any kind of mental illness* showing any kind of polymorphic picture in a number of transforming hereditary series has been opposed by other investigations which supported a *constant inheritance* of large groups of illnesses at least, within which transformation could be allowed.

Sioli¹ found that the affective disorders, mania, melancholia and cyclothymia, can replace each other but that these forms and those of schizophrenia (*Verrücktheit*) are mutually exclusive in one and the same family. Vorster² confirmed this when he found that the majority of cases belonging to the dementia praecox group (which roughly corresponds to '*Verrücktheit*') and to the manic-depressive psychoses do not occur together in the same family.

As regards the question of constant and inconstant heredity, countless statistical investigations have been carried out in which the main distinction drawn was between manic-depressive psychosis and the schizophrenic groups of illness. There is much variation in the figures. Sometimes opposite results are reached. The following summary of a number of different results is typical (according to Krueger):

In parents and children:

Investigator	Constant	Inconstant	No. of Cases
	Disorder	%	
Damköhler	75	25	8
Vorster	65	35	23
Schuppious	47	53	17
Albrecht	44	56	16
Foerster	44	56	25
Krueger	27	73	22 ³

Luther⁴ concludes on the basis of his figures as follows: the same psychosis (after exclusion of what is exogenous) appears in hardly 50 per cent of parents and children. Manic-depressive parents have almost half their children suffering with other psychoses and with schizophrenia in particular. Schizophrenic parents in the great majority have schizophrenic children but in individual cases they have manic-depressive ones. Amongst siblings three-quarters of the cases fall ill in similar fashion. Manic-depressive psychoses and schizophrenia occur together in a family more frequently than either of these psychoses with other psychoses. Psychoses break out earlier in the children than in the parents—Krueger's statistics show a preponderance of inconstant heredity. He once again makes a case for polymorphism, for transforming heredity and even for the increasing severity of the illness in subsequent generations. In summarising, Krueger explains 'ascendants and descendants

¹ Sioli, *Arch. Psychiat.* (D), vol. 16.

² Vorster, *Msch. Psychiat.*, vol. 9, p. 161, 301, 367.

³ Krueger, *Z. Neur.*, vol. 24.

⁴ Luther, *Z. Neur.*, vol. 25

usually fall ill with psychoses of inconstant heredity, while siblings and twins almost always suffer from the same mental illness'—Kreichgauer's¹ statistics on the other hand show a constant heredity in the typical forms of dementia praecox and manic-depressive insanity, so that no or only very slight interrelationship is found between the two groups so far as heredity is concerned.

All these statistics strike one as rather peculiar in their results. It seems as if this method cannot provide decisive findings. This is partly due to the difficulty of collecting the material. Many authors diagnose schizophrenia and manic-depressive psychosis differently. One needs material that stretches over several generations if one is really to say anything about heredity, and earlier generations of doctors described and diagnosed differently. If one wants to enumerate, the items need to be identical and without some such basis as this all figures come in question. To obtain data on mental illness that are really convincing we must have whole life histories and have seen for ourselves (Curtius and Siebeck speak of the 'utter uselessness' of statements based on interviewing relatives; besides a post-mortem one needs medical case-histories, teachers' reports, educational records, service records, records of accidents, social agency reports and criminal records, etc.). In addition we have to deal with phenomena that can be named and identified by many observers. The impossibility of ever reaching these ideal conditions compels every investigator to put up with the relatively meagre state of the findings. Under the general drive of the powerful interest in heredity we have improved our case-histories vastly in this last decade but all research into human heredity stays within certain limits owing to the nature of the empirical material itself.

The more the problem and the material are limited, the easier it is to obtain individual convincing results but the applicability of these remains small. Thus Reiss² made an excellent investigation into the heredity of constitutional moodiness and manic-depressive psychosis. From this study it emerged that 'in the heredity of morbid affective dispositions not only the general disposition but particular forms were in the large majority of cases transmitted to the descendants', this being most marked in cases of typical pathological moodiness and typical circular psychoses. If Reiss found in these cases a constant heredity of seemingly special disease-entities he also found in individual cases a separate typical heredity. In one case 'two lines could be discerned clearly, one of definite gaiety and one more depressive which met in the generation before the last and now possessed a completely separate inheritance so that the individual members of the family showed no similarity although closely related'.

Whatever a person has of hereditary substance in himself can be seen not only in him and in his parents but also in the whole family, siblings and kin. The old saying is that one should not marry a girl who is the only good one in the family but should take a look at the family as a whole. This rests on the

¹ Rosa Kreichgauer, *Zbl. Nervenhk.*, vol. 32, p. 877 (1909).

² Reiss, *Z. Neur.*, vol. 2, pp. 381, 601 ff.

view that in spite of excellent qualities in the individual, undesirable qualities that appear in the kin reappear once more in the progeny.

In the case of musical talent this has been clarified statistically. Two parents of high musical talent whose parents were also musically gifted have all their children musically gifted. Two parents of equally high musical talent, but of whom on the one side only one parent was musical and on the other none, have only half their children musically gifted (Mjöen, quoted by Reinöhl).¹

(e) *The cause for the first or fresh appearance of mental illnesses*

The question has been asked as to what gives rise to the innate Anlage when the latter is not identical with that of the parent and in particular when the ensuing deviations are unfavourable for life. The answer has been given by ascribing this to *inbreeding* and at other times inversely by ascribing it to *mixing* of alien stocks (*bastardisation*—or *hybridisation*). The idea finally arose of a fateful *degeneration* leading down through the generations.

1. *Harmful effects of inbreeding or hybridisation.* It was observed that mental illness appeared more frequently where there had been marriage between relatives; this seemed to show that inbreeding as such was harmful. To contradict this there are famous examples, such as the brother-sister marriages of the Ptolemies, which had by no means unfavourable consequences. Further research has shown:

That according to investigations by Peipers² there is no evidence for consanguinity of marriage having any special morbid effect. The same laws of heredity apply here as elsewhere; the healthy family inherits healthy characteristics, the unhealthy family unhealthy characteristics. Where both parents transmit an unfavourable 'Anlage', this becomes a 'cumulative' heredity, which in its turn follows the same rules of heredity in general. Favourable 'Anlagen' are equally 'cumulative'. Consanguinity can breed outstanding individuals as well as sickly ones. However, since many unfavourable 'Anlagen' are dormant in the human race marriage among relatives does constitute a considerable risk unless excellent characteristics are present in the whole family and morbid 'Anlagen' are absent.

Even with incest, biologically harmful effects on the offspring are not inevitable. This is known from experiments in animal heredity³ and from the self-pollination in hermaphrodite plants. Stelzner⁴ summarises as follows: incest in families of good stock does not bring about degeneration; incest plus hereditary defects in one or both parties leads to far-reaching defect in the progeny. Nowadays, therefore, inbreeding and incest are not in themselves considered as damaging factors. What matters is the hereditary substance of the partners.

What then is the situation where there is heterogeneous mixing (*hybridisation*)? As contrasted with the increase of favourable characteristics by the

¹ Fr. Reinöhl, *Die Vererbung der Geistigen Begabung* (München, 1937). (A clear summary of the findings and the literature.)

² Peipers, *Allg. Z. Psychiatr.*, vol. 58, p. 793. Weinberg, 'Verwantenehe u. Geisteskrankheit', *Arch. Rassenbiol.*, vol. 4 (1907), p. 471.

³ Wilsdorf, *Tierzucht* (Berlin, 1910). Pusch-Weber, *Die Verwandtschaftszucht* (Berlin, 1913).

⁴ H. Fr. Stelzner, 'Der Inzest', *Z. Neur.*, vol. 93 (1924), p. 660.

inbreeding of high-grade stocks, decline has been observed after mixing with alien stocks and instead of condemning inbreeding, the opposite conclusion has been drawn that mixing of alien kinds is in itself harmful. Research has shown the following:

Biologists have found that genes may come together that do not suit each other, e.g. the Anlage of the teeth and lower jaw, which is then either too small or too large for that particular dental 'Anlage'. We speak of gene-antagonism. If however we draw the conclusion by analogy that disharmony of personality characteristics is due to gene-antagonism and that this is the cause of personality disorder (psychopathy), we have to be careful. Such statements are vague and cannot be accurately tested. One too easily forgets the universality of antinomies in humans ('man and his contradictions'). The relationship between mechanical discrepancies and the meaningful tensions, contradictions and disharmonies of human life is only an analogous one; in essence they are heterogeneous.

Biologically, however, the essential matter is that sexuality as such is a trick of nature in bringing about variety. It brings what is heterogeneous together and thus creates not only combinations of what already exists but something new. Hybridisation is a technique of creation on the part of nature. We can never know all its variations in their perhaps infinite possibilities.

Individual examples are very revealing. For instance, the case of maize. Maize produces its rich grain with the help of constant hybridisation which brings about what is called heterosis. With self-pollination smaller strains appear with smaller ears. After several generations the yield is much less but the strain is both healthy and constant. Here we can see that there is no progressive degeneration through inbreeding, but only cessation of a particularly rich yield brought about by hybridisation.

Mixing (hybridisation), just as with inbreeding, can in itself be productive of good or bad. Mixing itself, moreover, is not some obscure factor of fate, neither in the sense of deterioration nor in the sense of some creative ascent. Speaking generally there lies something incalculable in both. Everything depends on the starting-point in the particular hereditary substance and on the concrete yet unpredictable potentialities.

We find far-flung theories of our human history; those of Reibmayr,¹ for example, according to which a high-level culture is due to racial mixing; hybridisation creates the new but in such a way that after a few generations (or centuries) productivity decreases through a process of levelling-out. Such theories forestall our actual knowledge with the semblance of impressive visions of the whole.

Instead of blaming inbreeding or mixing it would be much better to ask when and under what conditions mixing or inbreeding has desirable or undesirable results. The answer lies not in general categories but in the detailed investigation made possible by genetics (which we are shortly to discuss).

¹ A. Reibmayr, *Die Entwicklungsgeschichte des Talentes u. Genies*, 2 vols. (München, 1908).

2. Degeneration. It was observed long ago that mental patients often had a hereditary loading, when, for instance, Morel, Magnan and Legrand du Saulle devised their degeneration theories.¹ These writers asserted that besides mental illnesses where there is an *additional* hereditary factor (alcoholism, epilepsy, etc.), there is a group of illnesses *purely* due to heredity: the hereditary mental illnesses or degenerative mental illnesses. Within this group which form the majority of mental illnesses it is not a particular form of disturbance that is inherited but only the general disposition. The heredity is not a constant one but a 'transforming' one. This explains the 'polymorphism' of morbid pictures in the same family. According to this French theory it is a matter not of the inheritance of an illness but of degeneration. In the later generations *the severity of the illness increases*, until it comes to the extinction of whole families. Morel formulated his famous sequence of the four generations: in the first we find nervous temperament and moral inferiority, in the second severe neuroses and alcoholism, in the third psychoses and suicide, in the fourth idiocy, malformations and non-viability.

If we put this theory to the test and look at the data on which its adequacy must rest, we find the latter rather scanty and not at all impressive. Casual experiences were utilised to support this ingenious idea which seemed to reveal something of grandiose tragedy in the human race.²

In this way degeneration would be a fundamental force, hostile to life and ultimately irreducible. It brings about an 'Anlage' which becomes ever more unfavourable from generation to generation. It would thus be the counterpart to the constructive, refashioning and innovating force of creative life which enriches itself. How inherited psychic disturbance arises for the first time remains inexplicable. We speak of unfavourable mutations (see below for this concept) which may exist in the psychic life also as the 'Anlage' for mental illness. Genetic explanations of such mutations through gene-damage (alcoholism, syphilis, etc.), consanguinity of parents, hybridisation, have not succeeded so far. However, if any individual 'falls out of line' through mutation and transmits this difference by heredity, this will take place according to the laws of heredity, which take effect everywhere and are known to Genetics. If degeneration means anything else than this, it can only be the following: degeneration is the increased frequency in a family of unfavourable mutations, which are then inherited in such a way that due to some unknown, unavoidable cause the severity of the abnormality increases through the generations. We cannot prove that such a thing happens nor perhaps can we disprove it. There is such a thing as the extinction of families but not of such a kind that degeneration can be demonstrated as an independent factor. The increased

¹ Morel, *Traité des dégénérescences physiques, morales et intellectuelles de l'espèce humaine* (1857). Legrand du Saulle, *Die erbliche Geistesstörung* (German trans. by von Stark, Stuttgart, 1874). Magnan, *Psychiatrische Vorlesungen* (German trans. by Möbius), 2, 3. Heft, *Über die Geistesstörungen der Entarteten* (Leipzig, 1892).

² This greatly impressed artists who came under the influence of Morel. Cf. Zola's series of novels on the Rougon-Macquarts, and Thomas Mann's *Buddenbrooks*.

incidence of psychoses in a family by no means always involves the degeneration of the family as a whole. Some even think that cultural factors can set a degenerative process going, without, however, producing any material which could make such a view even probable.¹

Neither can we accept the details of the degeneration theory in the form in which they are generally advanced. The French investigators assumed that not only the psyche but sometimes the body as well degenerated. Physical abnormalities of form and function were supposed to point to psychic degeneration ('stigmata degenerationis'), i.e. tics, nystagmus, strabismus, innate reflex-anomalies, anomalies of secretion, flow of saliva, delayed or precocious puberty, premature ageing or infantile appearance in maturity. It was believed that one could see these 'stigmata degenerationis' in the psyche as well, particularly in the disposition of the personality (disharmony, contradictory character-traits, good intelligence coupled with lack of character, isolated abilities in an otherwise low level of development, and hence the term 'déséquilibre' for such personalities). Further, the deviations which the clinical pictures showed from one schema to another were taken as signs of the degenerative character of the psychosis ('atypical' psychoses). There is really no basis for all this. We must abandon this concept of 'degenerative' for everything that is unusual.²

The theory of degeneration is a conceptual schema with which psychiatry has worked for decades but up to now no empirical support has been found for it. What at first sight appeared to confirm it and could be easily accepted within this large-scale point of view—all too easily for the purposes of science—has so far been demonstrated universally as due to other causes. In spite of this however the question still remains in face of the up-and-down course of successive generations, but even if it is true that manic-depressive psychoses in a family are followed by schizophrenia and almost never the other way round, this can probably be explained without the help of the degeneration theory.

If we take a brief look at the old theories on heredity as a whole—constant and inconstant heredity, polymorphy, degeneration, the genealogical viewpoint and the statistical findings, the significance of inbreeding and hybridisation—the following seems to emerge: these basic conceptions stand on the whole because of their simplicity and wide sweep. Their evident truth was displayed at every point in the particular facts. But all of them became entangled in contradictions and had to face factual discrepancies. An all-embracing theory which could accommodate all the facts was not achieved. We can indeed criticise the generalities but not the particular facts. There is thus constant room for more concrete research which will not be satisfied with vague and facile generalisation but wants to know definitely and in detail what is the es-

¹ Bumke, *Über nervöse Entartung* (Berlin, 1912)—an excellent critical clarification.

² Nitsche holds the opposite view: 'Zur Kenntnis der zusammengesetzten Psychosen' auf der Grundlage der psychopathischen Degeneration', *Z. Neur.*, vol. 15 (1913), p. 176.

tablished, rather than the possible, truth. The basic general theories therefore will lose their air of ready-made knowledge and become unanswered questions to which new answers are provided by the science of biological genetics. Indeed a number of puzzles have thus found their fundamental solution.

§ 2. THE NEW IMPACT OF BIOLOGICAL THEORIES ON HEREDITY (GENETICS)

Since the rediscovery of Mendel's laws (1865) by the botanists Correns, Vries and Tschermak (1900), biology has been enriched by the development of genetics as a science. This has become one of the most magnificent fields of modern scientific knowledge owing to the exactitude of its experimental methods, the compelling nature of its results and the unanimity and intensity of its investigations. Once this science became known to psychopathologists all their previous views on inheritance in man had to be subjected to a radical test. One could understand why their own research so far had remained basically without results because it had continued to move within a circle of vague generalities. It now became clear that the rules and laws of heredity had in actual fact been investigated only in botany and zoology and that almost all the theories and basic concepts in respect of heredity would have to be based on these investigations if they were to claim any validity. So far as anthropology and psychopathology are concerned it is just a matter of transferring to our field what has been generally established in these other subjects and seeing to what extent one can find similar results. We need, therefore, some brief schematic account of some of the biological concepts of heredity.¹

PRELIMINARY REMARKS ON CERTAIN CONCEPTS OF GENETICS

(a) *Statistics of variations.* At first there seems to be an immense and irregular variability of all organisms. This becomes surprisingly regular if one makes an arbitrary selection of a number of individuals of one kind (a 'population'), chooses one characteristic for observation (e.g. height among a batch of recruits) and then counts the number of individuals which belong to various groups according to the gradings of the chosen characteristic (length, colouring, number of teeth, spots, etc.). By representing these groups on a vertical axis and by connecting the uppermost point we obtain a regular curve (a distribution curve) in which, starting from the

¹ Historically this is based on the statistics of variation, the discovery of Mendel's laws and their relationship to *cytological* discoveries concerning the structure of germ-cells, chromosomes, the processes of mitosis, self-division by reduction and conjugation and the *theory of mutation*. Goldschmidt, *Einführung in die Vererbungswissenschaft* (1922) (5th edn., Berlin, 1928)—gives access to the theory and the literature. The best short and clear introduction is given by Alfred Kühn: *Grundriss der Vererbungslehre* (Leipzig, 1939). Expansion of the biological viewpoint: Fr. Oehlkers: *Erblichkeitsforschung an Pflanzen* (Dresden and Leipzig, 1927). For human heredity: Bauer-Fischer-Lenz: *Menschliche Erblehre u. Rassenhygiene*, 5th edn. (1940). *Handbuch der Erbbiologie des Menschen* (pub. by G. Just, Berlin 1939 onwards). Journals: *Archiv für Rassen- u. Gesellschaftsbiologie* (pub. by A. Ploetz, München). *Gortschritte der Erbpathologie* (pub. by J. Schottky and v. Verschuer, Leipzig). *Zeitschrift für Rassenkunde* (pub. by Frhr. v. Eickstedt, Stuttgart).

average, the numbers decrease according to the greater or lesser development of the characteristic in question. This curve of distribution is the measure whereby we ascertain the alteration of a population as a whole in respect of one characteristic (under the influence, for example, of the living situation, climate, nutrition, etc.).

If from a group of individuals we choose those with a particular characteristic which we want to cultivate (selection) and continue to breed only from them we change the distribution curve in respect of that characteristic. Formerly we believed that we could change one type entirely into another (artificial or natural selection in the struggle for existence). However it has been shown experimentally that selection becomes ineffective if one has a 'pure strain'. This is the term—as opposed to population—given to a mass of individuals that—as can only occur with hermaphrodite plants—propagate themselves by self-fertilisation and, as for instance with beans, can be traced back to a single parent-organism. The members of such pure strains show a similar curve in the distribution of their characteristics as the populations do at first. If however one makes a selection of the extreme examples one finds the progeny show no shift in the direction of the chosen characteristic but repeat exactly the distribution curve of the parents. The success of selection within a population, therefore, comes to an end as soon as the isolation of the extreme pure strains has been accomplished. One concludes that a population is a mixture of many pure strains. This method of selection, therefore, can achieve isolation of pure strains but never breed new types.

(b) *The Genotype and Phenotype.* This leads on to the important distinction between the characteristics of the individual (phenotype) and those characteristics which the individual has obtained from its forbears and can transmit by heredity without manifesting them itself (genotype). In the pure strain all individuals have the same genotype while all are different in their appearance (phenotype). The difference is due to the influences of the conditions of life which vary from case to case and which affect the way in which the genotype manifests itself in the particular individual. As the genotype does not change the differences presented by the individual picture disappear in the progeny to whom the genotype is passed on. Even the extreme types of the same pure strain possess the same genotype.

In contrast to pure strains populations have, besides the phenotypical variations, others which are genotypical. If, therefore, one selects extreme phenotypes from a population there is a chance that one has at the same time included different genotypes, which will then appear as a lasting difference in the distribution-curve of the progeny.

Thus two individuals in a population may have the same appearance without having the same heredity (that is, they belong to the crossing distribution-curves of two different pure strains). On the other hand, they may also have the same hereditary substance while showing great differences in the picture they present (that is, they stand in different positions on the distribution-curve of the same pure strain).

Actually in the case of qualitative properties the situation is simple and clear: peas with green and yellow seed-grains, the plant (*mirabilis jalapa*) with white and red blooms show no transitions. Quantitative properties, however, give a different picture: width and length of leaves or weight of seed in plants, height in man, for example. Only the methods of statistical variations can show us the extent to which we can be definite here.

(c) *Mendelian laws.* Mendel did not know the findings made later by Johannsen

of pure strains and populations, genotype and phenotype. In spite of that he was able to conduct successful experiments in heredity which was due to the fact that he used plants with simple qualitative differences that had shown themselves as constants through a number of generations; for instance, peas with green and yellow seed-grains.

His experiments consisted in the hybridisation of individuals with unequivocal qualitatively differing characteristics of this sort and in the observation of the progeny where the carriers of the same characteristics bred further without hybridisation. Mendelian laws, therefore, which were discovered in this way, relate to events which follow the hybridisation of two individuals genotypically different.

In the first generation one characteristic 'dominates' the other, e.g. all plants have yellow seeds. Green remains 'recessive' as against yellow, which is 'dominant'. But the recessive characteristic is not extinguished but remains in the hereditary substance, since in the second generation, obtained by self-fertilisation or sibling-pairing, a separation of characteristics occurs: one quarter of the progeny has only green seeds, and only has progeny with green seeds; one quarter has exclusively yellow seeds and only progeny with yellow seeds; two quarters on the contrary have yellow seeds and in the next generation split again, one quarter finally green, one quarter finally yellow, two quarters with yellow dominant, etc.

If one calls the carrier of the hereditary unit in the genotype a 'gene' one can explain the numerical findings of Mendel by the following postulate: From each parent one gene goes into the child who therefore possesses two genes for every characteristic. In the formation of the new germ-cell in the hybrid, the two genes must again be separated from each other, so that every germ-cell once again possesses the one or the other gene. The numerical relationships which have been calculated for chance combinations of germ-cells are the same as Mendel found experimentally within the limits of the given error of such a distribution. Today the postulate is accepted as proven.

Every individual is determined by the effect of a very large number of hereditary units. The problem is how more than one gene-pair, in the simplest case two pairs, behave among themselves in a crossing-experiment. Mendel found the answer: in their separation and combination they are independent of each other. It is therefore important to find the gene-carriers among the infinite number of characteristics in the individual. Clear laws of heredity can be established only in relation to these genes, which transmit independently of each other.

These laws governing the distribution of the combination of hereditary substance in hybridisation will apply even where there is no definite dominance. Correns found that in the first generation intermediate behaviour of the two connected properties is possible, suggesting a 'fusion' of heredity. Thus after crossing of the white and red *mirabilis jalapa* plants the first generation had pink blossom. But here too the progeny had one quarter red blossom as a constant, one quarter white blossom as a constant and two quarters pink (subsequently separating out again). This shows that there are genes of different degrees of penetration. If those of strong and weak penetration are combined the first generation realises the dominant-recessive relationship, whereas if equally penetrating genes are combined an intermediate state appears of seeming hereditary fusion.

The characteristics suitable for experimental genetics are always paired. Either the one characteristic is there and not the other or it lies between the two poles.

But this simple relationship appears uncommonly complicated because simple characteristics need not have simple genes. Characteristics can be due to various combinations of gene-pairs (allelomorphy), the particular genes can manifest themselves in a number of characteristics (polyphenic genes) and conversely the same characteristic can have its origin in different genes (polymeria). These concepts have to be discussed further.

If there are two genes related to the development of one and the same characteristic (for instance, the gene for red blooms and that for white blooms) we speak of a pair of allelomorphs. In any one individual only two alleles can combine into a pair but there is the possibility that different individuals have many more than just two alleles. In fact in working through a population in relation to a series of genes one has found a whole number of declensions of which at any time two can be combined for experiment. In such a case we speak of multiple allelism. Multiple alleles often differ from each other quantitatively in their effects: they manifest themselves in a whole series of characteristics, stages of pigmentation, series of growth-formations, etc. This can considerably increase the distribution within a mixed race. Finally there is the possibility that one and the same gene influences more than one characteristic. Thus the gene which was used by Mendel in the pea and which linked with the red flower also produced a pigmented spot in the leaf axis. Such genes are called *polyphenic* genes. Inversely, there is the possibility that one and the same character is not influenced just by one but by several or very many pairs of genes, a phenomenon which we term *polymeria*. In this case, particularly if the gene-effects show us quantitative differences, the split in the progeny may no longer yield clear numerical relationships. The existence of polymer constitutions can only be deduced from the increasing distribution of these characters in the progeny. All these insights, which we owe to the new science of genetics, explain why in the concrete particular case the relations are so often obscure.

(d) *Hereditary substance lies in the cells.* It was suggested long ago (August Weismann) that the chromosomes in the nuclei are the carriers of heredity and that the complicated events in the formation of germ-cells by reductive division (cells with half the chromosomes) and the copulation of egg and sperm to form new cells (with the full number again of the chromosomes from which the new individual springs) all have something to do with heredity. However, it is only in our own days that this has been finally proven. Bateson and Punnett as well as Morgan discovered the laws of linked-characteristics. This is a deviation from the Mendelian independence in combination. This discovery revealed connections among the genes of an organism which made it possible to group them. The number of these groups coincided with the number of chromosomes in certain easily analysable objects (such as maize or the drosophila fly). This, together with cytological discoveries about the structure and behaviour of chromosomes, led to the theory of the linear arrangement of genes in the chromosomes. The gene which first arose as a hypothesis of the hereditary unit in breeding experiments is now somatically localisable and has become in fact visible—though only apparently so—through the mapping of the gene-order in the chromosomes. The corpuscular character of the gene is made probable by the fact that it can be hit by X-rays.

The magnificent concordance of biological genetics became possible because of the intimate relationship between the units regulating heredity (hereditary units) and units in the chromosome-structure (genes), and further because cytogenetic dis-

coveries (reductive division, mitosis, meiosis, etc.) coincided with the discoveries of experimental selection. What is found in experiments with heredity is re-discovered and comprehended in the findings in the cells, e.g.:

All life that comes about by sexual reproduction springs from two parents and therefore has paired chromosomes (one from each of the parents). The chromosome pairs are grouped together with other pairs—the number varying with the species—into the unit of the genome. The genome is the unit of all the genes belonging to the organism.

If the chromosomes have genes of the same type (homozygotic) no visible Mendelian splitting can occur even if they are exchanged in the reproductive process. Where the genes are different (heterozygotic) the Mendelian separating-out must become apparent in the progeny because of the recombination that occurs in every sexual process.

The difference between the dominant and recessive mode of inheritance depends on the pairing of the chromosomes. The recessive only appears if it exists in both chromosomes of the pair and is therefore contributed by both parents. (This explains its frequent manifestation in marriages amongst relatives.)

The relationship between chromosome-behaviour and the mode of inheritance in relation to sex as well as to sex-linked inheritance is more illuminating. In many organisms where the sexes are separate a special pair of chromosomes, namely that in which a sex-determining gene lies, is morphologically distinct; these are the so-called X- and Y-chromosomes. Thus in the fly *drosophila*, the female has XX-chromosomes and the male XY. All the egg-cells have X-chromosomes only; the sperms however have half X- and half Y-chromosomes. As a consequence after fertilisation 50 per cent of the individuals will have XX-chromosomes and will be female while 50 per cent will have XY-chromosomes and be male. Genes which lie in the chromosome X or Y will have something to do with the sex of the progeny and this has been demonstrated in a large number of cases.

Let it be briefly mentioned that today we also know something about the carriers of heredity which are to be found outside the cell-nucleus in the plasma but so far the insights gained do not apply to human generation.

(e) *Mutation.* If we had only constant hereditary units as genes all inheritance would be variations on the same theme brought about by a mechanical combination of an infinite but unproductive manifold. Selection would not produce new breeds but only a shift of pure strains. In fact, however, life is always showing new forms. The new phenomenon—e.g. the fact that an illness appears in a family for the first time and is from then on inherited—is explained by mutation (de Vries). From time to time new characteristics spring up without any transition; they are far removed from the distribution-curves that so far express the inherited characteristics of the organism. These new characteristics, according to the chromosome theory, must be traced back to a gene which has come into being—or, better, undergone alteration—at some point in the chromosome. In particular cases it is possible to ascertain the mutations historically, in others it can be observed experimentally. Where one knows very many of the genes in an organism—as in the *drosophila* or in maize—one can find out through many generations how often and how rarely individual genes undergo change. The mutation-rate can be determined. There are genes which mutate very rarely or never and others where mutations occur frequently. The spontaneous mutation-rate can be increased significantly by external influences (e.g.

extreme temperatures, short-wave rays). Most mutants are changes that are morbid and maladaptive to life and disappear quickly as a result of natural selection. But there are positive deviations which may lead to an alteration in the species if in the course of time their frequency increases.

(f) *Critical limitations.* In face of the impressiveness of all these discoveries we must realise that they have limitations:

The basic substance of heredity at any time is the realisation of the ground-plan of that species, the repetition of the same basic structure which constitutes this particular form of life. The theory of heredity concerns itself experimentally only with slight modifications, the ripples on the surface as it were, not with the foundation event.

Mendelism does not imply knowledge of the profounder events of heredity as a whole. It only signifies a method which is limited to alternating characteristics, i.e., their appearance or their non-appearance (red or white—colourless—blooms, illness or absence of illness) and particularly to such where the non-occurrence is not fatal. One can no longer *investigate* hereditary units the absence of which makes life impossible.

Genetics is limited to hereditary units that can be distinguished and defined. It can analyse but never grasp heredity as a whole.

(g) *Résumé of the most important basic concepts.* We have to content ourselves with at least a surmise of the dumbounding complexity of heredity, variation and mutation, so that in psychopathology we do not put our confidence in too simple an explanation. Of all the biological findings the most important for us are: that the chromosomes (the hereditary substance) can carry characteristics which the individual need not manifest as such (in particular we have long known that someone may pass on a hereditary illness by which he himself is not affected); further that in the natural inter-relationships of human populations there are many heterozygotes with a mendelian inheritance, so that siblings are not exactly alike, indeed can be entirely opposite, contrasting characteristics can express themselves in them and be preserved in their offspring. In connection with this we need to consider how complicated and obscure the individual case can be, particularly where a single characteristic is inherited *polymerically*, i.e. under the influence of a large number of independent genes that can be combined. Finally and most important of all there is the *theory of hereditary units*, that the heritage is distributed in the chromosomes in a definite order and in the form of individual units that can be isolated.

The *application to man* of biological teaching on heredity encounters great difficulty. Man as such is not an object in which the biological laws of heredity can be studied. The biologist chooses his research material from the point of view of facilitating his work. The generations must succeed each other quickly and there must be many offspring. The number of chromosomes must be as small as possible. Only so is it possible to grasp the facts in a relatively simple manner. In man, however, the generations follow each other so slowly that several generations cannot be surveyed exactly. The offspring is extraordinarily small and the number of chromosomes (48) is unusually high. In addition in the case of man one cannot carry out any planned experiments in selective breeding but one can only investigate a chance sequence of observations that

come one's way. Instead of the crossing-experiments of biology we fall back on abstractions from mass-statistics.

This, however, is no *objection* to research into the heredity of man. It only helps to clarify its *meaning*. We are not concerned here to find laws of heredity but only wish to see to what extent biological laws can be again discerned in man. If we investigate human heredity we are not concerned with heredity as such but with men.

Where in the case of man we find ourselves ignorant, biological genetics gives us some access to possibilities. If we look at the arrangement of the genes in the chromosomes of the *drysophila* it is clear we should know the order of the genes in the germ of every kind of living organism as well as their specific relationship to each other. In anatomy and histology we have to grasp the structure of the body; in physiology the structure of the functions and in the endocrine systems the structure of the inter-acting hormones; so here we have to grasp the structure of the hereditary disposition. But whereas in anatomy no creature has been so thoroughly investigated and studied as man, as regards the ordering of his genes man has to give way to the *drysophila* which is far better known. In view of the structure of the human body and its functions and the infinite refinements of its heredity, which in some cases strike us like a miracle, we know that a factor in this heredity must be the gene-arrangement which at present we are quite unable to grasp. We acquire a sense of wonder and a desire to refrain from making sweeping and precipitate conclusions.

§ 3. APPLICATION OF GENETICS TO PSYCHOPATHOLOGY

Rüdin¹ was responsible for the first work that was methodically based and for the further development of this research. He replaced the mass-statistical method of psychiatric investigation into heredity by an attempt to study genealogical material by statistical methods and apply mendelian theory. In collecting his material he began with particular patients (probands), and starting off with these he followed up their siblings and parents (sibling-method) or their children and grandchildren (descendants-method) and he made a note of their condition or their illness. Individual families are not conclusive material because all the figures here are accidental, but by looking at a mass of families significant figures may be expected. The work of Rüdin brought about a large number of investigations. The aim was to try and recognise genuine hereditary units and study the mode of their inheritance (dominant or recessive).

We will try to set out briefly and schematically a few of the main points of these researches:

(a) *The basic guiding ideas*

Genetics has discovered somatic hereditary units and the mode of their

¹ Ernst Rüdin, *Studien ueber Vererbung und Entstehung geistiger Störungen*, vol. I. *Zur Vererbung und Neuentstehung der Dementia praecox* (Julius Springer, Berlin, 1916).

inheritance. Before we can apply the ideas of genetics to heredity in psychopathology we have first to ask what are the corresponding *hereditary units*. That they exist is a biological fact and a precondition of any application of genetics to human heredity. Our goal is to discover these hereditary units which would not only help us to recognise the modes of heredity but would provide us with new and deeper insights into the factors that are effective in psychic life. The fact that hereditary units are not directly manifest and that all psychopathological phenomena seem at first to speak against the existence of any such units does not disprove that they exist, provided the following concepts are valid which concern the relationship of actual phenomena to underlying genes:

1. *All phenomena* are a result of the hereditary *Anlage* and the *environment*. They have developed out of the Anlage under the preceding environmental influences and as a result of reactions, experiences, practice and habituation have come to be what they are. If we compare these phenomena through several generations we are not directly comparing identical data but apparent facts in which perhaps one identical factor (the genotype) has assumed a number of different appearances as the result of a deviant environment.

It follows from this in the first place that even illnesses which depend most definitely on hereditary factors require environmental conditions for their manifestation and that all environmental effects also require the Anlage if they are to come about. For example: General Paralysis which is caused by the spirochaete pallida presupposes an Anlage which is hereditary; this is why General Paralysis sometimes shows a higher familial frequency. Schizophrenia depends on heredity but something must be added from the environment because with uniovular twins both twins are usually ill with schizophrenia but not always so.

In the second place it follows that in illness the hereditary Anlage only manifests itself with certainty inside limits that have to be determined in every case and it is by no means an absolute, inescapable doom. Where the environmental conditions are known avoidance of the vital external conditions might leave the Anlage quiescent so that it never manifests itself at all.

In the third place it follows that hereditary units on the whole are 'unhistorical' because of their biological constancy. They concern something which must have been identical in an Egyptian 5,000 years ago as it is in us today. Hereditary units cannot be grasped in the form of specific historical figures nor as cultural achievements nor as the contents of cultural phenomena. What has not been present a few generations ago and what will no longer be present a few generations hence is itself not a matter of heredity though it is true it is not without a hereditary basis. Heritable characteristics make such manifestations possible under certain historical conditions. But the possibility always remains open that even in the course of 100–150 generations of human history slight biological changes may take place through the accumulation of mutations. But these have not been convincingly demonstrated in the human race.

2. The unit of the gene is not the unit of the phenomenon. Many characteristics that are manifested suggest a gene but are not the gene itself. What seems to us directly out of place in the phenomenon may be attributed to a single gene and conversely what appears to be wholly a unit may depend on the interplay of several genes. We do not discover a hereditary illness by directly grasping it in some phenomenon or other but by our experience of certain hereditary connections.

What depends on a single gene is termed *monomer* and that which depends on several genes we term *polymer*. Only a few, and so far only somatic, illnesses are monomer. All psychic characteristics and illnesses so far as they are analysable genetically are probably polymer. Therefore, a simple mendelian calculation will not be applicable to mental characteristics, personality, psychoses, etc., and it is unlikely that mendelian laws which are based on simple hereditary processes would be directly applicable to any psychosis.

3. Hereditary units (genes) take effect as a mutual connectedness. Genes do not achieve manifestation independently of each other. As elements genes do not summate mechanically but hang together as members of a single whole—the genes in the genome. The store of hereditary dispositions is itself an arrangement or has a structure. This whole as a partial whole (in relation to the organism) would have to be itself grounded once more in a gene so far as it could be biologically identifiable.

Out of the mutual influence of genes on each other—out of this gene-milieu—we can comprehend how it is that hereditary ‘Anlagen’ manifest themselves sometimes more strongly, sometimes more weakly and sometimes not at all though as such they are identical. Genes need each other and may inhibit, stimulate and regulate each other. The realisation of one factor can thus depend on combination with other factors. Indeed we may ask: are absolute hereditary units undetectable in psychopathology because they do not exist? Because they are abstractions from something which only exists along with the whole whatever that may be and does not exist in itself but is only what it is as a focus, link or contrasting pole?

Only when a number of genes meet can a particular phenomenon such as an illness appear. Thus a negative finding of research into schizophrenia is that this illness cannot be the manifestation of any *one single* hereditary unit but it can only make its appearance when a whole series of different hereditary units have coincided and the environment offers suitable conditions. Somebody might possess a series of genes which predispose to a schizophrenic attack and yet not be ill but cause schizophrenia in his children when the last missing gene has been added from the hereditary substance of his spouse.

Such views which rest on biological experiments and are applied by use of analogy are mere possibilities so far as psychopathology is concerned. Something is construed as lying beneath the observed facts in such a way that the phenomenon is conceived as the result of an intricate process of interaction between many hereditary units. This is thought to take place in such a way

that although most hereditary conditions are present, if only one hereditary unit is missing the phenomenon does not occur.

The *connection* between several empirical phenomena is expressed numerically as the *correlation* between them which appears after the counting of many instances. The correlation-coefficient (r) means that the phenomena unfailingly coincide because they are linked together. The co-efficient (o) means that they have coincided accidentally. If the coefficient is reasonably high we interpret the relationship either by invoking the same gene (e.g. red hair and freckles) or the linking of two genes in the same chromosome (haemophilia and the male sex-chromosome) or the gene-milieu (the syringomyelia gene appears more readily in the short-haired rabbit) or only an apparent connection (in racial breeding what is actually together could just as well be separated, such as fuzzy hair and dark pigmentation in negroes). (This account is according to Conrad.)

4. *Mutations* (sudden changes in the hereditary Anlage) may explain the fact that an illness can start up in a family that has been manifestly free of it. There is the question whether, for instance, the genes of schizophrenia could start afresh as a mutation as is always possible in the human species and then become hereditarily transmissible or whether the genes are hereditary in every case once they have appeared. This must have happened a very long time ago because schizophrenia appears in every human race and in every period of which we have adequate report.

(b) *Methodological difficulties*

The application of genetic knowledge to hereditary illness in man has led to reasonably clear hereditary units and modes of inheritance in relation to certain *physical* illnesses (for instance, haemophilia and Huntington's chorea, juvenile amaurotic idiocy, etc.).¹ In the case of *psychic* phenomena and mental illness, the situation is different due both to technical difficulties and to the different principles involved.

Technically the original material is extremely difficult to obtain. Many psychic illnesses only manifest themselves at an advanced age. If the individual dies before that he is counted healthy though if he had lived longer he might have become ill. Personal investigation by the medical research-worker is a necessity but is only possible with patients who are still alive and are within reach.

In principle, however, a psychic phenomenon is never a characteristic belonging to a gene in the same sense as a physical phenomenon may be. In all questions of heredity the first demand is to be clear what it is of which we want to know the heredity in the particular case. It is thought that we might perhaps put to the question the countless units of psychopathology (from simple types of reaction, types of imagery up to types of personality, from syndrome up to disease-entities, from events appearing at certain times

¹ Sjögren, *Klinische und vererbungsmedizinische Untersuchungen ueber Oligophrenie in einer nord-schwedischen Bauernpopulation* (Copenhagen, 1932), also in *Z. Neur.*, vol. 152 (1935).

of life (phases or processes) to the enduring constitution, etc.). But the whole weakness of units such as these is that they are by no means unitary characteristics which can be clearly defined, identified and unequivocally counted.

To this must be added that almost all psychic phenomena in man are of cultural origin. Culture is not inherited but historically transmitted. Only the abilities to absorb it are inherited. These abilities, however, cannot be isolated from historical reality as basic functions. There is, therefore, a fundamental difference in the ways we look for hereditary units in somatic illnesses and organic psychoses on the one hand and in the major psychoses on the other and finally in personality and individual psychic characteristics. Luxenburger (1939) explains that one can only speak of a mode of inheritance if one is dealing with the hereditary characteristics of genetics. What we conceive to be a distinguishing sign—even though it may have a high degree of reality, as for instance, a personality trait—is not a characteristic in this genetic sense. Such a characteristic is something substantial, an expression of the *essence* of what has been inherited; it does not signify a genotype but it is the visible manifestation of an essence.

What then can we do if we cannot operate with clearly defined, hereditary units (genes) which can be recognised from certain unambiguous characteristics? We are left only with *indirect* methods which have been applied whenever it was suspected that a mode of inheritance in the genetic sense provided the factual basis for a complicated host of phenomena.

An attempt is made to think of *hypothetical* units underlying complex phenomenological wholes (e.g. schizophrenia) and conceive of these as due to two, three or more genes. We then try to analyse mass-statistics, using subtle and closely thought-out methods, in order to see whether the actual figures can be understood in terms of such a hypothesis and its expected results. Thus for the complex phenomena which we call illnesses we try to conceive of several genes (not a monomer base but polymer, perhaps trimer) from the combination of which in the hereditary process the figures of incidence for these illnesses should be calculable.

But mathematical artifice of this sort lacks demonstrable force, unless at the same time one uses mathematical means to determine whether the experimental hypothesis can be decided or not. In the infinite possibilities of mathematics figures may sometimes be right by chance. One can always calculate some underlying structure to explain the figures. Hereditary units which are obscure and cannot be recognised for what they are from the various phenomena, properties and characteristics must remain problematical. What cannot be directly ascertained in the phenomena will only lead us into endlessness, full of productive possibilities but always lacking verification. For the most part we are faced with matters that cannot be decided.

If, however, without the help of figures we construe underlying and complex possibilities of this sort the whole situation becomes entirely arbitrary. Such deduction from what is only approximate may give us meaningful hints

of what might really be but, whenever this is taken prematurely as if it were established, error has already entered.

In view of the indirectness of these methods it is obviously quite impossible to formulate the results clearly, comprehensively and unambiguously. We start from what is indefinite, often not even reliably identifiable, and we then look for well-defined and conclusive units. By tracing hereditary connections through the successive generations we hope to arrive at units which we would not otherwise have found, the very units with which we should have started in the first place. By this investigation into heredity we might perhaps even succeed in confirming or refuting the idea that there actually are disease-entities in the psychic sphere and if so which ones these may be.

If we are to transfer the concepts of exact genetics to psychopathology we must have well-defined, objective units with which to work. We have indeed to admit that the investigator at first can only suspect they are there and can only find them through genealogical studies; he cannot postulate them. But he will then have embarked on a course where he cannot yet make any statements that will be valid for others. If his enquiries show positive results then the unit he has established in this way in so far as it is clearly a fact becomes a postulate for further verification.

(c) *Investigation into the heredity of psychoses*

The major psychoses—schizophrenia, manic-depressive disorder and the epilepsies—have indistinct diagnostic demarcations and are not identified in the same way by all observers. This difficulty has been partly overcome by starting off with a restricted group of definite cases. In spite of this the figures established in this way have not led to any positive insight in the genetic sense.

Luxenburger has summarised the situation in regard to *schizophrenia*: 'Schizophrenia is not a unit. As far as research into heredity is concerned schizophrenia is still essentially a working hypothesis. Under no circumstances can it be compared with the characteristics of human morphology which as such can be far more sharply defined nor with those of experimental genetics.' Similar aims are never attainable in psychopathology. 'There is no doubt, in my opinion, that the true hereditary characteristic of schizophrenia can only be grasped as a somatic unity.'

As regards the hereditary mode of the units decisive for schizophrenia recessiveness is more probable than dominance. In favour of the recessive mode we find the following: 'only 4-5 per cent of the parents of schizophrenics are themselves schizophrenics'—'loading appears mainly in the collaterals'—frequent incidence 'in the marriages of blood-relations' (investigations of large families)—'families in which schizophrenia can be seen in three or more generations in direct succession are extremely rare'. The dominant mode is supported by the fact that 'it has not been shown that the number of blood-relation marriages is higher among the parents of schizophrenics than among

the average population'.—'There are more patients among the children of schizophrenics than among the siblings'.

Biologically the inheritance of schizophrenia must be thought of as due to a series of genes though so far we have not been able to define a single one. Further, external factors are necessary for the manifestation of the illness; we know they exist from the investigations into uniovular twins but we cannot yet state them.

Our knowledge is no better as regards the *manic-depressive* psychoses. Johannes Lange¹ comments on the failure of calculations here: 'Apparently the situation is more entangled than we can visualise.'

In general it may be said: In the psychopathology of the major psychoses no hereditary units have yet been found. Therefore a calculation of the expected incidence along mendelian lines is ruled out. Such genetic knowledge of human pathology remains confined to what can be grasped as a somatic entity.

Although up to now success in the genetic sense has been lacking, we might perhaps add this: it will certainly not be achieved by calculating but only if some investigator has the luck to break through the vicious circle by making some fundamental new discovery in regard to what in fact constitutes a unit. From that moment identifiable objective data will lead to a clear recognition of the mode of inheritance but at present we are often confronted with calculations in which every factor is an unknown. This lucky stroke—as Luxenburger wisely predicted—will presumably be the discovery of some somatic phenomenon if this indeed be the correct viewpoint for cases of schizophrenia.

(d) Investigations into the heredity of psychic phenomena

Investigations into the heredity of *personality* are questionable because what is observed lacks sufficient objectivity. What the investigator believes he observes and formulates only has validity if he can put the objective phenomena over to the reader in such a way that the latter can also observe them. Otherwise they remain subjective constructions. In spite of this in some cases a genealogical presentation has been successful, for instance, with personality-disorders of an attention-seeking nature (v. Bayer, Stumpf) and above all with uniovular twins. It has been possible to show the extreme similarity of personality which exists even if the twins grow up in quite different environments and at first sight appear quite different in the way they live and act. One of the most thorough investigators of the heredity of personality, Stumpf, has stated the following methodological criteria: all attempts to investigate the heredity of personality from a study of personality-types must fail and has failed in the past. Summary statements to which such attempts lend themselves obscure the real issue. A precondition is the exact psychological description of each individual personality in relation to his family, and we have gone wrong at the start if we assert the inheritance of personality

¹ J. Lange, in Bumke's *Handbuch*, vol. 6, p. 8.

characteristics (and begin from elements of personality which we have presumed). Attempts to reduce everything to some supposed essential core wash out everything that is characteristic, when one compares the sharply defined profile of the character-study, nor is the loss balanced by the discovery of hereditary units. As to basic principles, Stumpf convincingly says: the heredity of personality cannot depend on single corpuscular genes. In any case it remains completely obscure what is the supposed complex unity that determines the genetic connections affecting personality.

Research into the heredity of *intelligence* seems to deal with rather more concrete objects. Manifest criteria are at hand; for instance, *reports on school attainment*. Thus Peters investigated heredity in connection with schoolability and found:

Parents	Percentage of children			No. of Cases
	Good	Fair	Poor	
Good × good	41·5	58·5	0·0	426
Good × fair	25·3	73·4	1·3	1265
Good × poor	32·1	61·5	6·4	78
Fair × fair	14·7	82·0	3·3	1850
Fair × poor	12·1	74·4	13·5	323
Poor × poor	10·8	78·4	10·8	37

These figures may cause us to think but they only show that heredity in general plays some undefined part.

Methodologically the situation becomes even better if we start with performances that can be tested experimentally (school-records, questionnaires, always depend on the teacher's judgments or on the person who fills up the questionnaire). Here, however, one does perhaps deal with objective data.¹ What is '*testable*' can be made accessible to a statistical investigation of heredity. Indeed, investigations of this kind have brought with them much more convincing material on heredity in general. But the statistical combinations have not proved suitable for the establishment of exact genetic findings upon them.²

In all these investigations one is repeatedly convinced that heredity is a decisive factor but we are still far removed from finding basic elements which could be linked with hereditary units. Everything which we define as a psychic phenomenon (personality, performance, ability, etc.) is already extremely complex if we consider how it has come about biologically. Whether elementary psychic units exist, and if so in what sense, remains quite obscure so far as biological heredity is concerned. At present we cannot even conceive the starting-point from which we should set out to find them.

¹ The simpler and more constant the performance, the clearer the results of the enquiry, e.g. Frischeisen-Köhler, *Das persönliche Tempo, eine erbiologische Untersuchung* (Leipzig, 1933).

² Joh. Schottky, *Die Persönlichkeit im Lichte der Erblehre* (Leipzig, 1936); 'Über die Vererbung der Begabung (by Kloos), des Charakters (Stümpf), des experimentell Feststellbaren (Graf)', Just's *Handbuch*, vol. 5 (1939).

(e) *The idea of hereditary groupings*

We have now demolished the old teaching on the general disposition to mental illness and on the transformations and indiscriminate polymorphism of heredity. In view of genetics and its mendelian units it is most unlikely that all forms of hereditary mental illnesses have one single underlying disposition at their base. But this does not mean that we know anything definite about the constant heredity of well-delineated and mutually exclusive mental illnesses. The different abnormal manifestations in the same family remain an undeniable fact. The question now is: within *which definable groupings* is there a transforming heredity in the sense that one disease, so to speak, replaces another as its equivalent? Or, to put it more cautiously, *which types of phenomena somehow belong together* in such a way that common partial hereditary disposition must underlie them.

Hereditary groupings are spoken of in two ways: in one sense we mean the blood-relations of a patient (the hereditary grouping then embraces the history of all the phenomena that occur together in a kin-group). In another sense—and this is how we use it here—we mean a group of perhaps very different phenomena which belong together because they have their supposed basis in a common genotype. In this case grouping is a heredito-biological concept denoting a general connectedness.

(aa) Clinical observers in the past believed they saw a familial incidence in some groups of illnesses so that they connected together certain physical illnesses, metabolic disorders, psychic abnormalities, a tendency to apoplexy, etc. We have seen *neuropathic families* and we have also seen how muscular-dystrophy may perhaps appear in them along with mental deficiency and epilepsy or amyotrophic lateral sclerosis with schizophrenia.¹ Observations of this kind have been extended to psychosis and personality and to all types of personality disorder (psychopathy). Attempts have been made to correlate statistically and so define types of body-build, types of personality, psychoses, psychopathic predisposition and physical illnesses.

For example:—

1. Siblings of schizophrenics have tuberculosis four times as frequently as the siblings of non-schizophrenics (Luxenburger).

On the other hand in manic-depressives no relation to tuberculosis was found but one to gout, obesity, diabetes and rheumatism.

2. If we compare the incidence of schizoid personality-disorders and schizophrenia in parents and children, the probability of falling ill has been shown by Luxenburger in the following percentages:

both parents normal	0·5
one parent abnormal	3·2
both parents abnormal	8·6
neither parent schizoid	1·3
one parent schizoid	4·1
both parents schizoid	12·0

¹ Fr. Curtius, *Die neuropathische Familie* (Berlin, 1932). *Die organischen und funktionellen Erbkrankheiten des Nervensystems* (Stuttgart, 1935). *Multiple Sclerose und Erbanlage* (Leipzig, 1933).

The figures of schizoid personality disorders and schizophrenia are supposed to show that the two have something in common. The findings are not exactly compelling. Luxenburger thinks that 'it is certain that the schizoid personality disorders have certain relationships to schizophrenia but the relationships are loose, can mean more than one thing and can only be grasped statistically'. But he asserts in connection with these and other correlated phenomena 'in principle these phenotypes may occur without presupposing the genotype; in this case they do not belong to the hereditary grouping'. It follows therefore that 'we may conceive a whole series of personality-disorders as schizoid personality-disorders if the probands are blood-relations of a schizophrenic'. Nevertheless he is of the opinion that 'in the schizoid personality disorders we certainly seem to see nowadays the most outstanding manifestations of the schizophrenic partial "Anlage"'.

On the other hand Stumpf and v. Bayer found no increase in the incidence of psychosis in the hereditary groupings of the personality disorders.

3. It is demonstrated that paranoia belongs to the hereditary grouping of schizophrenia as follows:

Children of paranoics are schizophrenic	9-10% (Kolbe)
Children of paranoid schizophrenics are schizophrenic	10-11%

The closeness of the figures indicates the constancy of the hereditary basis.

(bb) For decades a differentiation has been made between *three large hereditary groupings: schizophrenics, manic-depressives, epileptics*. The polymorphism of the illnesses was supposed to be limited to these groupings. In principle these latter had to be mutually exclusive, and manifestations of the one could never be rooted in the other.

In fact if one investigates large numbers the groupings are to a great extent exclusive. Luxenburger when comparing siblings found in a hundred randomly selected probands belonging to the schizophrenic, manic-depressive, epileptic and G.P.I. groups that the expectation of the same kind of illness was vastly predominant. The index of coincidence calculated from the percentages was:

Schizophrenia	6.0
Manic-depressive psychosis	24.5
Epilepsy	9.0
General Paralysis	2.3

while the index of coincidence between the different hereditary groupings was small, e.g.:

Between—Schizophrenia and Manic-depressive psychosis	0.84
" Epilepsy	1.87
" General Paralysis	1.28
Manic-depressive psychosis and Schizophrenia	0.84
" Epilepsy	2.42
" General Paralysis	1.46

Where discrepancies appear we have to resort to interpretation. The simplest of these is that hereditary groupings overlap due to marriage between two families of different groupings or that there are mutations which allow an illness belonging to another hereditary grouping to arise afresh (always an

improbable interpretation based on vague possibilities). Or again we must think that they are different manifestations of the same thing due perhaps to the influences of other 'Anlagen' in a family and other environmental influences or inversely that they are similar manifestations of what is biologically heterogeneous, perhaps in the way that what really belongs to different hereditary 'Anlagen' may become similar in their manifestation due to accidental conditions in the Anlage and the environment.

There have been some outstanding investigations into the hereditary grouping of epilepsy.¹ Here are a few examples from Conrad's findings:

Among the offspring of epileptics there were 6 per cent epileptics (in the general population 0·4 per cent). Further, 35 per cent were mentally abnormal (besides epilepsy he found mental defect, psychoses, personality disorder, criminality) or 42 per cent if we include neurological diseases and physical defect-types.

In uniovular twins concordance was found in 55 per cent, in binovular twins in 12 per cent. That several genes must coincide to bring about epilepsy is concluded from the fact that a strong coincidence (86 per cent) exists in idiopathic epilepsy arising in uniovular twins, whereas only 6 per cent of children of epileptics are once again epileptics.

(cc) The idea of hereditary grouping seems to make an impressive unification in hereditary matters and the connecting of certain psychoses with certain personality disorders (psychopathies), body-types and tendencies to physical illnesses seems to give penetrating insights into the basis of life. But the results of this careful research do not come up to expectations. What at first sight appeared plausible is constantly put in question by contrary instances. After the first step has been made of taking a fundamental standpoint and demonstrating its validity by genealogical findings, no further advance is made even though the specific correlations grow clearer and more reliable. Proof grows weaker rather than stronger as the investigations proceed. The same basic principles are repeated. The discrepancies need interpretation: this gradually becomes more and more hypothetical while opposite possibilities remain equally permissible. Thus hereditary groupings provide, it is true, impressive pictures of a genealogical and historical kind but not in like degree any universally valid knowledge which can be reliably applied. The correlations show once again that something exists but do not bring us any further with the question as to *what* it is.

Against the background of genetic theories all sorts of concrete data have been gathered together in genealogical enquiries for the purpose of determining hereditary grouping. In particular cases it has been possible to see the hereditary connections of entire kinships through the generations. Not only diagnosable mental diseases but personality, body-build, somatic illnesses and all kinds of human phenomena have been visualised in order to demonstrate

¹ Konrad, *Z. Neur.*, vols. 153, 155, 159, 161, 162. *Arch. Rassenbiol.*, vol. 31 (1937), p. 316. 'Der Erbkreis der Epilepsie' (in Just's *Handbuch der Erbbiologie des Menschen*, vol. 5 (1939), p. 933).

the *connectedness of everything* while keeping in mind the idea of disease-entities or constitution. Genealogy of this more penetrating kind has become ambiguous. It remains unassailable as long as it only produces histories of kinship and stimulates the interest which every well-detailed description will arouse but as soon as it begins to draw general conclusions from the particular observations it loses in conviction in view of the small numbers of kinships so described. The point where we look, are surprised and see a possibility is the point where questions are asked rather than proof supplied. There is a very strong tendency to generalise from the objective evidence of particular cases, especially if there has been an accumulation of appropriate cases while the discrepant ones have been passed over. But an observation rich in implications is not yet something exactly calculable nor has it the preciseness of a law. Where diagnostics, characterology, investigation into constitution and structural-analytical typology are brought into genealogy they all need to support each other for individually each one of these conceptions proves fluid and vague. Disease entities are supposed to define themselves, constitutions delineate themselves and character-types reveal themselves. But in fact we get nothing definite by relating indefinite things to each other. Presumed hereditary units, totalities of pictured wholes and principles of typical complex unities all have to support each other. Thus at any time we can achieve a certain plausibility and extend our factual observations but no general knowledge arises from this. Logically there is no difference between a genealogical table of kinship which has been described and investigated with the greatest care and striking observations which are of an anecdotal character.

An example of the former would be perhaps the delightful investigations by F. Minkowska¹ who for many years followed up two kinships through six generations and visited and examined almost all the living members personally. She constructed a picture of the epileptoid constitution and its psychic and physical—biological structure—basing herself on Kretschmer's viewpoints. An example of the latter would be the numerous cases described by Mauz² who reports:

'Years ago in a Variety theatre I met . . . a heavily built man with a broad amorphous face whose eyes were glued to the stage. The stolid euphoria with which he followed everything never stopped at the end of a number but persisted through the intervals. This picture impressed me so much as a manifestation of viscosity that I sat down next to him to talk with him. He turned out to be a small insurance agent . . . he had never had seizures himself but his brother had been for years a patient in a mental hospital because of epilepsy.'

(f) Twin-research

We are used to the idea that no man is like another. We are really only surprised at this when we come to contrast certain twins. Twins that are so alike that they are taken for each other have long been an object of curiosity.

¹ Frau Minkowska, *Epilepsie u. Schizophrenie im Erbgang* (mit besonderer Berücksichtigung der epileptoiden Konstitution u. der epileptischen Struktur), (Zürich, 1937—Archiv. der Julius-Klauss-Stiftung für Vererbungsforschung, vol. 12).

² Fr. Mauz, *Die Veranlagung zu Krampfanfällen* (Leipzig, 1937).

Galton¹ was the first to give them prime significance in relation to research into the influences of 'Anlage' and environment. Twins that lie in one amnion have long been differentiated from those who each have an amnion for themselves. The former are developed out of the same egg, the latter out of two eggs (as is the case with animals that usually have more than one young at a time). The former are always of the same sex. This phenomenon first obtained fundamental significance through genetic cytology. Uniovular twins arise due to very early division of a single germ-cell so that each part can still develop into a whole embryo (analogous to what we can demonstrate by artificially cutting the eggs of saltwater eels into two in the early stages). Uniovular twins, therefore, have entirely uniform 'Anlage'-substances. They are related to each other just like two cuttings from the same plant. Binovular twins are just like other siblings to each other and no more similar than they. For twin research, therefore, we can only make use of uniovular twins, and they are not as rare as one may think. In Germany there is one twin birth for every 80 births and of these every fourth one is uniovular.²

The investigation of uniovular twins does not teach us anything about the hereditary process. Nor can genetics make use of it for gene-analysis but it is second to none in helping us to discriminate environmental influences from hereditary ones. Since we have to postulate the same 'Anlage'-substance for uniovular twins we can show what is due to environmental influence by comparing one twin with the other. Sameness of characteristics in twins is called concordance, disparity is called discordance. What is found to be concordant in twins who live in different environments points to a probable inherited quality, what is discordant has to be attributed to the difference in the environment and the different life-histories. In the observation of twins it is extremely impressive to see how far this concordance goes but it is no less impressive to see how even those radically hereditary phenomena (such as schizophrenia) still need certain environmental influences to make themselves manifest. If heredity declared itself absolutely then when one uniovular twin becomes schizophrenic, the other would have to become schizophrenic also without exception. This is usually but not always the case. Luxenburger found among 17 definitely uniovular twins, where one fell ill with schizophrenia, in ten of the cases the other fell ill also. The concordance is even stronger where there is congenital mental deficiency and epilepsy.³

Delinquent twins have also been investigated.⁴ Lange has shown how in

¹ Fr. Galton, 'Die Geschichte der Zwillinge als Prüfstein der Kräfte von Anlage und Umwelt', *Journal of the Anthropological Institute of Great Britain* (1876).

² For twin-research see O. v. Verschuer, 'Ergebnisse der Zwillingsforschung', *Verb. Ges. phys. Anthrop.*, vol. 6 (1931). R. Lotze, *Einführung in die Zwillingsforschung* (Oehringen, 1937). K. Conrad, *Fschr. Neur.*, vol. 12 (1940), p. 210.

³ Luxenburger, 'Untersuchungen an schizophrenen Zwillingen', *Z. Neur.*, vol. 154 (1935), 351. Conrad, 'Erbanlage und Epilepsie', *Z. Neur.*, vols. 153, 155, 159.

⁴ J. Lange, *Verbrechen als Schicksal* (Leipzig, 1929). H. Kranz, *Lebensschicksale krimineller Zwillinge* (Berlin, 1936). Stumpf, *Die Ursprünge des Verbrechens dargestellt an Lebenslauf von Zwillingen* (Leipzig, 1936).

one twin-pair both committed frauds and swindles and became confidence-tricksters in a big way. Kranz found two-thirds to three-quarters of uniovular twins were concordant in crime while with binovular twins the concordance was no more than half. Even in uniovular twins the 'Anlage' here is not absolutely determining as it is for instance with the blood-grouping or the physical stigmata where concordance is 100 per cent.

Twin research is particularly important because of the questions it raises. Biologists' observations show that the differences in plant-cuttings which are attributed to the environment are entirely quantitative. It is uncommonly rare to find a complete reversal or the appearance or non-appearance of a characteristic to be due to the environment, as with the red flower of *Primula sinensis* which remains red up to a certain temperature; over 30° it blossoms white although the red colour of the flower is transmitted by a single gene. Twin-research into schizophrenia, for instance, where in fact the illness does not attack both or none in all cases, makes it possible for us to ask: is schizophrenia merely a quantitative increase of something which is present, even though no psychotic illness actually appears? Clinically this is not the case. There is in fact a break when the psychosis begins. Or is there perhaps among the genes which bring schizophrenia about by their mutual interplay one gene which is subject to a quantitative change under certain environmental conditions and precipitates an otherwise dormant 'Anlage' into action? Can we find such a gene? There is still no answer to this because there is no point as yet from which we can attack the problem.

(g) *Injury to the germ-cell*

The consequences of injury to the embryo or of damage at birth do of course remain part of the individual from the very beginning of life but they are not his 'Anlage' nor are they transmitted by inheritance nor transmissible. The problem is whether there are injuries to or changes in the germ-cells which produce changes in the 'Anlage' as a result so that something which has not been inherited has now become transmissible by inheritance because it has become a part of the hereditary substance. These are the mutations.

Injury to the germ-cell in this definite and circumscribed sense has not been demonstrated as yet in Man although popular medical opinion has always taken this for granted. The insistence on gene-damage in alcoholism¹ has been strikingly refuted. Among the progeny of patients suffering from delirium tremens no increased incidence of psychic abnormality could be shown. There is therefore no germ damage by alcohol. If alcoholism is the expression of a psychic 'Anlage' this 'Anlage' is transmitted by inheritance. The alcoholism of delirium tremens patients is very frequently produced by environmental influences.

¹ Polisch, 'Die Nachkommenschaft Delirium tremens-Kranker' *Msch. Psychiatr.*, No. 64 (1927), p. 108.

Moreover germ-injury through syphilis remains unproven (but injury to the embryo through syphilis is very frequent).

(h) *The importance of applying genetics in psychopathology in spite of negative results up to the present*

Attempts to find laws of heredity in psychopathology in spite of the unfavourable conditions for research have not brought the positive and conclusive results of scientific genetics though there has been an enormous amount of effort and many subtle methods employed. But this careful collection of material and all this thoughtful work has thrown some light on a large number of problems even when the work itself has been unproductive. In that sense the course of research has not been fruitless.

1. All thinking about the heredity of mental illnesses has gained in exactitude and critical sense. The refinement of statistical methods has brought results though these cannot be put into the categories of genetics proper.

2. On the basis of genetics and the attempts to apply it new possibilities have been glimpsed; we have gained some idea of the complexity that governs the hereditary connections and are thus protected from over-simplification. We are struck by the decisive character of the basic processes of life as far as this is affected by heredity. We know how much we do not know. Our experience that the first attack on the problem failed because of too many hypothetical unknown quantities has clarified the crude empirical nature of the raw facts that have so far been found.

As so often happens with life, we again find ourselves in the situation where we see a surprising complexity but cannot penetrate it. For the present we are only touching the fringe of a vital happening which may be in itself quite simple but which grows rich and various as it unfolds. In touching the fringe, however, it is just this simple something that we miss; we only circle round it in all its manifold and endless relationships, which it would seem are fundamentally connected with it somehow but yet do not really bring us any closer to it though their number continually grows.

3. Failure in the application of genetics to psychopathology urges us ever more obviously on to the path of the somatic approach as being the only one which will hold out any hope of a successful method. What matters is to find some somatic characteristics for the illnesses which could be the hereditary units. Our knowledge of the heredity of psychic phenomena is limited by the continuing vagueness of these phenomena.

But in making this reservation we can also ask on the other hand whether there may not be a heredity which cannot be comprehended by the categories of present genetics. Scientifically exact knowledge is of course tied to the methods of genetics but we would be narrowing our observation if we turned genetics into an absolute and simply ignored the whole obscure field of psychic hereditary connections which seem to be of a different order. Therefore the historical study of whole families should not be despised. What cannot be

generalised does give us a picture of what may lie beyond the narrow limits of what can be generalised. The general is limited to the particular well-defined unit and to what can be clearly analysed. The history of a life is more than this. The probability is that the basic concepts we have formulated hitherto and our theories of genetics are far from sufficient to explain heredity in its entirety, most particularly as regards the human race.

§ 4. RETURN TO EMPIRICAL STATISTICS OF A TEMPORARY CHARACTER

The high claim to know the heredity in terms of a specific mode of transmitting the hereditary units cannot be realised in psychopathology at present. But although we cannot calculate any exact mendelian prognosis of heredity we would like to know roughly and empirically how to estimate the expectation of illness where there is a given loading. Instead of asking after the transmission of hereditary units we ask once more for the heredity of complex types of phenomena, such as mental deficiency, schizophrenia, manic-depressive psychosis and epilepsy. The results gained by the help of the older theories now increase in value. We cannot just drop them because they cannot be grasped in terms of genetics. The difference from the older methods of mass-statistics is that now we know clearly what it is we are doing and manipulate our statistics against a background of our real knowledge of biological heredity which we cannot yet establish in our particular case. Secondly we collect our material much more carefully and critically. The purpose is a practical one; we want a probable prognosis. Our knowledge of human heredity cannot wait until some fundamental, biological explanation is possible. That heredity plays a part in psychosis is no longer contested. It is not the fact of heredity but the extent of it that needs to be found. Genealogy has always shown that mental illness collects in particular families. We have always known the distress parents felt when they found in their children—in this or that case—the very thing that had brought such sorrow to previous generations and we have known the daring needed to accept the risk in the face of what seem quite favourable chances. Scientific statistics now try to show quantitatively the probabilities of illness when there are various heredity loadings.

The latest findings have been tabled by Luxenburger,¹ e.g. if one investigates manic-depressive patients one finds a probability of illness in siblings of 13.5 per cent and in children of 33.3 per cent, in cousins of 2.5 per cent, in nephews 3.4 per cent, whereas in relatives of the average population the probability for this illness is 0.44 per cent (Stromgren, 0.20 per cent).

In the case of idiopathic epilepsy the corresponding figures are: siblings 3.0 per cent, children 10 per cent, average population 0.3 per cent (Stromgren 0.35 per cent).

In schizophrenia, siblings 7.5 per cent, children 9.1 per cent, grandchildren 2.4 per cent, average population 0.85 per cent (Stromgren, 0.66 per cent).

The probability of illness is not confined to the psychoses but one also finds

¹ H. Luxenburger, *Psychiatrische Erblehre* (München, 1938).

among the relatives an exceptional number of personality disorders and other abnormal types.

How great one considers the risk to be in any individual case depends on the standpoint of comparison. If one finds that where one parent is schizophrenic about 10 per cent of the children become schizophrenic, this means that every tenth child is endangered but the danger is not altogether devastating. If one compares this with the children in the average population (approximately 0.8 per cent schizophrenic), that is fewer than 1 : 100, the increased danger where there is one schizophrenic parent is startling. We have also to add the frequent abnormalities in the other children and the probability of transmission through children who are not affected. Children of a manic-depressive parent are most at risk with a 32 per cent probability, so that every third child falls ill. If both parents are schizophrenic the probability of illness does not double but becomes four-fold. It rises from 10 per cent to about 40 per cent.¹

In connection with the teaching on heredity in mental illness in our own day (1913 and still valid at present) it is necessary to give a warning. It has been thought desirable to turn the incomplete theories on heredity, quite unsuitable for any practical purpose, into a 'racial hygiene' and use them prematurely as reasons for human action in relation to marriage and reproduction. The absence of *sufficient* knowledge forbids this. But even if we should know much more about such matters the scientist should steer clear of drawing *ethical* consequences from his science which to the self-determining, free personality can only appear as flat, crude and meaningless. It is not the business of the natural sciences to create obligation but to *find facts*. Its only business is to *communicate these facts*. Decision for action based on these facts and in the knowledge of the consequences never rests with the sciences but with individual personality alone and with those forces to which he gives his allegiance and which spring from his ultimate philosophies.

¹ H. Schulz, 'Kinder schizophrener Elternpaare', *Z. Neur.*, vol. 148, p. 332.

CHAPTER XI

THE EXPLANATORY THEORIES—THEIR MEANING AND VALUE

§ 1. CHARACTERISTICS OF THE EXPLANATORY THEORIES

(a) *The nature of the theories.* Where we want to establish *causal connections* and make them comprehensible we make an additional construct of something that *underlies* the phenomena. The dominance of the category of causality and the notion of something underlying are the two basic elements to be found in every theory.

In psychology the theories are concerned with something *extra-conscious*, something conceived as underlying the conscious psychic life. It is possible to form a picture to ourselves of what this underlying element may be which by its very nature is never directly accessible to us but must always be deduced. It is precisely these representations of what is underlying that we call theories.

Theoretically the causal connection has a twofold nature: there are extra-conscious effects on what is extra-conscious and there are the effects of what is extra-conscious appearing in the phenomena of consciousness and in the concreteness of individual facts. The original causal connections in the underlying elements bring these phenomena about.

Whatever theory we prefer to adopt, inasmuch as it represents this underlying factor, it will always be drawn into the category of causality and whatever causal connections we may conceive there will always accompany them the conception of something underlying. Research in the end always comes to the limiting point where theoretical questions arise. Only subjective phenomena and objective data are directly accessible. The meaningful connections are still clear and distinct to us. The question of cause arises when meaning has ceased. Once a causal connection has been established theory comes in to cope.

Theories should not be confused with other hypothetical or speculative constructs. *Anticipatory guesses* about facts yet to be found are not to be considered as theories. For example, with the idea of cerebral localisation, we use it to make certain guesses which as soon as our investigation leads to positive results cease to be guesses; alternatively we may use it as an idea about the nature of psychic life as such, when its meaning can never be verified except indirectly and then it remains a theory about psychic life as a whole. *Nor do we give the name of theory* to the concrete construction of *ideal types* of meaningful connection or of personality, etc. Finally we do not call theories those conceptions of *complex unities* which are used as a means of research, the conception of a disease-entity for example or of constitution, etc.

The value of having theories lies in the fact that we can then *trace back* a large number of different phenomena to some basic event. The expression 'trace back' varies its meaning according to the viewpoint adopted when something psychic is traced back to something else, something complex to something simple. 'Trace back' for example can mean: to break down phenomena into units of direct experience; to understand an experience as arising from another one; to recognise a psychic datum as dependent on some unnoticed determinant (e.g. spatial perception as dependent on eye-muscle movements); to know the causes of an existing psychic structure (for example, a personality-type by reason of heredity), etc. Finally we have the tracing back of the facts to an underlying causal event that has been theoretically postulated.

(b) *Basic theoretical concepts in psychopathology.* The extra-conscious provides the field for theoretical concepts. All theories deal with something that is thought to underlie the conscious psychic life and also bring it about. There are many terms for this underlying factor: 'Anlage', disposition, potentiality, capacity, ability, instinctual energy, mechanism, etc.

A collection of characteristic ideas appear in these theories repeatedly. The underlying factor is dealt with by *analogy*. The analogies used are either *mechanical-chemical* (elements and their combination, splitting off of psychic life) or in terms of *energy*, *dynamic* (psychic or biological energies and their conversion) or *organic* terms (idea of structure—hierarchical or teleological arrangements) or *psychic* (making the separate psychic phenomena into absolutes or creating a psychic unconscious as if events went on as in consciousness but imperceptibly); or finally it is dealt with as something neutral and extra-conscious, something which is only conceived and not in any way concretely visualised. None of these possibilities can be avoided in the course of psychological thinking. We are always dealing with *hypothetical models* which represent the underlying factor in terms of metaphors, that arise from inorganic nature, from life itself and from psychic experience. A brief presentation of these ideas follows:

1. Mechanistic theories

(aa) The idea that what is psychic is composed of *elements* that are *inter-connected* has been set out in relation to association-mechanisms. The *connection* between the elements is conceived as one of mutual stimulation, the building up of an ordered structure in the manner of brick-building, a combination into a new unity much as with chemical compounds. We speak of combining and separating, of condensation and displacement.

(bb) The idea that psychic entities can split off has a concrete basis in a series of heterogeneous observations. There is the experience of a double self and the experiences of patients who are confronted with the contents of their own minds in the form of voices that turn into complete personalities. There is the entire loss of memories which demonstrate their continued existence by the possibility of their being brought into consciousness again. There are the

contradictions between human thought and act, whether between themselves or between themselves and 'reality'. All these established observations have led to the assertion that a *cleavage* in the psyche takes place which has been called dissociation, sejunction or the disintegration of consciousness and of individuality.

2. *Dynamic theories*

Dynamic theories regard the extra-conscious psyche as energy with quantitative properties. This energy flows away, is changeable, can be dammed by resistance and thereby increase; it can attach itself to contents and pass from one content to another. The connections here are conceived of as a transformation of energy which shows itself in the changing phenomena.

This idea is used either to explain the *momentary psychic flow*, and the content which happens to be in the centre of attention is then considered to carry the strongest charge; or the idea of energy refers to the *affects, passions* and *instinctual drives*. These are the psychic energies. The energy increases, discharges itself and exhausts itself. It may be repressed and transform itself or it may displace itself on to other contents.

Alternatively the idea of energy is used in reference to the *total state of the psychic life* and the amount of psychic energy is conceived to vary in different states. Thus it is said that each bodily unit has its own charge of life-energy which determines the tempo and function of all the organs, those of the brain as well as of the psyche. This is shown subjectively in feelings of energy and vitality and objectively in the actual ability to perform. Personality and temperament are explained as asthenic where there is an element of weakness, a lack of energy and a diminution of working performance well to the fore. The instinctual drives are poor, the feelings dulled and the will lacks power.¹

3. *Structural theories*

(aa) *Theories about life.* Life is conceived as a whole—very vaguely—as something that is more than mere existence. It is the stream of life, the fullness of life, a fundamental development. From this angle everything somatic—morphological and physiological—all consciousness and the self are but trifling tools of something greater (influence of Nietzsche's ideas). All phenomena are explained out of some superior meaning and purpose of which the preservation of existence is a partial aim, secondary and not unconditional. The morbid phenomena of the individual psyche are explained as disturbances of the vital living whole. One speaks of 'biological thinking' in this context, not meaning the natural sciences, a form of thinking which explains life in terms of chemistry and physics, nor biology proper as it explores life morphologically and environmentally, nor any definite and particular insight at all. Rather, life has become a concept of the whole as in the philosophy of the young

¹ Cp. the theories of T. H. Lipp, Janet, Freud; for application of them, see: Kiewet de Jonge, *Psychiatrische en Neurologische Bladen*, (1920).

Hegel or as in the life-philosophies of the romantic and later periods but entangled now with the newer findings of biological research transformed in meaning through the use of them as analogies or absolutes.

(bb) *Theories of Stages or Levels.* The analogy of structure is kept in the idea of a hierarchy of psychic functions. Psychic life is conceived as a whole in which everything has its place but everything so to speak is arranged in pyramid fashion with a high point conceived in terms of purpose or as the most vital reality. The connections lie in the purpose-means relationships of a meaningful existence.

Examples of these particular theories would be the following:

Janet¹ conceives of function in a descending series: at the top stands the 'reality function' which expresses itself in acts of will, attention, and in the reality feeling of the moment. This is followed by 'disinterested activity' and that again by the 'function of imagery' (phantasy) and then again the 'visceral reactions of affects' and finally 'useless body movements'. Kohnstamm² distinguishes: 1. Upper levels of consciousness; 2. Sub-conscious experiencing and sub-conscious ordering of events; 3. Non-personal sub-consciousness at the deepest level. Neuda distinguishes a 'causality of a lower order which by its nature can only influence affect; it only acts as a stimulus not as a motive'.³ Similarly Kretschmer distinguishes three levels: 1. motive from experience—purposeful act; 2. stimulus from experience—negativism, automatic obedience, muscle-tension, etc. 3. sensory stimulus—reflex arc, muscle contraction. Ascending up the scale, he calls these three layers the reflex apparatus, hypoboulic and purposive and finds them successively in ontogenetic and phylogenetic development and present simultaneously in the mature man of today.⁴

The theory of levels serves to explain certain symptoms in terms of the *disintegration* of the higher levels. In analogy with the neurological facts, a *disinhibition* is conceived as a result of which the lower levels of the psyche become independent and take increased effect. Or a reduction in tension is conceived analogous to sleep as a result of which individual functions of the now isolated systems become released. According to Janet's theory the higher functions in psychasthenia are weakened and the lower ones become independent. Jackson⁵ sees illusions for example not as caused by the illness but as manifestations of life at the lower levels which have been left intact in the patient. He speaks of survival at the lower level of integration which has now become the higher. The disinhibitions make possible 'primitive reactions' (Kretschmer).

The disintegration is also visualised in relation to the phylogenetic or

¹ Janet, *Les obsessions et la psychasthene* (Paris).

² O. Kohnstamm, 'Das Unterbewusstes', *J. Psychiatr.*, vol. 23, Erg. H. 1 (1918). A summary of his most important work in *Medizinische u. philosophische Ergebnisse aus der Methode der hypnotischen Selbstbesinnung* (München, 1918); cp. Gruhle, *Zbl. Neur.*, vol. 17 (1919), p. 458.

³ Neuda, 'Zur Pathogenese der Neurose (das Willensphänomen)', *Z. Neur.*, vol. 54, p. 251.

⁴ Kretschmer, 'Der Willensapparat der Hysterischen', *Z. Neur.*, vol. 54, p. 271.

⁵ Hughlings Jackson, *Aufbau und Abbau des Nervensystems* (D) (Berlin, Karger, 1927). Cp. O. Sittig, 'Hughlings Jackson hirnpathologische Lehren', *Nervenarzt*, vol. 4, p. 472.

historical development of man. The disintegration restores once more what had been his life in earlier times. The archaic levels of function return which have been liberated by the defect in the more recent, superimposed layers. (But neither biological nor archaic levels of previous existence are really known to us. As so often this is merely a theory which cannot ever be verified.)

4. *Psychic theories*

Psychic phenomena become the starting-point for theory when they are considered as the actual psychic life of an individual and their singularity is taken as analogous to all psychic life. Thinking was previously often taken to be the very essence of the psyche and all phenomena were 'logically' explained in terms of thought and imagery. Similarly sensation (sensualism) experience of the self, experience of time, the emotional life, drive (*libido*), etc., all used to be taken as intrinsic to the psyche. Theories on the psyche arise through turning the individual psychic phenomena into absolutes. These theories then take the phenomenon as an analogy for everything psychic.

§ 2. EXAMPLES OF THEORY FORMATION IN PSYCHOPATHOLOGY

To form some idea of the different theories it will be useful to give a critical account of a few of the most heterogeneous ones. They all contain within themselves a large number of speculative ideas. Wernicke and Freud at the turn of the century produced those that have been most effective up to the present day. In more recent years the 'genetic-constructive' psychology of v. Gebsattel, Straus and others seems to me the most original.

(a) *Wernicke*¹

If mental disturbances can be localised in the brain it is not far-fetched to think one can blaze a trail for research by a preliminary construct of what will be discovered at a later stage by anatomical research and so become empirical knowledge. If however we consider mental illnesses as cerebral illnesses in the sense that they can be wholly comprehended in terms of cerebral processes the idea of their anatomical localisation becomes a theory. The concept of the cerebral origin of what is psychic then serves as a final target even where no direct cerebral findings can be expected. The structure of Wernicke's theory combines both these premisses: the anticipation of experience by the formation of hypothetical constructs and a complete theory of psychic life. The elements and connections of psychic life are seen as identical with the elements and structures of the brain. The psyche becomes spatially represented. Holding such a view one will tend to turn not to the psychic life itself but to the brain and to neurology when one wishes for psychopathological comprehension. Psychic phenomena will only be used for the time being in the absence of direct access to the brain. Besides an outlook belonging purely

¹ Wernicke, *Grundriss der Psychiatrie*, 2nd edn. (1906).

to the natural sciences, the chief inducement to this view was the discovery of the aphasic disturbances. Aphasia became for Wernicke his guiding star. Along with the fact that these disturbances could be linked with certain parts of the brain he took over the concepts that were fruitful for such an analysis (though even here they were questionable) and applied them to all psychic disturbances while he entirely ignored the fact that aphasia is a disturbance of the psyche's tools not of the psyche itself. 'Every mental illness' said Wernicke 'in so far as it manifests itself in patients' distorted utterances we take as an example of trans-cortical aphasia'. Just as trans-cortical aphasia is supposed to be due to a disturbance not in the projection-fields of the cortex but in the fibre-tracts between them, so Wernicke explained all mental illnesses as illnesses of the 'organ of association'. According to his view anatomical fibre tracts and psychological associations fuse into each other.

In accord with his attempt to grasp mental illness as cerebral illness, not only in general but in every particular, Wernicke's ideas are dominated by the notion of the psychic reflex-arc and he only accepts objective symptoms as relevant, i.e. movement (motility) including its special mode—language. He says that 'in the end there is nothing else to be observed or found except movement and the entire pathology of mental illness consists in nothing else but the peculiarities of motor behaviour'.

Wernicke rarely notices the fact (and always forgets it when discussing fundamentals) that, although motor behaviour is our only instrument of communication, we are interested in the majority of cases, all the same, not so much in the instrument itself but in what it conveys.

However, even Wernicke in fact has to formulate a number of purely psychological concepts. These have to be of such a kind that they can serve as localisable elements. They have to be defined precisely and must so to speak rid themselves of any psychic element and be transformed into a 'set of building-blocks'. For that purpose the crude conceptions of the association-theories suit him admirably. They guide him at every point. Everything in the psychic life is an association of elements and thus 'memory-images' become for him a 'summation of associations'. Those associations which are 'almost similar' for all individuals become for him 'associations of universal validity'. Rightness is also traced back to something mechanical, namely, the average. A current of excitement flows along the association tracts. Elements are localised at certain points. Even changed contents (delusions in the widest sense) are conceived as localised and have the 'value of focal symptoms' even though so far as anatomy is concerned these foci are only a postulate. A certain grouping of these symptomatic contents denotes certain anatomical arrangements in the association-tracts as well. Wernicke therefore replaces all other classifications of psychic disturbances with his own: 'our most recent basis for classification is that of anatomical arrangement; that is, of the natural grouping and sequence of changes that carry content'.

Wernicke naturally could not ask any actual help from anatomy so far as

the psychological concepts were concerned, those psychic elements which in general made such a classification possible for him. He constructs these concepts without saying how he arrives at them, thanks to his outstanding gift of seeing what is psychic in bold outline and of making admirable differentiations. He first of all starts by setting out the parts of the 'psychic reflex arc'—sensitivity, intra-psychic functions, motility and in each of these three areas sees the possibility of over-function, under-function and dysfunction. He further subdivides movement into expressive movements, reactive movements and initiating movements. He divides contents into awareness of the outside world, of one's own body and of one's personality (this gives rise to an allo-psychic, somatopsychic and autopsychic orientation in patients). But above all he makes a differentiation which in his eyes should single out the pathological. He distinguishes delusion proper from 'explanatory delusions' (*Erklärungswahn*). Whatever normal understandable psychic life may make out of the pathological element that as a result of cerebral processes breaks in upon it, this is not the pathological element itself although it may often occupy a considerable part of the picture. By analyses of this sort Wernicke has created a series of purely psychological concepts which are extremely striking and have become a lasting possession of psychopathological thinking; for example, his concepts of delusional explanation (explanatory delusions), perplexity, over-valued ideas, registration of memory, transitivism and the differentiation of autopsychic orientation within the allo-psychic disorientation of delirium tremens.

Psychological analysis of this sort is an essential precondition for the application of the theory in detail. In this way all disturbances are explained by means of irritation or inhibition localised in certain (though at present still unknown) places in the brain. The basis of the majority of psychic disturbances lies primarily in the parting of the association-links or *sejunction*. Where there are false ideas or judgments in an individual or they are in conflict with each other or with reality this is thought to be due to a 'loosening up' in the firm network of association. By severing the 'continuity' of the tracts, by an 'absence of certain associative performances' a number of different personalities may simultaneously arise in the same individual and a 'break-up of individuality' occur. *Sejunction* can also explain a large number of hallucinations (in so far as they do not arise from direct irritation in the projection fields): if association is interrupted excitation processes are dammed up and thus a progressively increasing stimulus is formed which brings the hallucinations about. Similarly he explains 'autochthonous ideas' (the so-called 'made thoughts'): the autochthonous idea is due to a process of irritation when continuity is interrupted whereas compulsive thinking is explained by a process of irritation while continuity is preserved. Abnormal movements (parakineses) are also due to these *sejunctions*. Because hallucinations are due to *sejunction* Wernicke finds it quite feasible that they are without any counter-image and therefore there is no criticism of them; also that they so often have

contents of an imperative character. Delusions of reference are due to a morbid increase in irritation which has its impact on the same place as in hallucinations but this irritation has not reached the same intensity. In many of his explanations Wernicke likes to use the concept of organ-sensations and postulates their existence, irritation and failure. Perhaps these references to a few of the theoretical explanations will suffice.

If we consider what Wernicke's theory really means we have to keep two things apart. So far as the aphasic disturbances are concerned and other disorders of a neurological character affecting the psychic tools or substructure of the psychic life, such a theory as this is a fruitful one leading to questions and trial experiments. Here a very productive path leads from Wernicke to Liepmann, who discovered apraxia. But as soon as this theory is transferred to everything psychic as if it were analogous it ceases to further our knowledge. It becomes merely a fanciful interpretation which falls in line with philosophical and systematic requirements, develops into something schematic and in a simple fashion brings order into description. Wernicke sometimes seems to see this quite clearly when he says for instance that his schemata should serve for 'communication' or when he arrests his urge to play with words and says 'the purely descriptive tendency of our clinical investigations forces us to drop those hypotheses which are not absolutely necessary for our understanding'. It must be said that Wernicke only rarely distorts his constructions; far more often he keeps his eye on concrete observations and has a great deal of feeling for what is comprehensible and interesting and, in spite of the fundamentally wrong theoretical basis of his ideas, his work is one of the most outstanding achievements in psychopathology. No scientist can afford not to study him seriously.

(b) Freud¹

Freud's new attempt at psychological understanding was epoch-making for psychiatry. He came into the field at a time when the psyche was once more emerging into view after decades of exclusive contemplation of rational content (the teaching on paranoia), objective symptoms and neurological material. Since his time psychological understanding has once more become a matter of course even with investigators who do not want to know anything of Freud's theories. Opponents of Freud will speak of the flight into psychosis, of complexes and of repression. But although at that time understanding of meaning came as something new to psychiatry, from the point of view of cultural history Freud did not contribute anything new in this respect (see pp. 359 ff.).

¹ Literature on Freudian theory.—Freud's works, among them as summaries: *Über Psychoanalyse, fünf Vorlesungen* (Vienna, 1912); *Vorlesungen zur Einführung in die Psychoanalyse* (Vienna, 1917); Pfister, *Die psychoanalytische Methode* (1913). Criticisms are contained in Isserlin, *Z. Neur.*, vol. 1; Bleuler, *Die Psychoanalyse Freuds* (Leipzig, 1911); Bleuler, *Allg. Z. Psychiatr.*, 1913; Mittenzwey, *Z. Pathopsychol.*, 1. Freud's own book on the Interpretation of Dreams goes most deeply into the structure of his theory. An acquaintance with the most profitable part of Freudian teaching can be gained from reading Breuer and Freud, *Studien über Hysterie*.

His specific contribution, taken in conjunction with his philosophical position (see pp. 773 ff.) and looked at from the historical point of view, appears as the construction of a theory and a general statement of principles. He is the medical man who can only pursue psychological understanding by theorising from the natural sciences; he does not just simply understand.

Freud himself however did not put the theoretical aspects in the foreground. He kept his theories fluid, basing himself on his experiences which he claimed as his only source and one not permitting any fixed theoretical system. His theory, therefore, seems without a centre because so many different things have been said in his voluminous writings. We do not find any particular theory adhered to, tested at every point and carefully corrected. If this had taken place in true scientific form the theory would at any time have become clear as a whole and in detail. But with psychoanalysis this was never the case. Here are a few samples from the very numerous theoretical concepts of Freud.

According to him everything psychic is 'determined', i.e. it is meaningful in our sense. This may be paralleled with the postulate of the natural sciences that causality dominates everything. There is a particular psychic causality, this meaningful determination, which is constantly interrupted and fragmented in conscious psychic life. Underlying this consciousness an unconscious must be construed, the existence of which is proved by the conscious phenomena. The unconscious is the psychic life proper; it does not enter consciousness directly but only through the sphere of the preconscious after modification by a 'censor' at the threshold. Similarly consciousness is only a sense-organ for the apperception of psychic qualities, applied to sense-perception of the external world or to unconscious thought-processes within. The deceptions of this self-perception build up the conscious psychic life.

In the unconscious there is an energy with quantitative characteristics which drains itself off, transposes itself and dams itself up. This is an energy of affect and in the last resort it is attributed to a single force which Freud called sexuality and Jung libido. It is the real driving factor in the psyche and it appears in the manifold forms of the different instinctual drives among which the sexual instinct is the most important. (For this reason it lends its name to them as a whole.)

The psyche does not enter consciousness from the unconscious just as it is (this happens only in the earliest stages of naïve childhood) but it undergoes many metamorphoses which hide its real meaning. Psychoanalysis, reasoning retrospectively from the many and varied phenomena of consciousness, particularly such as are involuntary, believes it can penetrate through the various 'censors' to what is really there. Therefore dreams, the slips of everyday life and the contents of the neuroses and psychoses are all main sources for acquiring a knowledge of the unconscious and with this of the psyche as a whole.

Of course so far as the content of unconscious events is concerned only meaningful conscious events can give us a point of observation. The psy-

chology of meaningful connections is thus the source of the theoretical contents. What Freud describes as repression and censorship is a meaningful experience of consciousness, so is flight into phantasy and illusion and the wish-fulfilment which they bring. The same events are found in the unconscious. The only cure for them is the clarification of oneself to oneself, the process of seeing through oneself and the dissipation of one's self-deceptions.

A critique of Freud's teaching might resolve itself into the following theses which I formulated in a previous work of my own (1922):

1. Freud is actually concerned with the *psychology of meaningful connections* and not with causal explanation as he himself believed.

2. Freud teaches us in a most convincing way to recognise many *particular* meaningful connections. We understand how complexes repressed into unconsciousness reappear in symbolic form. We understand reaction-formation towards repressed instinctual drives, the distinction between genuine, primary psychic events and psychic events that are secondary and only disguises and substitutes. To some extent here Freud fills out in detail the teachings of Nietzsche. He presses on into the *unregarded part of psychic life* which by his agency is brought *into consciousness*.

3. The falseness of the Freudian claim lies in the mistaking of meaningful connections for causal connections. The claim is that *everything* in the psychic life, every psychic event, is *meaningful* (comprehensibly determined). Only the claim for unlimited causality, not of unlimited meaningfulness, is justified. This error is linked with another. Freud *uses meaningful connections as a basis for building theories* about the original causes of the whole course of psychic life whereas understanding of meaning can never by its very nature lead one to a theory. In contrast causal explanations always have to lead on to a theory (the meaningful interpretation of an individual psychic event—and there can only be isolated interpretation of this sort—cannot of course be called a theory).

4. In a great number of cases Freud is concerned neither with understanding the meaning of unnoticed connections nor with the bringing of them into consciousness but with a '*hypothetical understanding*' of *extra-conscious* connections. Considering that psychiatrists confronted with the acute psychoses could do no better than note perplexity, disorientation, defective performance or senseless delusion with orientation intact, it has to appear an advance if in all this chaos something is temporarily characterised and classified with the help of '*hypothetically meaningful*' connections (e.g. the delusional contents of dementia praecox). So previously it was an advance when the manner of distribution of hysterical sensory and motor disturbances was rendered significant as a result of the meaningful connection with the patients' crude anatomical notions. Janet's investigations in particular also showed that in hysteria there are actual cleavages of psychic connection. In extreme cases one has had to deal with two psyches in the one individual, neither of which knew anything of the other. Where there are such cleavages in fact '*hypothetical*

understanding' attains a real significance. There is no easily demonstrable answer to the question how widely such cleavages occur (Janet's type of case seems very rare) nor to the question whether such a cleavage exists in dementia praecox as well (as for example both Jung and Bleuler taught). We shall do well to suspend any final judgment here. The investigators on Freudian lines are in any case very imprudent in their rapid supposition of such cleavages and for the most part there is nothing very convincing about the 'hypothetically understandable' connections which, for example, Jung thought he had discovered in the case of dementia praecox.

5. One lapse in Freud's teaching consists in the increasing *naïveté of understanding* which goes with the transformation of meaningful connections into theory. Theories call for a certain simplicity whereas the understanding of meaning uncovers an infinite manifold. As it is Freud believed that practically everything psychic could be traced back to sexuality in a broad sense as if it were the sole and primary power. In particular the writings of many of his followers are intolerably boring by reason of this very naïveté. One knows beforehand that the same thing will be found in each one of them. The psychology of meaningful connections cannot make any progress here.

(c) *Constructive-genetic psychopathology*

v. Gebssattel used this term to characterise a trend of thought that has appeared in many varied forms and under a number of different names (theoretical psychology—Straus; philosophical-anthropological interpretation—Kunz; existential analysis—Storch, existential anthropology—Binswanger). It has started a kind of movement in psychopathology though in spite of some significant individual contributions it has led to no final conclusions nor to any fully representative work. What we have in the way of descriptive performance (cp. pp. 280 ff., for example) is unquestionable but what has been intended and realised in respect of these new viewpoints and methods I take to be one of those inevitable mistakes inherent in all theories: they have to happen for us to overcome them.¹

Underlying endogenous depression, compulsive illness and delusions there is supposed to be a *disturbance of vital events* which only seems to manifest itself differently in the different illnesses. This disturbance in the basic events is called 'vital inhibition', 'disturbance in becoming a person', an 'elementary obstruction on becoming', an inhibition 'of one's own inner timing', an 'inhibition of the personally moulded urge to become' (of the urge for self-realisation), a 'standstill in the flow of personal becoming'.

¹ To quote from the literature: E. Straus, 'Das Zeiterlebnis in der endogenen Depression', *Mschr. Psychiatr.*, vol. 68 (1928), p. 640. 'Ein Beitrag zur Pathologie der Zwangsercheinungen', *Mschr. Psychiatr.*, vol. 98 (1938), p. 61. Freiherr v. Gebssattel, 'Die Welt der Zwangskranken', *Mschr. Psychiatr.*, vol. 99 (1938), 10 ff. 'Zeitbezogenes Denken in der Melancholie', *Nervenarzt*, vol. 1 (1928), p. 275. 'Die Störungen des Werdens u. des Zeiterlebens' (in *Gegenwartsproblem der psychiatrisch-neurologischen Forschung*, edited by Roggenbau (Stuttgart, 1939), p. 54). Criticism in Kurt Schneider, *Fschr. Neur.*, vol. 1 (1928), pp. 142–6. K. F. Scheid, 'Existentielle Analytik u. Psychopathologie', *Nervenarzt*, vol. 5 (1932), p. 617.

Symptoms are derived from the basic disturbance. Thus with *depression* (Straus): as a result of the inhibition of becoming, the time-experience becomes an experience of time standing still. There is therefore no future; the past is everything. Everything is final, definite, decided and hence the delusions of insignificance, of poverty and of sin (the psychopathic hypochondriac asks for consolation and support but not the depressive); there is fear for the present (since it is cut off from the future but there is no fear of the future as with the personality disorders in which depression does show fear of the future). Happiness presupposes a capacity for enrichment in future relationships, sadness presupposes possibilities of loss. If the experience of a future is obliterated by the vital inhibition, a temporal vacuum is created and both happiness and sadness lose their possibility of realisation.

Symptoms of *compulsive thinking* are derived from the same basic disturbance, the inhibition of becoming (Straus). Because of the inhibition of becoming time comes to a standstill; there is no future, therefore nothing can ever be brought to a conclusion. The psyche has no élan for the future: what in fact is incomplete is normally taken up into the flux of life by the force of future events. But where there is no experience of a future such a resolution is never reached. The past increases in power over the future. The patient cannot rise to a decision. The inability to make an end, the inability to come to a decision, form the content of his psyche. v. Gebssattel puts it differently: in the obsessional patient the trend of his 'basal happenings' (the vital disturbance of becoming) does not go in the direction of development, growth, increase and self-realisation but towards reduction, downfall and dissolution of his own particular form of life. The inhibition of becoming is experienced as an effective dissolution of form, not directly, but within the framework of a dissolving potentiality for existence; the psyche is filled only with the negative significance of the world, death, corpses, rot, contamination, images of poison, faeces and ugliness. The morbid basic events within manifest themselves in the patients' interpretation of their world, the pseudo-magical quality of their reality. The purpose of the compulsive actions is to ward off this meaning. The actions may be carried out to the point of exhaustion and are characteristically futile. The nature of the disturbance in the basic events is for v. Gebssattel better grasped as follows: there is a close relationship between disturbance in becoming and contamination. 'Who rests rusts'—'he who goes not forward goes back'—'standing water stagnates'. This contamination is only a particular case of the diminution that sets in when life stagnates. 'Normally life purifies itself by surrendering to the forces and challenges of the future. If a man is prevented from paying off the debt of his existence by an arrest in his movements of self-realisation, an ill-defined feeling of guilt arises in him'. Thus the feeling of contamination is a variant of the more general feeling of guilt. This can be expressed differently: healthy life which moves onwards into the future is perpetually getting rid of the past and cleanses itself of it. The obsessional, however, falls a prey to his past which overpowers him all the time as something that is never finished. All in all, life which is itself an ever-developing form is opposed by a hostile formlessness wherein there rules a self-distorted past which threatens life with contamination, rot and annihilation. The anankastic behaviour must be understood as a defence. The defence is powerless because the trend to annihilation in formlessness cannot be overcome owing to the disturbance in the basal events and the exclusion of any future and it asserts itself again and again. The patient fights with his world which has shrunk to a repulsive physiognomy of

exclusively negative meanings but this fight is with his own shadow. The significance of the forces making for dissolution only gain power over his imagination because as a result of the inhibition of becoming he is preoccupied with the loss of his own specific form. The obsessional patient defends himself against the effects of his own disturbance in becoming but he does not know what he is after.

To understand the full structure of this theory which we have only sketched in these few examples the following points must be kept in mind:

1. *The disturbance in the vital basic events and the events themselves are not given any psychological explanation.* They are just what is given and have to be accepted as such. The 'exclusion of the future is in the last resort unknown to us as far as its nature is concerned' (v. Gebssattel). The vital process—something which happens in the fundamentals of life—is itself quite unknown and indeed is in essence mysterious (Straus).

2. This disorder in the basic events is found in obsessional patients, manic-depressives and schizophrenics. It appears *in a number of very different symptoms*. The obsessional patient is differentiated by the way in which he works through the fundamental time-disturbance, his way differs from the other ways in which the basic events can be transformed, e.g. the inactivity of depressive retardation or the 'syndrome of emptiness' in delusion, in all of which we can find underlying them the same 'basal disturbance in the area of becoming'. *It is not known why the same basic disturbance can bring about sometimes one sometimes the other manifestation.*

3. *The patients are unable to observe the disturbance of their vital basic events* and know nothing about their experiences, of time for example (Straus). 'The obsessional patient defends himself against the threatening effects of his own imprisonment in time but he does not know what he is after.' The threat is so deeply hidden in his very nature that it cannot come directly into his consciousness except only in the form of the existential possibility of dissolution (v. Gebssattel).

4. We have to differentiate between *basic event, experience and respective knowledge*. The basic event is not directly experienced and therefore cannot be observed. The flow of events is not experience. But the person who has an experience can know at one and the same time that he experiences and what he experiences. It is possible therefore to say something about the experience of time but not about the flow of time itself. The theory is thus characterised as theory pure and simple because it goes back to a vital basic event which *cannot be experienced* but can only be *deduced*.

Any *criticism* must first state the true *origin* of this theory i.e.: 'the psychiatrist's own surprise, the experience of meeting the inexplicable other'—'the contrast between the familiar human manifestation and the strange, utterly inaccessible mode of existence' (v. Gebssattel). It remains to be seen whether this surprise without which no psychiatric thirst for knowledge can arise will produce the appropriate questions and answers. We doubt this very much and formulate our doubts as follows:

1. The totality of human life and its ultimate origin cannot be the object of any scientific research. But the theory we have been discussing refers to human life as a whole. This however is the proper theme for philosophy whereas science is only concerned with particular aspects of the whole. This genuine surprise of v. Gebsattel's, brought to a halt before this whole, can indeed translate itself into a metaphysical reading of the ciphers but not into knowledge. Perhaps it may still be possible to turn into some kind of scientific object 'that strange remoteness of a mode of existence entirely different from our own' but the 'inexplicable other in his human totality' eludes all our knowledge. v. Gebsattel says: he wants to get beyond the mere analysis of function, of act and experience, of character and constitution; he wants to go beyond all neuro-physiological constructions (stimulated by the compulsive phenomena of post-encephalitic patients). This however means going beyond all that we can possibly know, and in his case the well-founded enthusiasm of such a transgression into philosophic awareness rightly wants to retain its hold on everything that can be known, as presuppositions for this 'constructive-synthetic method' of his. As a psychopathologist he wants to become a physiognomist but he becomes one in a metaphysical not a psychological sense. His theory consists of 'seeing through' someone, seeing through appearances. Nothing can be said against the basic plan or the aim, provided he understands what he is about. But he converts all this into psychiatric knowledge and expresses it in the categories of the natural sciences and psychology and understands his genetic-constructive observations as 'a method that demonstrates the ontological kinship of biological, mental and psychic symptoms in any one field of sickness'. The aim in all this remains 'a phenomenological-anthropological theory to prepare the ground on which the findings of analytical research can attain their real meaning'; that is, he hopes to create a comprehensive theory of human life. The exercise of scientific reasoning must be incorporated into 'this new order of existential-anthropological connections'. As to the type of anankastic personality disorder (psychopathy) he thinks 'that the individual really lives as a whole in his own private and particular world' and therefore has a particular value for the method of existential-anthropological observation. The aims of this existential anthropology are to be discussed elsewhere. Here we are only wanting to examine the scientific aspect of this theoretical method, not the philosophy of it.¹

2. The basic disturbance that is theoretically deduced is ill defined and of shifting significance. We must first acknowledge that the impression of an elementary, biologically conditioned event does force itself upon one in the illnesses that so far can only be recognised by their psychic manifestations. Kurt Schneider described vital depression without linking his description to any particular theory. v. Gebsattel selected a type of obsessional patient where

¹ One can hardly dispute about philosophical content. I confess I seem to feel something in v. Gebsattel's work on obsessional patients of that rare hint of hidden depths, even though these elude our knowledge.

the failure of every kind of therapy, the importance of the heredity and the final, ruinous course taken by the illness suggest some insurmountable and elementary process, analogous to an organic illness although in the case of the obsessional it remains psychic and functional. For the formulation of such an impression the idea of some vital disturbance does not seem out of place. No psychological understanding of compulsive phenomena manages to understand the compulsion as such, the overpowering something which the thesis of an 'inhibition of becoming' is intended to meet. But this inhibition has so many different meanings. It has to cover extra-conscious vital processes as well as time-experiences, objective psychological states as well as events of which we cannot be inwardly aware; it is so ill defined in its extra-conscious nature; it is called biological yet never open to biological research and it is so abstract that in the end it only becomes the mysterious whole of life, inaccessible to science since it cannot ever be a definite object which we could grasp.

3. *An empirical proof of a definite disturbance in becoming cannot be produced.* The disturbance in becoming is supposed to show itself directly in experience, particularly in the time-experience. When such empirically testable positions appear it is possible to disprove them (Kloos, for instance, in the case of the time-experience in endogenous depression).

4. *The derivation of meaningful phenomena from a basic disturbance is doubtful because of their random multiplicity.* Compulsive phenomena, delusions and depressive affects can all be understood to spring from the basic disturbance, which is supposed to show itself at its most direct in the changed time-experience (time standing still, the sense of there being no future, being engulfed in the past, etc.). Yet each of the manifest syndromes can be understood differently and according to the method used can claim equal significance with v. Gebstett's claim to attribute them to the growth of formlessness and its phenomena of compulsion: 'that the inhibition of becoming should be in principle experienced in this way seems to us highly significant. Life only takes on form in the process of becoming . . . the failure to become and to realise one's own form are merely two sides of the same basic disturbance'. But the significant element changes according to the writer and according to the way in which the manifest syndrome is conceived. Sometimes the significant element is the *same feature* characterising a number of phenomena, sometimes it is the *basic factor* rendered visible to the acute observer in the physiognomy of the phenomena: the underlying factor as it is conceived. Sometimes it is something *unexperienced and inexperienceable*, a teleological meaning for our external consideration; on another occasion it is *a matter of experience*, what happens in the patient's psyche when he is compelled to grasp and elaborate the basic event. In the one case the *phenomena arise in consciousness as a consequence* of the transformation wrought by the basic extra-conscious disturbance (deduction sees a biological meaning in the extra-conscious), in the other the *phenomena arise as a consequence of primary disturbances of conscious experience* (the time-experience), as an understandable consequence in the wider context of

consciousness: this primary symptom however is not really the prior event, because this is the vital basic event: 'the thought-retardation, the inhibition of will and feeling, the delusion and compulsion as well are only symptoms of the more central disturbance'—the inhibition of becoming (v. Gebssattel).

The following line of thought pursued by Straus¹ shows how understanding can become a pseudo-understanding through leaping over into the entirely different dimension of a vital process of becoming. In the awareness of our powers we anticipate the possible development of our personality in the future. Tedium descends when along with this awareness of power and the urge to develop we experience the impossibility of filling the passing time with any content. Should the urge be absent our experiences are different: for example, we tarry while time runs steadily on (as when we are tired) and we enjoy the lack of content, a holiday atmosphere, the pleasure of a pause between past and future activity. Further, in our life-history past experiences are seen in the light of future events; the past is only pregnant when the way into the future lies open. Should our experience of the future change the past changes also. These and many other possibilities when rightly understood apply to phenomena which in the last resort have their roots in the very Existence of Man in its historical, absolute and irreversible aspect. They have to be seen in the light of this. If however such experiences are grounded instead in the vital processes of becoming and their disturbances, in a concretisation of what can never be understood, then the vital substrate, a factor both impenetrable to understanding and obscure, replaces Existence itself, that which is ununderstood but capable of an infinite illumination. We have here a fatal leap of thought which suddenly dives from the paths of a meaningful psychology (supposedly lit by the illumination of Existence itself) into biology, into a world which must be explored by the methods appropriate to empirical somatic facts. Both exist in their own right. But if one confuses the two it will only lead to argument that grows constantly more dogmatic (an unphilosophical philosophising) which usurps the place of true scientific research.

5. Sometimes these constructive ideas do perhaps *offer themselves to patients* as a way of self-understanding. They lead people along on a path of philosophical awareness but instead of philosophising properly the patient gets misled with a sort of pseudo-knowledge. We may perhaps ask: why do we live or why do we remain alive? What is it that still makes life possible for us when our experience and logical thinking has to leave the world irrational, purposeless and meaningless for all that our reason can make of it and where the only practical consequence of such true insight would be suicide? I may find an answer by developing a philosophical belief or some belief in revelation or I may say: we go on because the vital process of becoming urges us on in the face of all reasoning. In the one case we invoke the Godhead, in the other Vitality (or in Dostoevsky's words: Karamazov's brutishness). In the one case the illness is God hiding or the loss of God, in the other the vital unconcern of becoming is disturbed. But neither of these concepts bears a trace of psychopathology and its scientific knowledge which must always look for definite phenomena and definite connections that can either be verified or refuted. No

¹ Straus, *Msch. Psychiatr.*, vol. 68 (1928).

such knowledge is offered by these modes of understanding which swing between such obscure heterogeneities as God or Vital Becoming. And when a knowledge of life's quality, of how things are (*Sosein*) simulates a scientific knowledge then true philosophy is lost as well.

(d) *Comparison of the above theories*

Let us throw a final glance over these various theoretical constructions and compare them:

Wernicke started with his theory from the 'outside', with the brain. Freud on the other hand started with his theory from the 'inside', with what is psychically understandable. Both review a whole field of facts and both generalise what has only a circumscribed validity and apply it over the whole realm of psychopathology and psychology; both end in abstract constructions. They are complete opposites as regards the content of their study and interests; Wernicke looked for an absolute without meaning, a product of brain processes, while Freud tried to understand almost all psychic disturbances entirely from within; yet their two modes of thought are structurally related. They are indeed opposites but on the same plane and with the same limitations and restrictions on their thinking. It is conceivable and indeed it has already happened that both the theories have found their way together into one psychiatrist's head (e.g. Gross: Wernicke and Freud were both pupils of Meynert). Historically powerful names are associated with these theories. It seems as if there is a connection between the eminence of the scientist and the creation of the theory. But in the scientific contribution of these men along with the theory we find from the start a rot at work which eats away the whole structure, something destructive and paralysing, a spirit of absurdity and inhumanity.

The more recent constructive-genetic endeavours are a different matter. They do not try to design any definite all-embracing theory; instead they take up a far from fanatical attitude, in contrast to the previous two. They sometimes give the impression of a humane attempt to give meaning, a kind of amiable play (sometimes too in the interests of the patients who in this way find some anchor for their self-understanding) or they offer a sceptical-humanistic permissiveness in the way of looking at things which seems to mean: interpretations are soothing yet interpretations are nothing but interpretations.

All these theories go beyond mere theory when they take form and shape as general schemata which investigators make in order to comprehend the psyche as a whole. What for purposes of methodological clarity we call 'theory' has always to be dissected out from actual findings of research and the matrix of philosophical ideas in which they lie.

§ 3. CRITIQUE OF THEORISING IN GENERAL

(a) *Natural scientific theories as models*

The theories of physics, chemistry and biology used to be the models for theorising in general. In all of them—but already to a limited extent in biology—something is construed as underlying the phenomena (atoms, electrons, waves, etc.) which has quantitative properties so that theoretical deductions can be drawn and the results can be experimentally measured and verified or refuted in fact. Thus there is a continuous interchange between theory and the established facts. Theory becomes fruitful in that it leads to fresh facts and it continues to dominate as all the facts are subsumed under it. Research begins when something does not tally. The point of the theory is not to interpret or delimit what is already known but to allow the discovery of something new. The highly successful theories of the natural sciences have strongly influenced all the other sciences. Similar theories grew up in psychology and psychopathology. If their success has not been great this is due to the fact that *they are essentially different from the theories of the natural sciences.* *In the first place* there is an obvious difference in what is regarded as verification and falsification. In psychopathology theories are designed to accommodate the known facts, to provide a source for appropriate facts and room for future discoverable facts. This is all done without any systematic method which would attempt to control all the facts and which would always be on the look-out for discordant examples. It is more an attempt to group the facts analogous to building a theory; here theory is not the instrument of research. *In the second place* such theories as do come up are not built one on the other. There is no transformation into a bigger unity or any closer approximation to reality. It is rather that some theory is evolved and then forgotten again completely. *In the third place* we find a disparate number of theories which stand side by side in no relation to each other.

Therefore we may say that in psychopathology there are no proper theories as in the natural sciences. Theories come to grief and prove to be deceptive speculations about presumed existence; they have taken forms analogous to the theories of the natural sciences but for the most part lack any logically clear method.

(b) *The spirit of theorising*

All theories are invested with a common spirit in spite of their great mutual differences (apart from the theories proper of the natural sciences). Theorising has an atmosphere of its own. People are fired to try and grasp psychic reality in its uniqueness and in its entirety. As the particular ideas really imply the whole the investigator finds more in them than they really can express; that is he has a primary experience of the reality which communicates itself to him symbolically. In this way the vision of the inorganic world and its laws

affects the builder of theories; the glimpse he has of life in all the dynamic movement of its forms; the encounter with experience in all its richness and with the timeless nature of pure forms. Out of each of these basic experiences there arises a mood of wanting to know in this particular mode of thoughtful observation. If we term somatic theorising materialism or biologism, psychological theorising psychologism and give all logical theorising perhaps the name of idealism we have only classified the content of these theoretical constructs not the basic experiences and drives, the various moods and philosophical attitudes which reach expression in them (and hence the strong affect which is usually associated with theorising which otherwise is soon found to be an empty and not very satisfying task).

Theories usually claim a complete domination. The theorisers seem instinctively aware that somehow they have grasped the basis of the matter itself and at one go have mastered the thing as a whole. However, their satisfaction is bought at a price. Their viewpoints become unavoidably fixed no matter how much the form seems to change. They become coercive and see everything through the same spectacles so that some things are seen more clearly but others are shut out. They are rather like people with fixed ideas particularly if they are genuine theoreticians and not just playing with their constructs. They fascinate others because the depth of their knowledge has an emotional appeal, all the more because they seem to have penetrated to the nature of things by relatively simple means. Their theories are seductive because they usually satisfy certain metaphysical needs in others. The pleasure of having a theory seems to bewitch one with a unique sort of existence which one believes one has grasped for oneself. Hence theoretical content becomes closely associated with the philosophical outlooks and spirit of the times.

History shows us that there are usually fruitful beginnings in the construction of a theory. Anticipatory intuitions of a whole open up fresh areas for observation and at the same time create new organs of apperception but later it is just the theorising urge that curtails fruitfulness because it thinks its detailed designs fully comprehend the real essence of all that underlies existence. It is the basic deceptiveness of theory-building that however much it starts from a first glimpse of the whole it ends by losing itself in the trappings of a rational construction. The initial enthusiasm of feeling in contact with reality turns into a fanaticism of knowing which is falsified as it grows into a developed dogma. The deceptive crisis lies in the transition from the conquest of fresh facts to the presumed knowledge of them and with that a new blindness in the pigeonholing and classifying of them. Theoreticians who have experienced this initial enthusiasm make use of it to defend themselves against any doubts as to the loss of its validity. But instead of returning to source they struggle on with the sterile operation of their rigid theories or make use of their general claim to actual knowledge against the primary importance of a true empirical knowledge which they have abandoned. The charm of the first truth lets people hold on to their theory in an unending chain of rational operations.

Historical experience is informative and it teaches us that any psychopathology which is dominated by theorising will quickly become dogmatic and sterile. Only a psychopathology which takes its starting-point from an indomitable interest in the infinite variety of reality, in the richness of the subjective approach and the objective facts, the multiplicity of methods and the uniqueness of each, does justice to its task as a scientific discipline. It will deplore those modes of theorising that 'show the few recurrent basic biological mechanisms to which the whole confusing wealth of living reality may be reduced'. It wants to protect its freedom against the theoretical world of technical and supposedly known Being and withdraw from it to fully present reality (it wants to protect the man in the scientist, so that he does not lose his accessibility to Existence itself and therefore to the problem of the limits of psychopathology rather than of its subject matter, through being led away by the pseudo-knowledge of some theory). Such a psychopathology senses the danger in all theories that they will deflect the worker from unprejudiced experience and divert him into the narrow confines of frozen concepts, schematic views and a cocksure agnosticism. We need to comprehend both the point and charm of a theory and its poverty and inadequacy.

(c) *Fundamental errors of theorising*

Theorising continually leads us astray. We tend to take the conceivable (the possible) for reality; to mistake what is unverifiable (and random) for what is verifiable (and can be determined); and finally to take what is simply construed as basic and presented metaphorically, for the actual objective realities. We select a few common errors of this sort:

1. *Formation of absolutes.* Methodological analysis of psychological theories shows us the following: There is no theory which could be called 'the right one'. Nor is this possible; no theory can be valid for the whole. Every theory which sets out to explain the actual basic event springs from particular knowledge, particular viewpoints and particular categories, which have been converted into absolutes. It is an extremely simple methodological rule not to take the particulars for the whole and it is very illuminating to uncover false absolutes and liberate ourselves from yet another of the shackles which thought imposes upon itself. But it is still surprising how frequently we find ourselves creating these absolutes anew without noticing that we do so.

2. *Wrong identification.* Many theories are useful within their own limits; they only become mistaken when used to explain every psychic event. Other theories are already mistaken in principle. Something that has been well and truly grasped at one point (the brain, for example, or certain meaningful connections) is then postulated as the sole reality of psychic life. Theories such as these fall into two groups: (1) the transformation of anatomical cerebral structures into fantastic constructs of parallel psychic events which prove most uninformative; (2) The conversion of meaningful connections into 'extra-conscious laws' which are interpreted as causal connections on which a theory

is then built. It is this basic error in principle on which the theoretical structures of Wernicke and Freud rest.

3. *Theories in combination.* When thinking out a theory a scientist usually combines a number of theories. These are in turn combined with certain real observations, meaningful possibilities and typical schemata which he then tries to shape into some kind of whole so that at the end his work generally needs a methodological analysis. Where the combination of heterogenous material is relatively clear, mistakes can be avoided but when there is a confused mixture and constant transition from one element to another this combination of heterogeneous material becomes an invincible source of error. Everything becomes equally true, possible, false and obscure once subjective phenomena, objective data, objective causal connections and meaningful connections are combined without any method, and converted into the basis for a theory, and once the immediate content of consciousness is mixed up with extra-conscious material.

(d) *The necessity for theories in psychopathology*

Apprehension of psychic reality forces us to construe the presence of extra-conscious events. When such extra-conscious material is not a biological event which can be grasped by direct experience it becomes a theoretical assumption. In this sense psychopathology is always in need of theories, and thus it is that in nearly every chapter we have had to touch on some theory or other though we have not drawn any particular attention to it. Every theoretical speculation contains its own obvious set of psychological concepts which have to be grasped from this inevitably specific point of view, and it is expressly because this is so that we have made theories the subject-matter of this particular chapter.

We were able to classify the theories schematically according to the specific ideas held and according to their creators who were responsible for a particular theoretical trend. We can now ask in what way do they make a significant contribution. They have a use, but we can always show that it is a limited one.

1. They serve to *bring some order into things*. With their help we are able to see very diverse matters from a unified point of view and achieve a certain order in description.

2. They help us to *formulate our problems*. By postulating an observable datum which has become conceivable because of some theoretically constructed ground, we can open up new ways of research.

3. They are *indispensable to us for causal knowledge*. We cannot use purely psychological means to comprehend the temporal sequence of psychic realities in their continuity. Too many intermediary links are missing, which we try to supply by somatic research. But the gaps keep reappearing. Causal knowledge therefore calls for some theory so that we can comprehend the continuity of events by postulating something which underlies them. In psychopathology

however theory-building is still rather a scattered effort. It tends to remain specific and *ad hoc*. We have no all-embracing or truly comprehensive theories and this fact characterises all causal knowledge in psychopathology.

4. *Well-defined areas of investigation have their kindred specific theories.* Such theories always crop up when in these given areas thought turns to find causal categories. Thus in the field of performance, experimental psychology has a number of theories concerning elements and their connections, the mechanisms of association, the perceptual act and Gestalt-effects. So too the psychology of meaningful connection gives rise to ideas of dissociation, extra-conscious mechanisms, conversion, etc.

5. There remains the basic problem: *is it necessary to have a theory of the psyche as a whole?* The answer is 'No', because every theory applicable in psychopathology has to explain limited data. A theory is justified simply because of its usefulness in this respect not because of the eventual truth of the notion it contains. We cannot say whether the theoretical concepts of what may underlie everything do approximate to what 'really is' or to what 'is properly there'. *There is no valid theory of the psyche, only a philosophy of human existence.* For this reason we can go on asking repeatedly: is not theory always mistaken? Are not theories in all their random variability simply ways of *ad hoc* description, mere attempts to classify certain phenomena?

(e) *The methodological attitude to theorising*

In the long run it may be a good thing to formulate explicitly what is the methodological attitude to theories in general since they cannot be dispensed with and their validity is doubtful.

1. We need to know *the principles on which the particular thinking rests and what are the possibilities* so that we can use the theory to the limits of its usefulness and master it as a whole. At the same time we must not be captivated by any one theory or credit it with being able to explain the whole of human life, Being itself. Every theory calls for our immediate attention within its accepted limits but none of them either singly or collectively call for an enthusiasm which credits them with the power to penetrate the depths of the human being himself.

2. When following a theoretical lead we must understand when it is the right moment to stop and *withdraw one's adherence*. We should only follow the lead so far as it gives shape to our material and makes new experience possible.

We should trust the discomfort which assails the worker in the course of theoretical interpretations, when instead of making his own experience he proceeds to lose himself in endless interpretations that repeat and reshuffle themselves, and are either interpretations of well-known experiences or of experiences that are ill defined and of a very general character.

3. We shall often have *to be satisfied* with vague theoretical notions on the fringes of experience: such notions dispense with any further elaboration and

confine themselves to stating that we have to construe something extra-conscious, the successful exploration of which cannot take place directly but only through the discovery of causal relationships. In this respect we try to choose a terminology that shall be as non-specific as possible, for instance, 'extra-conscious mechanisms', 'conversion', 'switching-over', etc. Such theoretical notions no longer have any meaning in their own right but are simply demarcations, limiting concepts which define the scope and validity of our existing knowledge.

4. The *entire literature* is pervaded and partly dominated by one theory or another. Theory has a limited usefulness but it is often superfluous and like some creeping plant it tends on the whole to suffocate real insight, lively observation and all scientific progress. If we are to clarify the nature and trend of theoretical speculation we need to acquire a firm and discerning hold on the entire psychiatric literature. For the same reason we must be aware of how far each theoretical speculation ranges and be able to recognise it in every instance. The mental attitude of scientists, who are captivated by their theories and unknowingly allow their thoughts to be strung along by them, is quite the opposite of that scientific attitude which handles its theories in full consciousness, because it has a thorough knowledge of them and does not assign a significance to any one of them that goes beyond its relative usefulness as a methodological tool.

PART IV

THE CONCEPTION OF THE PSYCHIC LIFE
AS A WHOLE

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As we investigate the manifestations of life and our analysis grows more detailed there is a continual discovery of fresh individual connections. But life itself remains apart as a whole from which we are able to extract these particulars, which in themselves are lifeless, never life itself. So with our knowledge of psychic life. We analyse out the individual connections (e.g. memory performance, work-capacities, expression in movement, meaning in action and achievement, meaningful connections between experience and its effects, somatic influences, heredity, etc.). Each analysis presents us with its own relative complex unities (the state of consciousness, the total performance, etc.). But we are still left with *complex psychic unities as such*, the psychic life in its entirety, from which we have extracted some entities and will extract others. We want to comprehend these complex unities *as such*, demonstrate them by description in our analysis of patients and make use of them diagnostically. In doing so we find that 'the whole as such' can never be grasped and here too there is nothing for us to do but analyse. We do not know the psychic life in its entirety nor any individual personality as a whole, but we direct ourselves towards this whole by means of totalities, which in themselves however are not the whole but only restricted measuring-rods, the outcome of an analysis which shows us ways for a possible conception of the whole without ever giving us full possession of it. What the whole really is, always remains an open question. It is always the idea of something infinite; the meaning we give it can never be fully exhausted. The whole we conceive is always the schema of the idea with which we operate but we do not take the schema for the idea itself. Knowledge goes astray once it tries to turn the whole as such into the complex unity of a fixed and definable object.

As regards the *relationship between the particulars and the whole*, we find two opposed and one-sided views. The one is that psychic life consists only of elements, that is, isolated facts and particular relationships; the whole of psychic life adds nothing to this but is only another way of expressing the relationships in which the individual facts stand to each other or the permeation of all the psychic events by some one of the elements. The other view is that the whole of psycic life is the essential thing. It is this alone which really changes and becomes abnormal and the extraction of certain elements in the shape of a host of isolated facts is something artificial. Both these views are mistaken. If the only thing one sees is elements and their relationships, then psychic life becomes a mosaic or kaleidoscope of dead fragments; intuition for

the colouring lent by the whole is missing; so is a critical standpoint from which each particular fact may be seen and defined by its relation to the whole. On the other hand, if one postulates the whole as a fixed entity and sees it as the only thing that needs to be directly grasped, then one foregoes any chance of well-defined concepts and, with this, the only possibility of any exact analysis which requires a precise definition of elements in terms of particular facts and their relationship. Hence science, if it is to be productive, will vacillate constantly between the elements and the whole. There is indeed an intuitive attitude towards the whole but it can only be clarified by an analysis of its elements. We can work easily, if superficially, with the isolated elements but we only grasp them in their reality if we see them in relationship to the whole. Sometimes indeed the whole presents itself to the 'feeling' of the observer, though the relationship to its elements is completely obscure; we say people have 'an eye' for constitution, for disease entities, for syndromes, etc. Nevertheless, for exact concepts we must always veer towards the elements, because it is only through their definition that concepts can be clearly grasped. The same problem returns whenever complex unities are the subject; these cannot be grasped directly and are clarified only so far as we succeed in analysing them. They then reveal their proper nature in these analyses which add fresh concepts and a fresh apprehension of the facts which have already been discussed.

(a) *The main objective*

We would like to grasp the psyche *in its entirety*, in its current state and in the whole course of its life. We want to gain access to the phenomenon of one entire life, to the idea of the single human being who is this empirical individual. Everything that we have so far discussed in this book is no more than an element, an isolated factor, a relative, temporary whole of given scope. Now we want to know how all the elements that we have discussed and all their relative complex unities hold together and what makes them cohere. We would like to know the central factor which encompasses them all and on which they rest, that substance of which all that has gone before is only manifold, individual appearance, localisable in time and significant as a symptom.

(b) *Threefold division of the objective*

We have to see in what way the whole life gains its empirical form. It must be seen and conceived *biologically*, not in the narrow sense of an isolated biological investigation but in the sense of *looking at a man as a living whole* in so far as he is not indeed a total biological event but something essentially based on and conditioned by such events. The individual lives for a limited time within the biological phases appropriate to his age and in his singularity he is among the varieties of human nature as such. He is attacked by disease-processes in which manifold phenomena order themselves for the time being into a total biological event. The empirical form of the individual as a whole has, therefore, biologically three aspects.

There is firstly the whole of the *illness as defined*. Being ill reveals itself in the form of specific illnesses to which we give names. In the second place there is the bodily whole of the individual, with which he is always confronted, a psyche-body unit in which his *particular variety* is displayed and which harbours his undeveloped potentialities; he always varies in some special, if not unique, way. In the third place there is the whole *life-span* of the individual, all that he is coheres in time and is limited and moulded by time. As his nature develops he is revealed.

The first target therefore for our investigation is the *disease-entity*. The pattern is supplied by the presenting case-history to which the final diagnostic formulation of the synoptic, nosographic approach lends a unity. We term this science *nosology*.

The second target is the *particular variety as a whole*. The pattern is supplied by a structured description of the individual in his physical-psychic-cultural aspects. We term this science *eidology*.

The third target is the life as a whole. The pattern is supplied by a presentation of the biographical facts. We call this science *biographics*.

All three employ the same methods; that is, collecting the facts of a single human life into the form of a psycho-biogram (psychographic method) and then giving this material shape as a diagnosable disease-entity, or as a particular variety if it appears a constant, or as a coherent life-development over the years. A precondition in the investigator is the power to discern concrete unity among all the manifold phenomena, that is, to adopt the nosological, eidological and biographical approach.

These three approaches are linked with each other inseparably, just as all the three sciences are really branches of a single one. The disease-entity, since it is linked so closely with the nature of the person as a whole, can only be sought by means of biographical and eidological investigations. Illness is included in the life-history, as no individual can be fully comprehended if we know nothing of his illnesses. We need both the biographical and nosological sciences if we are to grasp the particular variety, which is shown in the life as a whole and in the way the person falls ill.

One of the three approaches is usually in the foreground of interest and the other two then fall into the background. Kraepelin's time was dominated by nosology. Owing to Kretschmer's influence the eidological approach was fostered and nosology resigned itself to 'multidimensional diagnostics'. Should the idea of disease-entities and constitutional-types be abandoned, we should be limited to biographics only, and the schemata of the two former ideas would only be used as auxiliary supports for the latter.

(c) *What can and cannot be achieved in trying to reach this objective*

If we were really to grasp an individual as a whole, we would have to think in terms of a unique and irreplaceable individual. All that we know in general terms would be a means towards knowing a whole which is unique. The

knowledge of one individual would presuppose a complete general knowledge and in the concrete case would go beyond this by virtue of the uniqueness of the whole which is there revealed. This goal is unobtainable. But while trying to find the whole as such, we find other new categories which are specific yet have a general aspect as well and they keep the quest for the whole in motion though the goal can never be reached. Thus the search for the whole as we put it into practice continually assumes the form of some fresh and particular piece of knowledge. We shall discuss this in the chapters that follow:

In *nosology* we do not secure a single, definite disease-entity but guided by the idea of disease-entity we give preference to certain, particular elements and isolate for our diagnostic purposes the relative disease-entities as best we can. The presence of the guiding idea will at the same time show how far the sought-after knowledge falls short of any concrete realisation.

In *eidology* human varieties are similarly grasped in certain well-defined forms, as types to measure by rather than as classes of qualitatively different Being. The variety itself as a whole always eludes us though the multiple typology is concerned with this and tries to represent it indirectly.

In *biographics* we try to gain a view of the whole from the standpoint of the time-relationships, the chronological age, the life-history and selective factors (first experiences, crises, etc.).

All these various attempts can be rejected in principle. We can say that *there is no such thing as a disease-entity*; we were only chasing a phantom; or that *there is no basic individual variety*—we only hear of types and particular factors; the varieties we grasp are only aspects, never the whole itself; or that *there is no such thing as a whole life history*, there is only a haphazard collection of facts, a subjective selection determined by the aim of the enquiry. In the last resort life is an aggregate of events, never a coherent, developed whole. Hence—if we sustain this wholesale rejection—all that we achieve are haphazardly composed life-histories, arbitrary glimpses of typical human possibilities and composite, multi-dimensional diagnostics.

The rejection is right only when rigid and persistent claims have been made to know the whole; it is then well justified. But there is no ground for it when it is a failure to see how ideas can lead to knowledge, and when the particulars are left in scattered isolation only to be tidied up by an uninformed reason, instead of being seen as part of a coherent pattern with the help of an idea. The problem always remains the same; we are dealing not with the existence of an object but with the truth of an idea.

(d) *Enthusiasm for the whole and its power to mislead*

Genuine enthusiasm has always been the dynamic factor in the pursuit of the whole. Knowledge aims at ultimate factors, at the profundities of life and at grasping what actually is as the source of all that follows. The belief arises that we shall get to know the nature of things. This is a justified enthusiasm

so long as there is a constant inspiration by ideas. Once it is thought that the whole is known, there is deterioration into a dogmatic narrowness. Ideas are then usurped by an empty subsumption of all the phenomena under a couple of categories, such as disease-entities, constitution and so on.

When it comes to the over-all picture which psychopathology tries to present, this mistaken enthusiasm tends to start from the whole as something fully known; it begins with personality as a body-psyche unit and takes the major disease-entities for granted, etc., and then proceeds to accommodate all the particulars within this framework.

The advantage of such a presentation is its wide sweep, its simplicity and that beginning with essentials which immediately arouses the liveliest interest. The disadvantage is that such a presentation cannot follow through its own promises. The particulars will not let themselves be evolved from the whole. We are simply left with high-sounding slogans, the basic problems vanish from view and we are no longer ready to investigate anything in an unprejudiced manner. It was believed that the whole could be taken by storm and possessed at one blow, but we now have to learn that if we evade the step of structuring our particulars in a methodical and critical way, which means attending to everything that can actually be grasped, we shall end in bewilderment with no fresh avenues of approach and the boredom of listening repeatedly to the same things over and over again.

(e) *Knowledge of Man as a way into the openness of being human*

The critical enquirer is constantly met by the fact that the whole is never entirely a whole. The individual is not confined to what can be known about him. He is always something more than what he can get to know about himself. His nature and origins lie beyond the borders of what can be known. We see this from the fact that whenever we think we have grasped him by means of some supposed totality, this particular totality always falls victim to a critical dissolution. The false completeness of supposed wholes is always being disrupted. In each chapter where we discuss some relative whole we come to feel its limits. In the end we are confronted with the unrestricted nature of being human and find ourselves faced with questions that can never be answered by empirical research though inevitably they arise there. We shall touch on them in Part VI; their detailed illustration belongs to philosophy.

In particular, man is not confined to what is biologically known of him, the present theme of Part IV. This can be seen in the way in which every one of the complex unities we are about to discuss leaps from a biological into a cultural and finally into an existential reality. Illness can be conceived as a personal fashioning of one's nature (as in the case of the neurotic); in the end such personal fashioning is once more formed and derived from an existential source, and the biological event evolved through time is transformed through human behaviour into a life-history.

(f) *Investigation guided by ideas*

Kant has given us his ideas magnificently: When I want to grasp the whole, whether this be the world or the individual, the object eludes me, because what I have in mind is not something particular, enclosed and finite but an idea (the objective of unending research). What I get to know is never the world but only something in the world. The world is not an object but idea. If I mistakenly try to make statements about it as an object, I find myself enmeshed in insoluble antinomies (contradictions). I may expand my knowledge in all directions in the world but the world itself I can never know.¹

It is no different when it comes to man. He is as comprehensive as the world. I never have him as a whole when he becomes an object to me; he is always so in a certain way and under certain aspects. Nevertheless the whole remains. When I seek the whole, I enter an unending search after the infinite relationships of all known and knowable facts (the hallmark of efforts which seek the whole under the guidance of some idea is that they bring what has hitherto been dissipated into some systematic relationship, and finally seem to speak generally of everything as if it were one). Although I cannot exactly know the whole as idea, I can approximate to it—in Kant's words—by the 'schema' of the idea. Schemata are designed types, misleading if I treat them as realities or as basic theories but true as methodological aids that can be endlessly corrected and reshaped.

(g) *Methods of typology*

I gather the knowable aspects of objects into *generic groups* of their own; I collect ideal objects into *types*. It is absolutely necessary, as well as clarifying, to hold on to the distinction between generic group and type. A case either belongs or does not belong to a generic group (e.g. paralysis) whereas a case only corresponds more or less to a type (e.g. hysterical personality). A generic group is the concept which represents an actually existing and definable variant. A type is a fictitious construct which in reality has fluid boundaries; it serves to assess a particular case, though it cannot be used as a classification. Hence there is point in assessing a particular case in terms of a number of types so as to exhaust all the descriptive possibilities. If it is subsumed under some generic group the case will in all probability be finished once and for all. Generic groups either exist or they do not. Types reveal themselves as either fruitful or not for the comprehension of individual cases (as the particular variation of the presupposed totality of their being). Through the use of generic groups, real boundaries are established; through the use of types we only give structure to a transient manifold.

How are types arrived at? We create them through thoughtful contemplation whereby we develop the construct of a coherent whole. We make a dis-

¹ See my *Psychologie der Weltanschauungen*—appendix for Kant's teaching on ideas, which is one of the profoundest and most illuminating insights of philosophy. It should be studied in the original (*The Critique of Pure Reason* and *The Critique of Judgment*).

tinction between the *average type* and the *ideal type*. Average types are created, for instance, when we establish certain measurable properties in a group of individuals (height, weight, powers of registration, fatiguability, etc.) and calculate the mean. If we gather together the results for all these properties this will give us the average type for this group. Ideal types are created when we proceed from given presuppositions and develop the consequences either through causal constructions or the exercise of psychological understanding; that is we envisage a whole on the occasion of our experiences but do not actually experience it. To establish the average type we need a great number of cases; but for the development of an ideal type we only need to be stimulated by the experience of one or two individuals. It follows from the very nature of ideal types that they carry no significance as a classification of what really is, but provide an instrument all the same which helps us to assess real, individual cases. In so far as they correspond to the ideal type, we can comprehend them. The hysterical personality of an actual individual is not something 'pure' and clear-cut. Where reality falls short of the ideal type we have to ask the further question 'why'? If however the reality fully corresponds, this is a peculiarly satisfying verdict and we proceed to investigate this entity to find its causes. In addition ideal types enable us to give order and meaning to psychic states and developments *in concreto*, not through disjointed enumeration of them but by revealing the ideally typical connections in so far as they really exist. Those who have the gift of depiction differ from the case-history scribes (who frequently boast of their objectivity but in fact simply juxtapose and enumerate) in that the former use ideal types instinctively without thereby being necessarily any the less objective.¹

Whenever we look for complex unities we can find a typology. There are types of intelligence and dementia, types of personality, types of body-build (as morphological or physiognomic constructs), types of clinical pictures, etc. They are always an attempt to schematise the idea of the given whole.

But *more is intended than simply to establish types ad infinitum*. Types differ in value according to how closely or otherwise they approximate to *reality*. This reality must be the whole individual as a biological event. Hence it is precisely the most comprehensive biological horizons which we have recourse to, the developmental history (ontogenetic and phylogenetic) and the heredity. In order to grasp a whole in terms of which the individual differences can be explained, we relate everything to everything else (and establish quantitative correlations); the somatic aspects are taken together in the anatomical-physiological and morphological sense and the psychic aspects are conjoined as modes of experience, capacity for performance, and personality. In all this there is present the danger of mistakenly turning one particular area of possible research into an absolute, since there is need to take an over-all view. But as this, in its application to reality, inevitably turns again into a

¹ See Max Weber on the concept of Ideal type. *Arch. Sozialwiss.*, vol. 19, pp. 64 ff. Reprinted in *Gesammelte Aufsätze zur Wissenschaftslehre* (Tübingen, 1922), pp. 190 ff.

particular, totality remains only an idea. It is the guidance by such ideas which makes the investigations of Kraepelin, Kretschmer and Conrad so vital. Criticism need only hammer out the truth of the ideas as against their own misconceptions.

(h) *The psychogram*

Universally the technical method of comprehending a person as a whole consists in collecting all the material that is accessible and in investigating the individual from every possible point of view. The most superficial procedure is to make sure of the whole as if it were an aggregate. The inclusion of every finding into a single ordered schema is called 'making a psychogram'. The only purpose of such a method is to remind the investigator by means of the most comprehensive schema possible not to overlook anything.¹

It is only when we have gathered together all this psychographic material that complex unities can be created in a methodical and vivid way: *the life-history* as a plastic presentation of the single individual and the course of his life as a whole; *typology* as a range of specific forms for comprehending what is essentially basic in the eidology (sex, constitution, race) and the *history of the illness* presented in unified fashion from the standpoint of the illness itself.

¹ Cp. *Das psychographische schema*, *Z. Angew. Psychol.*, vol. 3 (1909), p. 163; vol. 5 (1911), p. 409, Beih. 4 (1911). Every psychological questionnaire would like to cover every individual variant, and thus include the whole of psychopathology. Kretschmer, *Psychobiogramm* (Tübingen, Laupp).

CHAPTER XII

THE SYNTHESIS OF DISEASE ENTITIES

(NOSOLOGY—NOSOLOGIE)

Psychopathology generally deals first with isolated phenomena on their own, e.g. false perceptions, flight of ideas, delusions. We think of these phenomena in isolation and then consider what they may have in common; for instance, in which disease do they occur together? But in fact each of them shows a variety of nuances in the different diseases in which we find them. These consist not only in a greater or lesser degree of development but, where there is an equal degree of development, in modifications of the psychic events which derive partly from individual differences and partly from psychic changes of the most general character. In many cases we can feel those nuances rather than formulate them precisely. If phenomena were rigid structures which we could always identify we might see disease-entities appropriately in the form of mosaic-like structures composed from a variety of individual and identical pieces. We should only need to name those generally identical pieces to see in which illness each fragment appeared most frequently and arrive at our diagnosis by addition of these frequencies. This method of living mosaic which is applied often enough in rudimentary form is a superficial method. It turns psychopathological investigation and diagnosis into something mechanical and petrifies discovery. Many beginners tend to favour it because it is so easy to grasp and can be learned relatively quickly. Whole textbooks, for instance that of Ziehen, owe their popularity to it as well as their ease of comprehension—and their deadly rigidity. It is important to resist the attraction of this easy facility and to *introduce fairly the different viewpoints* rather than offer *a list of symptoms for parrot-like repetition*.

In the previous chapters we seem to have covered all the viewpoints and indicated everything that can be seen from them. Analytically we might be well satisfied with such methods as we have got to know. But from time immemorial the essential question for clinicians has always been: *how does everything fit together in the individual case?* What illness, that is, *what disease-entity* are we dealing with? What disease-entities are there? The psychiatrist in his analysis breaks a case down in all directions; as a clinician however he wants to arrive at a diagnosis. All phenomena are for him symptoms of disease. A disease-entity has its own symptoms which can be expected and from which one may draw conclusions as to the underlying illness. The great question is what is this ‘something’ that underlies the symptoms.

§ I. INVESTIGATION GUIDED BY THE IDEA OF THE DISEASE-ENTITY

From ancient times the question of disease-entity has been answered along two different lines. The one involved the theory of the *unitary psychosis*: that is, there are no disease-entities in psychopathology but only varieties of madness with fluid boundaries of their own, which merge into each other everywhere and in all directions. The forms of madness can only be classified as a typical sequence of states (thus, all mental illness is supposed to start as melancholia, followed by furor, later by delusional madness and finally dementia; the theory of 'original paranoia' arose in opposition to this). The other involved the theory that the main task of psychiatry is to find *natural disease-entities* which are different from each other in principle, present characteristic symptomatology, course, cause and physical findings and in which there are no transitions. The battle between these two camps was fought with a good deal of mutual contempt and everyone was convinced of the total fiasco created by the endeavours of the opposite camp. Yet in view of the actual history we may suspect that the battle has never really ended and that both camps were on the track of something valid and could well complement each other instead of wrangling. Rather than accepting any of the glib, partisan formulations we have to undertake a far from easy task; that is, we have to understand these actual initial advances towards a synthesis of diseases and extract the kernel of real results from the shells of mere assertion.¹

The basic fact is the manifold nature of the diseases. On the one hand it is obvious that the manifold causes or formative elements do not give rise to a uniform horde of clinical pictures, in constant transition and essentially indistinguishable. It is rather that the vast majority of cases do conform to certain clinical types while the transitions and atypical cases that cannot be classified readily tend to form a minority. On the other hand, however, these unclassifiable cases undoubtedly exist and they are sufficiently impressive and disturbing to lead one modern geneticist, who insists on clearly defined units, to state the following: 'it is possible for a schizophrenic patient to possess the full schizophrenic genotype and in addition manic-depressive or epileptic partial dispositions and vice-versa . . . I even hold to the view that one and the same individual can become first an epileptic, then a schizophrenic and finally a manic-depressive. According to present-day genetics we have no reason to assume that the hereditary psychoses are mutually exclusive . . . against such a view we have the observation that in addition to the extremely frequent familial combination of different hereditary psychoses (even among sibs) there are a large number of atypical schizophrenias, cyclothymias and epilepsies as well as those cases difficult to diagnose which have been termed 'mixed psychoses' (Luxenburger).

In the course of history *almost all psychopathic entities* have been accepted as disease-entities at one time or another. Hallucinations were classed as 'a'

¹ The literature is vast; cp. the principal contributions: Kraepelin, 'Fragestellungen der klinischen Psychiatrie', *Zbl. Nervenk.* (1905), p. 573. Alzheimer, 'Die diagnostischen Schwierigkeiten in der Psychiatrie', *Z. Neur.*, vol. 1, p. 1. Liepmann, 'Über Wernickes Einfluss', *Mscr. Psychiatr.*, vol. 30, p. 1. Gaupp, *Z. Neur.*, vol. 28 (1905), p. 190.

disease, delusion was 'a' disease, the particular content of certain behaviour constituted 'a' disease (pyromania, kleptomania, dipsomania, etc.). Although these views have now been abandoned because they lead to undifferentiated enumerations ad infinitum and imply that the same person suffers simultaneously from a host of 'diseases', the following viewpoints still serve us in more recent times for the definition of diseases:

1. As late as about 1880 the dominant disease-entities were certain symptom-clusters which according to various points of view went to form *the unit of a symptom-complex* (melancholia, furor, confusion, dementia). Attempts were then made to penetrate in depth through the mass of detail to *the basic psychological structure* of these abnormal psychic events. Meynert derived dementia from incoherence ('lack of associations'). Wernicke continued this kind of analysis but both started from conceptions derived from brain-anatomy and association-theory and were never able to find any real psychological 'basic structure' anywhere. Perhaps in our day Bleuler's theory of schizophrenia arrived at such a structure. His theory may be said to give what is so far the most profound psychological description of a basic form of abnormal psychic life.

2. As the investigation of psychological entities failed to provide any convincing or generally acceptable results, search was made for a 'more natural' structural unit and this was thought to have been found in *the causes of mental illness*. Everything with the same cause should be formed into an entity. The French in particular (Morel, Magnan) tried to put this point of view forward as a superior one. It guided them to their theory of disposition (Anlage) and heredity. According to them the overwhelming majority of psychoses fall into the category of hereditary mental illness, illness of degeneration. '*Degenerative madness*' as they called it was so extensive a term and included so many heterogeneous elements under the one, at the most hypothetical, point of view, that of degeneration, that it could not satisfy anyone either.

3. About the same time it had indeed been advanced that *anatomical findings* should provide the entities. Similarity of cerebral processes formed a disease-entity. But this point of view remained nothing but a *claim*. In addition to the cerebral processes known to neurology (disseminated sclerosis tumour, cerebral syphilis, etc.) which were known to produce mental illness among their symptoms, another disease of the nervous system was discovered, namely *General Paralysis*. This was first discovered through the somatic symptoms (paralysis, etc.—Bayle, Calmeil), then later through characteristic findings in the cerebral cortex (Nissl, Alzheimer). General Paralysis was regarded for a time as the very 'paradigm' of mental illnesses. It was the only known entity. But the symptoms were so similar to all the other cerebral diseases so far known, only surpassing them in the severity of the destruction,¹ that it had much more to be grouped with them than with the other psychoses.

¹ In spite of the severity of the destruction, paralysis is sometimes characterised in the beginning by a certain manic productivity with florid delusions, but none of it is specific.

General Paralysis is a process of the nervous system in which in every case symptomatic psychoses appear, but they are in no way different from other psychoses associated with brain disease, neither in the psychological symptoms nor in the sequence of psychic phenomena throughout the illness. General Paralysis is therefore a model for anatomical and causal investigation but not, as people have tried to make out, a model for clinical psychiatric research. Psychological factors have in fact never played any part in establishing the illness; we are dealing here with a purely neurological matter.

Neither the *basic psychological forms* nor the *teaching on causes* (aetiology) nor the *cerebral findings* have yet provided us with a system of disease-entities within which all the psychoses could be accommodated. *Kahlbaum* and later *Kraepelin* embarked on a new approach which hoped to arrive at disease-entities in spite of everything. *Kahlbaum* formulated two fundamental requirements: firstly, the entire course of the mental illness must be taken as basically the most important thing for any formulation of disease-entities and secondly one must base oneself on the total picture of the psychosis as obtained by comprehensive clinical observation. In emphasising the course of the illness he added a new viewpoint to the three which preceded and by his second requirement he brought *all the previous viewpoints together*: they were to work together in the construction of disease-entities rather than continue to work in opposition. Here is a classical passage from *Kahlbaum's* writings:

The task is 'to use clinical methods for the development of pictures of disease, in which as far as possible all the phenomena of the individual patient's life are evaluated for purposes of diagnosis and the whole course of the illness is taken into account. The groups of disease-formations, which resulted from assembling such symptoms, as appeared together with the greatest frequency and as they were delineated from purely empirical observation, were not only easy to make comprehensible but the diagnostics based thereon allowed a more precise reconstruction of the past course of the illness from the patient's present state. We could also deduce with greater probability what would be the further development not only in general terms as to life and health but much more particularly in relation to the various phases of the clinical symptomatology. This could be achieved with much greater precision than when the help of earlier classifications had been invoked.'¹

Kahlbaum's ideas had little effect until they were taken up by *Kraepelin* and propagated by him. In the successive editions of his Textbook we find a record of the development that brought him from his struggle with all those provisional and one-sided entities on which he had been engaged to the fruitful appropriation of *Kahlbaum's* ideas. He persisted in shaping and re-shaping these ideas while trying to bring to realisation his notion of the disease-entity within special psychiatry as an actuality. Clinical pictures of diseases that have *similar causes, a similar basic psychological form, similar development and course, similar outcome and a similar cerebral pathology* and which therefore all present the same over-all picture, are genuine, natural disease-entities. Comprehensive

¹ *Kahlbaum, Die Katatonie oder das Spannungsirresein* (Berlin, 1874).

clinical observation helps us to discover such entities. It seemed as if the *outcome* of the disease-entities would be a particularly fruitful field to study: the dominant supposition was that the completely recoverable disease and the completely incurable one were fundamentally different. Secondly Kraepelin supposed that knowledge of the psychological structure of the outcome would allow us to detect the basic psychological form of the disease process even in the finest of indications at the very beginning of a psychosis.

As a result of these investigations we have the *concept of the two great groups of diseases*, which cover all those psychoses that cannot be explained in terms of demonstrable cerebral processes: *manic-depressive psychosis*, which was also to include the 'folie circulaire' of the French and affective illnesses; *dementia praecox*, which was to include Kahlbaum's catatonia, hebephrenia and delusional illnesses. In addition to this all other milder abnormalities were grouped together as 'degenerative madness'. Let us now get an orientation on the results of this line of approach, which has been actively applied since about 1892:

1. *No real disease entity has been discovered* by this method of approach. We have no scientific knowledge of any disease which satisfies the claims made for a disease-entity: (a) the disease-entity of General Paralysis is an entity of a purely neurological, brain-histological and aetiological nature. There is nothing characteristic about the psychic events apart from the general destruction which is only quantitatively different from that accompanying organic cerebral processes. Every possible pathological event can appear as the result of the paralytic cerebral processes. The discovery of General Paralysis has not gained any new entity for psychopathology which can be psychologically characterised. (b) The two disease-groupings of manic-depressive psychosis and dementia praecox are almost completely unknown so far as their causes and cerebral pathology are concerned. Their definition depends rather on the basic psychological form or on the course run (towards recovery or not) with varying emphasis placed on the one or the other. Whereas one set of investigators (Bleuler) pushes the initial outbreak into the foreground and thus makes the dementia praecox group impossibly wide, the other set refutes this and would rather emphasise the course of the illness (recovery with insight or not) and narrows down the dementia praecox group considerably (Wilmanns). These latter investigators point to recoverable illnesses with catatonic symptoms or schizophrenic experiences, which are therefore not to be included in dementia praecox. Thus for many years the border between manic-depressive insanity and dementia praecox has vacillated considerably in a kind of pendulum movement without anything new emerging. Moreover both groups of illnesses are so impossibly extended¹ that we have to consider them victims of the same fate that in the last century overtook all disease-entities of psychological origin.

¹ Cp. Bumke, 'Über die Umgrenzung des manisch-depressiven Irreseins.', *Zbl. Nervenkh., etc.* (1909), p. 381.

Just as the rings made on the water by raindrops are first small and distinct and then grow larger and larger, swallow each other and vanish, so from time to time in psychiatry there emerge diseases which constantly enlarge themselves until they perish with their own magnitude. Esquirol's monomania, the paranoia of the 'eighties and Meynert's dementia are all examples of this. Hebephrenia and catatonia, which were relatively clearly defined, grew into dementia praecox which seemed to have no limits and folie circulaire into manic-depressive insanity which seemed equally ill-defined.

2. *Kraepelin's clinical disease-entities, however, are fundamentally different from these previous massive groupings.* His entities have been formed at least with the intention of doing so in accordance with the total picture as observed and the course of the illness. The two groupings, because they are *two* and engaged in a struggle to define themselves, have fostered continuous investigatory efforts which have produced very valuable results though not much that has added to the definition of the two groups. In the formation of these two groupings there must be some kernel of lasting truth not present with previous groupings. The idea has established itself throughout the whole world, an achievement shared by no other classification of psychoses of no known organic base, and the principle is generally accepted today. It has further led to an intensification of diagnostic effort. The stagnant finality of comfortable but rigid diagnostics was overcome and the idea of finding the disease entity has remained an aim which acts as a spur to psychiatric effort. Kraepelin himself gained a remarkable depth of knowledge regarding the psychological structure of affective illnesses as well as of the schizophrenic illnesses (from which grew Bleuler's idea of schizophrenia). Kraepelin's students made entire biographical studies of the course of illness and isolated typical small groups of psychoses with greater precision.

3. There has been *no fulfilment* of the hope that clinical observation of psychic phenomena, of the life-history and of the outcome might yield *characteristic groupings* which would *subsequently be confirmed in the cerebral findings* and thus pave the way for the brain-anatomists. Historically the following facts emerged: (a) Physically demonstrable cerebral processes have in every case always been discovered by exclusively physical methods of research without any preliminary psychopathological exploration. (b) Where well-defined cerebral processes were found, it was clear that at one time or another they could be accompanied by every possible kind of psychopathological symptom and that no pathognomonic symptoms exist in the psychic sphere. General Paralysis gives us a superb example: even when the physical findings were known to a large extent—in the 'nineties of the last century—Kraepelin thought he might be able to diagnose it psychologically. He did this by including a number of ill-defined physical phenomena and making a host of wrong diagnoses, as the subsequent course of events well showed.¹ At that

¹ In his *Allgemeinen Psychiatrie* (S. Aufl., vol. 1, p. 527) Kraepelin openly acknowledges this fact in his diagnostic table 1892–1907.

time the percentage of General Paralysis at the clinic was 30 per cent whereas for years the figure fluctuated regularly between 8 and 9 per cent once lumbar puncture had been introduced and the diagnosis was made essentially on somatic grounds. The constancy of this latter figure is a sign of the correctness of the present diagnostic method. The conclusion is that even a known somatic illness could not be diagnosed psychologically with any certainty and we cannot do so even now. How then can one use psychological means to find and define an unknown illness (in the major psychoses the investigation of the course and outcome is also purely psychological)? History seems to teach us that this is an impossibility.

The lessons of *history* are confirmed by the *factual* objections raised against Kraepelin's formulation of the problem (i.e. the quest for real disease-entities).

1. Diagnosis can only be made from the total picture when one knows '*a priori*' of a definite illness that can be diagnosed. The total picture does not provide us with any clearly defined illnesses; it only gives us types which in individual cases continually show 'transitions'. Experience teaches us that it is by no means rare to find cases where one may review the whole life-history and still be unable to discuss fruitfully whether one is dealing with a manic-depressive psychosis or a dementia praecox.¹

2. That the *outcome is the same* is no proof that the *disease is the same*. The most diverse organic brain diseases show the same outcome in the same type of demented state. On the other hand there is no reason why with the same illness there should not be recovery in one case and not in the other. In spite of this there is much in favour of the view that there are certain processes which by their very nature are incurable. Up to now however we lack any means of distinguishing these from the others which sometimes lead to recovery and sometimes do not.

3. The *idea of the disease-entity never reaches realisation* in the individual case. The knowledge of the regular conjunction of similar causes with similar phenomena, similar course, outcome and brain-pathology would presuppose *a complete knowledge* of all the particular connections, a knowledge which belongs to the infinitely remote future. The idea of the disease-entity is in truth an idea in Kant's sense of the word: the concept of an objective which one cannot reach since it is unending; but all the same it indicates the path for fruitful research and supplies *a valid* point of orientation for particular empirical investigations.² We ought to explore the total picture of psychic illnesses from every point of view and search for all the possible connections. If we do so, we find on the one hand individual connections and on the other certain tentative types of clinical pictures, not sharply delineated but much 'more natural' than any of the preceding, one-sided and artificially

¹ The 'unclarified cases' which first look like manic-depressive psychosis but later deteriorate, or the typical schizophrenic states which later show a benign course, teach us a great deal and prevent us from schematic rigidity.

² For this reason research guided by the idea of disease-entity cannot be called 'the hunt after a phantom' as Hoche suggested.

constructed classifications. The idea of the disease-entity is not an objective to be reached but our most fruitful point of orientation. This idea, which in fact and more than anything else has set scientific exploration into motion, remains the peak of psychopathological endeavour. Kahlbaum's contribution is that he grasped this idea. To have made it effective is the merit of Kraepelin. But error begins where *instead of the idea there is an apparent accomplishment of the idea*, and ready-made descriptions of disease-entities such as dementia praecox or manic-depressive insanity take the place of individual investigation. Descriptions of this sort always try to achieve the impossible, so that we can predict that they will always be wrong and remain unproductive. Instead of such descriptions the special psychiatry of the future will present descriptions of organic brain-diseases, toxic states, etc., and in addition an unconnected series of types of illness arrived at exclusively by individual investigation. A precursor of such special psychiatry is the sporadic practice of listing the case along with the names of previous patients who represent the same type of illness rather than labelling the illness with the general diagnosis dementia praecox or manic-depressive insanity. The drive to synthesise, which is quite rightly guided by the idea of disease-entities, must at the same time limit itself a little if it wants to remain firmly attached to possible objects of knowledge. It cannot achieve anything else than the empirical presentation of actual cases whereby it discovers typical clinical pictures of psychoses which will fit a small group of cases. As soon as it tries to include larger groups, the knowledge gained will become vague and instead of concrete investigations, 'general descriptions' will be designed based on poorly controlled residual experiences. If the reader tries to get a precise hold on the entity involved, he will find it melts away from him even as he looks at it. The question as to what underlies all phenomena in general used to be answered in the old days by the notion of evil spirits. These later turned into diseases-entities which could be found by empirical investigation. They have proved themselves however to be mere ideas.

The original question: are there only *stages and variants* of one unitary psychosis or is there *a series of disease-entities* which we can delineate, now finds its answer: *there are neither*. The latter view is right in so far that the idea of disease-entities has become a fruitful orientation for the investigations of special psychiatry. The former view is right in so far that no actual disease-entities exist in scientific psychiatry.

Actual research has long accepted the lessons of history and of the insight gained from the three foregoing objections. In addition to all the possible analytical approaches described in the previous chapters, scientific enquiry, attempting to synthesise and guided by the idea of the disease-entity, has embarked on two separate paths:

1. *Brain-research*—which endeavours to discover disease processes in the brain. It does this in fact without any reference to the clinic and without having learnt anything from psychopathology. Should it discover any such processes

by its own methods, psychopathology is then in a position to put the question —what psychic changes are effected by these processes? We might almost say: any psychicanomaly can occur with any organic brain-process (but only if the former is taken objectively and superficially and not if it means any kind of experience, least of all the schizophrenic experience). According to the progress made by this kind of research, psychic illnesses become 'symptomatic' illnesses of underlying neurological processes. From this point of view the concept of disease-entity shifts over entirely from the field of psychopathology into that of neurology, and indeed quite rightly so, in so far as individual psychic illnesses are recognisable in essence as concrete processes in the brain.

2. *Clinical psychiatry*—which investigates individual cases from every viewpoint in order to obtain some over-all picture. It groups together into types the cases that appear to conform with each other. Special psychiatry, however, is far from having such conceptual types in its possession for even the majority of psychoses.

Clinical pictures of disease arise from *the nosographic approach*—as Charcot called it and so exercised it (though in his case he tried to confirm it by anatomy) and as Kraepelin put it into practice though without any such control. Clinical description of the presenting picture is the method of unbiassed translation into words of what has been observed without any presupposed concepts; indeed the method is pre-conceptual and non-schematic. The acuter the observation which designs and applies it, the better it proves to be. Concepts arise along with the formulations that create the original form. Very few psychiatrists have been gifted in the art of presentation and only too often this fails owing to the doctor's lack of descriptive power and inability to represent the essential nature of what is seen or the mood; there is also a tendency to deflect into the abstract, utter mere opinions and string words, empty concepts and judgments together in place of a few, vividly descriptive sentences. Latterly the best descriptions were perhaps those of Kraepelin. But even he often lost himself in an endless mosaic, composed of fragmentary experiences that failed to fit into any picture.

Kraepelin's method was to take case-histories and survey the whole life-history in order to obtain a clinical picture of the illness. The effect was that *all attempts to delineate* particular psychoses, as distinct from schizophrenia or within the group of schizophrenias, *ended in failure*. What had been delineated (e.g. pre-senile delusions of injury, paraphrenia, etc.) had repeatedly to be taken back into schizophrenia. If in the comparison of the life-histories an illness does not thus lose distinctiveness, it cannot be accepted as a comprehensive disease-entity, it is only a particular causal connection, an isolated phenomenon.

Types can only be fashioned with the help of full life-histories. Investigation of types on the basis of intensive and vividly descriptive life-histories is one of the most hopeful undertakings of psychiatry. We can only expect a really great advance

where the director of a clinic or institution is fully grounded in the various viewpoints and factual data of psychopathology, and where he has the help of assistants who themselves have an independent habit of thought and are also well informed in matters of general psychopathology; where, too, the team works over its material in such a way that it attempts clear type-constructs based on all-round comparison of the entire patient population and provides continuous illustration through good, well-structured case-histories free from frills. Kraepelin was perhaps the only one to risk such an undertaking and follow it through tenaciously.

The diagnostic approach to mental illness can either apply *the most* general categories of psychopathology (schizophrenic process or personality development, cerebral disorders with a special neurological diagnostic, etc.), or must keep as close as possible to reality and therefore to *narrowly defined types*, if it is to be at all fruitful. Very little transpires and what does leads to very vague concepts, should the psychiatrist be satisfied with such diagnoses as 'paraphrenia', 'shiftless individual', etc. On the other hand it is usually beneficial if he can make some concrete comparison when he comes across published cases analogous to his own. The concept of disease-entity here approximates to the individual. Kleist indeed calls my point of view 'diagnostic nihilism' and says: 'Under the influence of this constructive typology psychiatry will degenerate into a psychiatry of particular cases'. However, in the field of internal medicine Curtius-Siebeck say 'In the diagnosis of disease, therefore, we are led on to a diagnosis of the individual; that is, to a comprehensive judgment on the peculiarity of the sick personality and his life-situation and this gives us the ultimate objective of medical diagnostics'. Kraepelin said of paranoia that 'the clinical grouping of the pictures presented by paranoid illness offers particular difficulty because there are as many forms of it as there are individual patients'. This remark of his has a general significance which reaches far beyond the field of paranoia.

Psychiatry urgently requires a register of case-histories which are biographical in nature and worked over thoroughly. The usual chaotic notes are not at all satisfactory. Mechanical case-histories, written according to stupid rules of 'objectivity' and reproducing every sentence noted in the case-record, are profitless. We must have definite points of view and an eye for significant facts. We must see as much as possible but at the same time concentrate on what is most striking and we must construct our case in an orderly manner without forcing anything unduly but shaping the material systematically and lucidly. Of a random mass of cases we will always find only a few that are fit to serve as a basis for such histories. The quantity and clarity of patients' utterances depend on their disposition and education (the more differentiated the personality, the better), and the material available will always show some gaps, often too many, to constitute a biography that could be published. Work should take place simultaneously on the living material and on the material offered by the clinic archives (the real value of which lies in the catamnestic enquiries) and on any material that has been published. Only by the complementary juxtaposition of sources like these will the best results be obtained. The main thing is to make a careful selection of our patients and then mix with them a great deal and

observe them closely ourselves. To limit ourselves to this however is an unproductive performance. No psychiatric knowledge is gained without a wide education in psychology and without some fundamental grasp on what is already known. Moreover, work has to be designed on a long-term basis; for quite a long time it will have to remain at the level of 'monographs' and not aim at any complete presentation.

Case-records are published for a number of reasons; for instance, to demonstrate some phenomenon or symptom, to emphasise certain meaningful or causal connections, to delineate certain states or demonstrate therapeutic effects. But comprehensive life-histories only come into being with the idea of the disease-entity. These histories need to be genuine descriptions in contrast to the empty constructs of a schema; a well-shaped case-history rather than any haphazard story of a case, superficial life-story, arbitrary if entertaining case-report or any chaotic collection of notes. Such life-histories however will give rise, though always in tentative fashion, to a constructive typology that emphasises the essential.¹

At the present time it is perhaps even more important for the study of special psychiatry that good monographs should be read rather than any of the textbooks that attempt to survey the whole field. The textbooks with their comprehensive descriptions of illnesses are good as regards cerebral processes and the exogenous and symptomatic psychoses, but for anything else they are misleading because they either separate out what cannot be so clearly separated or their matter tends to be both blurred and obscure.

§ 2. BASIC CLASSIFICATIONS IN THE TOTAL FIELD OF PSYCHIC ILLNESS

It seems appropriate to stress certain fundamental distinctions which occur within the over-all picture of psychic ill-health. These give us an initial orientation in our efforts to comprehend the whole but at the same time they reveal some profound and unsolved problems inasmuch as each pair of opposites implies a basic concept of the psychic life as a whole. The pairs of opposites are not mutually exclusive alternatives but differences of polarity. The individual case approximates either the one or the other pole and the majority of cases can be placed at one or the other pole. However, there are not a few cases which combine what we have separated as opposites; for years neuroses can be the symptom of a psychosis (e.g. schizophrenia) or of an organic neurological illness (e.g. multiple sclerosis) which only reveals itself much later. Endogenous psychoses will occasionally reveal themselves in part as organic cerebral illnesses. Patients with affective illnesses sometimes show schizophrenic features. Defects in performance are perhaps in the majority of cases linked with personality changes. In individual cases the difference between acute and chronic illness becomes a fluid one.

¹ Thus there are some contributions which without much case-history nevertheless gain importance because of their type-construction. Kahlbaum's *Catatonia*, Hecker's *Hebephrenia* and *Cyclothymia*.

1. *Differentiation according to the clinical state*

Acute and chronic psychoses. Psychiatric usage gives these opposites a multiple meaning. (1) They may indicate differences *in the total picture* presented by the psychotic state. Acute states show intensive change already in the outer behaviour, excitement or depression, confusion, restlessness, etc. Chronic states are sensible, orientated, quiet, orderly and relatively even. This general contrasting picture of the symptoms will often, but not always, coincide with (2) the opposing contrasts of *process* and *state*. In all acute cases we think of pathological processes, which are marked by a rapid increase in the severity of the symptoms. In the chronic cases we think of pathological states which develop slowly or remain as a residue of the stormy acute processes. Again this often coincides, though not always, with (3) the opposing prognoses of *curable* or *incurable*: acute processes are more often thought of as curable or at any rate capable of some improvement, while chronic states are always thought of as incurable.

For initial orientation it is useful to contrast the typical acute psychosis: severe signs and symptoms in the case of a still curable process with the typical chronic psychosis: less conspicuous symptoms in a no longer curable state. Here the duration of the illness is not of importance. Psychoses which have lasted for years are still called acute psychoses—a usage which is quite different from that of somatic medicine.

2. *Differences according to the nature of the illness*

(a) *Defects in performance and disorders of personality.* Among the vast variety of psychopathological phenomena we are often impressed by a polarity which though it appears under a number of different names is concerned with similar matters. Quantitative changes in objective performance (e.g. in memory or work-performance) are contrasted with qualitative changes of psychic life (different modes of subjective experience, altered meaningful connections, 'delusion'). Altered capacity for performance in an intact personality is contrasted with changes in personality where the performance is intact. In the former case we are dealing with a disturbance in the *mechanisms that underlie the psyche* (ranging from purely neurological elements to the functions of intelligence); in the latter case we are faced with a modification of *the centre of psychic life itself*. In the former the personality as a result of the destruction of its tools, as it were, is incapable of expressing and communicating itself and suffers a secondary impairment. In the latter a personality that has been qualitatively modified and has become deluded works with the same tools as before but in a correspondingly different fashion. In the first case the observer, looking behind the destroyed function, has a clear impression of an unchanged personality with which he can fundamentally communicate; in the second case, the observer has a vivid feeling of the gulf which has torn mutual understanding apart although performance and function do not seem to have undergone any

definite change. In the first case the psychology of performance is able to analyse and define disturbances experimentally in considerable detail; in the second case the behaviour of the sick personality in the psychological performance-tests is normal or sometimes even surprisingly supra-normal.

These typical contrasts are in fact only rarely encountered in their pure form. But this construct of opposing polarities gives us a useful viewpoint for analysis. The hitherto known disease-groups or rather generic groupings provide us with phenomena of both types but nowadays it is quite obvious that the known organic disorders predominantly affect the mechanisms of performance, while the paranoid processes predominantly affect the personality. A large proportion of the psychoses only bring destruction in their train. In a number of others we might say that the mind is still there, in a form new and strange to us but in some way preserving itself through all the destruction.

The polarity however penetrates our conception of human nature and all its variants as well as our judgments on them. It appears in the polarity we maintain between intelligence and personality.

(b) *Neuroses and Psychoses.* Those psychic deviations which do not wholly involve the individual himself are called neuroses and those which seize upon the individual as a whole are called psychoses. Neuroses therefore are also called nervousness, psychasthenia, inhibition, etc. Psychoses on the other hand are mental and affective illnesses.

In a negative sense, then, the *neuroses* embrace the *wide field of personality disorder* (psychopathy). Personality disorder shows itself in the somatic field as organ-neurosis and as psychoneurosis where the disorder shows itself in the psychic state in experience and behaviour but no one regards the sufferer as mentally or affectively sick. In the positive sense the source of neurotic disorder lies in the situations and conflicts which engage the individual in his world and which only become crucial because of specific mechanisms that lead to certain transformations of experience not normally found; dissociation, for instance (as distinct from normal division and synthesis) or building vicious circles which induce the self-aggravation of the disturbance (as distinct from the constructive reciprocities of psychic life).

Psychoses on the other hand are the *more circumscribed* psychic disturbances which are generally thought to open up a gulf between sickness and health. They spring from additional disease processes, whether these are hereditary disorders beginning at certain times of life or whether they are called into being by exogenous lesions.

Neuroses as well as psychoses are *sharply distinguished from states of health*. The neuroses however seem rather to show transitions to what is generally healthy and human, firstly because the personality of the patient is not 'dislocated' and secondly because particular neurotic phenomena can appear transiently in otherwise healthy people although this would still happen only in a minority of the population. We cannot comprehend neurotic or psychotic phenomena simply as exaggerations of normal experiences and

activities but we can, nevertheless, bring them closer to ourselves by the use of analogies (e.g. schizophrenic thinking may be compared with experiences that occur when one is falling asleep or compulsion neuroses with certain experiences during normal fatigue which are also termed in some sense compulsive). It is quite another thing that all neurotic and psychotic phenomena may serve as a kind of allegory for human possibilities in general, for the disorder of human life as such. This in no way implies that these phenomena as such are in any way some attenuated form of ordinary human life. In every neurosis there is a point where the person in good health no longer understands and is accustomed to consider the patient if not 'mad' at least with certain qualifications basically 'mentally disturbed'.

Neuroses are the field for psychotherapists, psychoses the field for psychiatrists.¹ This holds in general but in very many cases of psychoses these can be managed without constraint and by forms of voluntary treatment, while there are individual cases of neuroses which can reach a degree where institutional treatment becomes necessary.

(c) *Organic cerebral diseases and endogenous psychoses.* The major endogenous psychoses are illnesses of unknown somatic origin while the organic cerebral diseases are well known as such; among other things they have psychic symptoms. The problem is whether this striking difference is only temporary until we get to know the somatic disease-processes in the brain responsible for the endogenous psychoses or whether even then a basic difference will remain.

For a period the difference seemed to be bridged by the discovery of progressive General Paralysis. This had been known as a psychotic illness though in practice it could never be precisely defined until cause and cerebral pathology were known. As soon as these were discovered (the spirochetes of syphilis and the histopathological cerebral findings of Nissl and Alzheimer) the magnificent instance seemed to have occurred which called for confirmation that a psychosis could be attributed to brain-disease, a finding which seemed to lead on to an expectation that other psychoses would follow suit. The psychic phenomena of General Paralysis have lost a great deal of their interest since then and nowadays are very little studied. One might think that, once the somatic base for schizophrenia has been recognised, there will be very little interest for the schizophrenic psychic life either.

On the other hand it can be said that psychopathology still has the task of studying abnormal psychic phenomena in General Paralysis, even after the discovery of the cerebral processes, but the psychic disturbances which occur in General Paralysis are of a radically different kind from those appearing in schizophrenia. In the one case it is as if an axe had demolished a piece of clock-work—and crude destructions are of relatively little interest. In the other it is

¹ This does not mean that they cannot be the same people. Clear knowledge and effective therapy in both fields requires that psychiatrist and psychotherapist should be one person, or so it would seem.

as if the clockwork keeps going wrong, stops and then runs again. In such a case we can look for specific, selective disturbances. But there is more than that; the schizophrenic life is peculiarly productive. In certain cases the very manner of it, its contents and all that it represents can in itself create quite another kind of interest; we find ourselves astounded and shaken in the presence of alien secrets, which in this sense cannot possibly happen when we are faced with the crude destruction, irritations and excitements of General Paralysis. Even when we have discovered the somatic processes underlying the psychoses there will always persist a profound contrast between the various psychoses and probably too an interest of quite a different order in their psychic aspects.

We must guard against *any one viewpoint becoming an absolute* even if such a viewpoint proves fruitful for research and might now and then even be decisive for radical therapy. The fact that a classification of disease entities into generic groups—a diagnostics proper—is not applicable to the psychoses but only to cerebral processes has probably led to our seeing in *brain-research* not only one task among many but the task of psychiatry. On the other hand the poverty of the so far recognised relationships between abnormal events in the brain and abnormal psychic events, the restricted outlook for further results in psychopathology and the self-evident assumption that psychopathology has to deal with psychic life may all have led *psychopathology* to reject, sometimes perhaps a little too abruptly, this over-estimation of anatomy and of the somatic for psychiatry. As brain research is nowadays still more firmly anchored as a science than psychopathology this is perhaps an understandable rejection on the part of psychopathologists who are still too much on the defensive. Yet the only fruitful position is for every science to remain within the framework of its own field. At the beginning of the nineteenth century one saw just as ridiculous encroachments on the part of psychology as during the era of psycho-analysis; but the encroachments made by anatomy in the second half of the century were at times no less (Meynert, Wernicke, etc.). Today it seems that on both sides limitation of the field and clarification have gained the upper hand.

(d) *Affective illnesses and mental illnesses* (natural and schizophrenic psychic life). The most profound distinction in psychic life seems to be that between what is meaningful and *allows empathy* and what in its particular way is *ununderstandable*, 'mad' in the literal sense, schizophrenic psychic life (even though there may be no delusions). Pathological psychic life of the first kind we can comprehend vividly enough as an exaggeration or diminution of known phenomena and as an appearance of such phenomena without the usual causes or motives. Pathological psychic life of the second kind we cannot adequately comprehend in this way. Instead we find changes of the most general kind for which we have no empathy but which in some way we try to make comprehensible from an external point of view.

Language has always differentiated *affective illness* from *madness* proper. For lay persons madness means senseless raving, affectless confusion, delusion, incongruous affects, a 'crazy' personality, and they think this all the more the

more sensible and orientated the individual remains. Should this not be so the lay person rightly tends not to count these states of clouded consciousness as madness proper. Affective illnesses he indeed calls unmotivated but profound emotional disturbances for which after their own fashion one can have empathy, as for instance those of melancholia. Holding these views the lay person has hit upon a basic difference within morbid psychic life which even today we cannot formulate clearly and precisely but which remains one of the most interesting problems and in the last decades research has added much of essential importance relevant to it.¹

The affective illnesses appear to us to be open to empathy and natural but the various types of 'madness' do not seem open to empathy and appear unnatural. The theory, which so far seems the aptest, explains the various features of this ununderstandable psychic life in terms of a split in the psychic life; accordingly, Bleuler decided to call it 'schizophrenic' which we may also use as a mere descriptive term without necessarily accepting the theory. Basing ourselves on these contrasting differences we give an illustration of two groups of symptoms:

i. Looking at the *phenomenological elements* we find in morbid psychic life that there are those which can be seen under favourable circumstances, though they are difficult to discern at all clearly, and those which *can in principle never be seen by us*, which we always have to circumscribe negatively and indirectly by saying what they are not. Such elements which are in principle psychologically inaccessible we term '*statically ununderstandable*' or closed to empathy. Of these we can make the following relatively clear selection:

A common quality which may accentuate almost any psychic event and which gives the whole psychic life a new note seems to be that which the patients themselves describe as a 'made' quality. With all our psychic events we are aware that they are our own psychic events; I am aware that 'I' perceive, eat and feel. Even when I am passive or there are compulsive ideas, etc., this awareness is always present that the psychic events which I experience are my own. We can experience a drive, a compulsion, a belief that something is true, as 'alien to us' and by that we mean it is alien to our whole personality but we feel it all the same as an emanation from our actual, momentary self. It is my own drive no matter how much I feel it to be alien to my actual personality. In fact we are not at all able to have any clear sight of a psychic event without our self-awareness being involved. Only negatively and metaphorically can we visualise this essentially changed psychic life in which these 'made' psychic experiences play a part. We are not dealing here with the strangeness and urgency of compulsive events nor with simple passive experiences, such as movements of my own limbs enforced on me against my will by someone stronger than I. Yet it is only with some such events that we can make com-

¹ Bleuler, *Dementia praecox oder Gruppe der Schizophrenie* (Leipzig and Vienna, 1911). Carl Schneider, *Die psychologie der Schizophrenen* (Leipzig, 1930). Comprehensive presentation and complete literature in vol. 9, Bumke's *Handbuch* (pub. K. Wilmanns, Berlin, 1932).

parison. *Feelings, perceptions, acts of will, moods, etc., can all be 'made'.* Patients feel 'not free' as a result, under some outside power, not masters of themselves or of their movements, thoughts and affects. Where the influence is very strong, they feel themselves like marionettes which have been set in motion arbitrarily or else laid aside. They almost always elaborate these experiences into delusions of physical and other influences, complex apparatuses and machines which have power over them or supernatural influences that take effect here in the real world. We have got to know some of these 'made' phenomena from phenomenology. The entire complex of the phenomena presents itself vividly to us from the self-description of patients. A former patient of the Heidelberg clinic, a well-educated individual who a little later became acutely ill with schizophrenia, wrote an account of these 'made' phenomena in a style which shows a number of hebephrenic characteristics:

A paranoid syndrome preceded the events and during it the patient observed all sorts of things with astonishment: crowds of people, railway compartments whether empty or full, turns of phrase, etc., 'though I had not the slightest idea what it was all about'. 'Everything is a riddle to me. On the following morning I was put into a most peculiar mood by this machine or whatever it is, so that Father and Mother thought I was having extremely vivid fantasies . . . All the night through I was fully sensible and quite clear . . . the machine—the construction of which was of course quite unknown to me—was fixed in such a way that every word I spoke was *put into me* electrically and I could of course not avoid expressing the thoughts in this peculiar mood. When I woke out of this very strange mood I felt quite peculiar. I might speak perhaps to my Father in the following way as I was in fact *translated* into a "death-mood" as it were . . . "You know I must die now, Dad, so I would like to thank you before dying for everything you have done for me" . . . At the time my thoughts had been taken from me so that I didn't know why I had to die. A joyous mood was *put into me* which prevented me from thinking of anything. At times I was given back my natural way of thinking, and then I used to say "Well, what did I want to say?" I would repeat this sentence several times, I know quite definitely, but not a thought came to me . . . I became *transported* into a continuously mounting happy mood, as I was, from what I heard, only being allowed to live another five minutes . . . from that day onwards I have been painfully tortured . . . several times I was tested electrically in regard to my conscience and I suffered great pain . . . since then I have frightful stories in my head of murder and robbery which I cannot fight off . . . I note all this down because I am now terribly unhappy. I feel the machine is getting me down mentally more and more and I have several times asked for the current to be turned off and my natural thinking returned to me . . . Usually it is the cheap word "tramp" which I can't get out of my head . . . By the way, I also thought that in the first few days father and mother had also been electrified; I clearly recognised this by their movements and facial expressions whenever I had my often terrifying thoughts . . . One evening the thought *was given to me* electrically that I should murder Lissi; as this made me speechless for a time it was shouted at me through the machine: "You have compromised yourself thoroughly" . . . such thoughts are surely *unnatural*, although I have complete control of my mind . . . terrible heat was generated electrically and they shouted at me the words

"rogue, rascal, shark, anarchist". The last word of course was wound round my head for several minutes . . . However precisely my thoughts are understood and however much entire sentences are shouted at me by the apparatus, it is a fact that I know quite definitely that to a large extent *these are not my own thoughts* and that is the great puzzle. It must be a very complicated machine which could *transport* me *into any kind of mood*—serious, gay, laughing, crying, grim, humorous—several times during my examination in the first days it turned into a 'gallows-humour' which I understood very well—amicable, morose, energetic, distracted, attentive, fixation of thoughts at one point to the verge of unconsciousness if not madness—I remember an evening when I did not know what I thought—melancholic, bewildered, etc. The remarkable machine can also suddenly *give me sleep* (cp. the sleep-giving rays of Schreber), and withhold sleep; it can develop dreams in me and wake me up at any time . . . it can distract my thoughts—indeed *give me any kind of movement* . . . I try to fight these thoughts with all my energy but it cannot be done with the best will in the world as the thoughts are also actually *pulled out of me* . . . also when I read, whatever it is, I cannot give sufficient attention to the contents and with every word I get a side-thought—I want to make another point; there is an exaggerated laughter which comes over me several times although it does not make me suffer, and I have not been able to fight it . . . This laughter—not at all painful—was sent to me just when I thought of something particularly stupid . . . When one reads all this it seems the greatest nonsense ever written but I cannot say anything else except that *I have really felt all this*, though unfortunately I have never understood it. I suppose only someone who has been tortured by such a machine as I was would be able to understand . . . if only someone would tell me what it all means. I am terribly unhappy . . .' The patient in his despair goes to the Public Prosecutor. He asks that steps be taken to stop the machine 'as the slightest holding up of my thoughts or the slightest suppression of them because of my great capacity to apprehend would be very detrimental to my work as a conductor, and it would be immediately noticed . . . I am being interfered with daily . . . I would like to allow myself to make another point . . . during my cycle tours very often such a gale was generated that, in spite of my hurry, I was overtaken by breathlessness, thirst, etc., and I had the greatest trouble to fight against them . . . so I would like to ask once more, Sir, that you very kindly see that my own thoughts are returned to me'.

In this case we are dealing with the complex phenomenon of 'what is made' (passivity) in a rapidly deteriorating schizophrenia. These experiences are sometimes even clearer in paranoid patients who do not deteriorate and remain quite sensible. We can also recognise them as completely isolated occurrences in patients in the early stages of a process and who otherwise appear as neurotics. Thus a patient at the Polyclinic told us:

'If I meet a girl in the street I notice she is clean-living because I have an erection. This is accompanied by the feeling of unnatural stimulation. Something is not quite right there. I can only say something is not quite right there.'

There are probably yet other elementary experiences entirely inaccessible to us besides these 'made' phenomena. As a more clearly defined group among them we find at times the quite abnormal body or organ sensations, but they

are difficult to differentiate from the unpleasant sensations which so many patients of all kinds have. Some schizophrenic patients find new words for their utterly indescribable body sensations—e.g. 'es zirrt' and so on.

2. When we trace back behaviour, activities and the general conduct of life in an individual and try to understand all this psychologically and with empathy we always come up against *certain limits* but with schizophrenic psychic life we reach limits at a point where normally we can still understand and we find ununderstandable what strikes the patients as not at all so but on the contrary quite well founded and a matter of course. Why a patient starts to sing in the middle of the night, why he attempts suicide, begins to annoy his relatives, why a key on the table excites him so much, all this will seem the most natural thing in the world to the patient but he cannot make us understand it. When we investigate, we find ourselves offered insufficient motives which are subsequently elaborated. If such behaviour is already striking in quite sensible individuals who are still capable of working and with whom we can talk about their life, the non-comprehensibility becomes downright grotesque in the acute psychotic states. Only the fact that we see these states so often and are used to them makes them appear less remarkable. In these cases we see patients who understand perfectly and have *no clouding of consciousness*; they are fully orientated, yet they rave wildly, make meaningless gestures and carry out senseless acts; they utter totally disjointed verbal products or write them down (incoherence); while the next moment they may show they can speak and behave quite coherently. After the psychosis has remitted they find none of this remarkable but say perhaps they were joking or playing some prank or other, etc.

Among all this ununderstandable material search has been made for a *central factor*. All the unexpected impulses, incomprehensible affects and lack of affect, the sudden pauses in conversation, the unmotivated ideas, the behaviour so reminiscent of distraction and all the other phenomena which we can only describe negatively and indirectly ought to have some common base. Theoretically we talk of incoherence, dissociation, fragmenting of consciousness, intrapsychic ataxia, weakness of apperception, insufficiency of psychic activity and disturbance of association, etc.¹ We call the behaviour crazy or silly but all these words simply imply in the end that there is a common element of 'the ununderstandable'.

We note that in fact no psychic function is definitely missing so that the central factor cannot be a disturbance of any one function. We find that non-schizophrenic symptom-complexes appear in schizophrenics and that these acquire the peculiar 'colouring'; thus we find manic-depressive symptom-complexes submerged in the schizophrenic sphere. We have intuitions of a whole which we call schizophrenia but we do not grasp it; instead we enumerate a vast number of particulars or simply say 'ununderstandable' while each

¹ J. Berze and H. W. Gruhle, *Psychologie der Schizophrenie* (Berlin, 1929). Cramer, *Allg. Z. Psychiatr.*, vol. 67, p. 631. Hoche, *Z. Neur.*, vol. 12 (1912), p. 540.

of us only 'comprehends' the whole from his own new experience of actual contact with such patients.

§ 3. SYMPTOM-COMPLEXES (SYNDROMES)

(a) *Mental state and symptom-complex (syndrome)*

By examining symptom-complexes from a psychological aspect general psychopathology provides some preliminary facts to help in the formation of typical comprehensive disease-entities. Since we have learnt to consider the course of an illness as one of the most important criteria for the grouping of illnesses we have to distinguish *clinical pictures of the mental state* (the transient forms in which an illness appears) from the *entire disease process*. To characterise these pictures of the mental state better the concept has been created of the symptom-complex (syndrome). Certain symptom-clusters were found which were taken as *typical pictures of mental states* and this allowed some order to be brought into the countless varied phenomena. Emminghaus was already describing melancholia, mania, delusional states and dementia as symptom-complexes and they were spoken of as self-evident structures which had had their day once the idea of disease-entity moved into the foreground as the centre of interest. Nowadays however we are asked to pay attention to these complexes on grounds of principle. We are supposed to investigate them as such without regard to any disease-entity or process. We are to determine their rules and the necessary correlations and thus create units which will occupy a midway position between elementary phenomena of every kind and disease-entities.

(b) *Viewpoints governing the formulation of symptom-complexes*

Psychiatrists today, just as a hundred years ago, find themselves in their observations forced to acknowledge certain typical pictures which for a long time now have been accepted as symptom-complexes. What viewpoints govern the formulation of these types? It would be possible to give the name of symptom-complex to quite diverse things. In the last resort it becomes merely a matter of terminology whether, for example, one wants to call reaction-formations, personality types, 'attacks', etc., symptom-complexes or not. Actually all unitary structures which clearly manifest their essential coherence have a well-defined place in general psychopathology: as causal or meaningful connections, or as personality-types, etc. The remainder that arise through the contribution of a number of viewpoints and are usually suffering from methodological confusion yet assert themselves in the course of our concrete experience are thought of as belonging to the sphere of symptom-complexes. Several viewpoints are always in combination when it comes to the formulation of symptom-complexes; if we separate them out they are as follows:

1. *Objective and subjective phenomena of a striking character.* At first the

most superficial elements were taken and terms found for the most striking *objective* phenomena; for example, *stupor* (all states where although the patients are quite clearly conscious no reaction can be elicited to questions or situations and the patients stay immobile in the same posture), *furor* (state of excitement) expressing the mere fact of motor excitement (motility-psychosis), *confusion* (incomprehensibility and incoherence of action and speech), *paranoia* (the appearance of delusions in the widest sense), *hallucinosis*, etc. These terms are still used to characterise objective phenomena (from the viewpoint of performance-psychology). Any further investigation is faced with having to elucidate the origin of the symptoms that are only superficially similar and the modes of the patients' own subjective experiences.

Even nowadays we have only relatively superficial concepts of those *clinical pictures* which focus on the subjective experience of basic mood states (depression, melancholia, anxiety-psychosis, mania, ecstasy).

2. *The frequency of simultaneous appearance.* Elements are combined into complexes according to a number of viewpoints. Sometimes the only valid point of view is taken to be the view that a symptom-complex is formed by symptoms that *occur together most frequently*. As a matter of fact there are very few investigations regarding the frequency with which this happens. The figures given by Carl Schneider for the frequency of symptoms are interesting (*Psychologie der Schizophrenen*, 1930). But there must be other sources apart from these for the singular way in which certain groups of symptoms are accepted as a matter of course and for the convincing necessity which attaches to such groupings.

3. *The coherence of symptoms.* One such source is the '*meaningful*' coherence of the symptoms of a complex. The cheerfulness, delight in movement, pressure of talk, the enjoyment of jest and activity, the flight of ideas and all that can be meaningfully deduced therefrom, do not go to form the picture of 'pure' *hypomania* just because in this combination they are, along with pure *depression*, the most frequent picture presented by affective illnesses (on the contrary 'mixed states' are as a matter of fact much more frequent the more we investigate in detail). They give us this picture because the whole forms for us a '*meaningful*' entity. Along with depression this is the psychologically ideal type of affective illness of which we do not even know the average type because this has never been investigated.

Another source of symptom-complex unity is the *one common aspect* of otherwise heterogeneous categories of symptoms. This is the case, for instance, where all the 'made' (passivity) experiences are gathered together into the *paranoid* complex and all the phenomena of abnormal motility into the *cataxic* complex, in so far as the phenomena cannot be explained neurologically or understood psychologically. So too all the events which can be seen to spring from 'over-excitability' and 'excessive weakness' are gathered into the *neurasthenic* complex. In all this the conception of some unitary extra-conscious cause plays a part.

Carl Schneider tries to grasp the 'laws of syndrome formation' in schizophrenia. He claims that in the *formal peculiarities of the act-experience*, the disturbance of a formal basic function, he has discovered what is the common factor in a large number of symptoms and at the same time their source.

4. *Primary and secondary symptoms.* The distinction between primary symptoms directly brought about by disease processes and secondary symptoms that only come into being through elaboration provides a basic principle for the analysis of symptom-complexes. The two words primary and secondary have a number of different meanings which need clarification:

(aa) Sometimes the term primary symptom is used simply to denote those *elementary symptoms* which as alien interruptions are particularly important for the diagnosis of schizophrenia. In this case all psychic events that have not this elementary quality no matter where they come from are classed as secondary.

(bb) Primary is what is *immediate*, what can no longer be reduced by understanding, for example, the instincts. Secondary, then, is what *emerges* from the primary *in a way which we can understand* and for which we can have empathy, for instance, the symbolisation of a drive (a love of cats in place of frustrated maternal love). Thus delusional experiences and hallucinations are primary but the delusional system in so far as it is a work of reason is secondary, so is the comprehensible alarm felt about the content of the delusion and the '*Erklärungswahn*' (Wernicke) (*elaboration* of certain morbid events by that *part of the psyche which is still intact*).

(cc) Primary is what has been *directly caused* by the disease process. Secondary on the other hand is the *outcome* in the environmental situation, as it is understandably linked with the defect in question. For example, the disturbance of registration of the Korsakow syndrome is primary; the disorientation that results from this is secondary. Sensory aphasia is primary; the great disruption of relationships with other people which arises *from this situation* as opposed to that of motor aphasia is secondary (Pick). The patient with sensory aphasia *appears* to be greatly impaired in his intelligence because he can no longer orientate himself properly while the patient with motor aphasia appears much less defective apart from his speech-disorder since he can orientate himself quite well and find other ways of making himself understood.

(dd) Among the symptoms which are directly accessible to us those are primary which are *individual symptoms* directly caused by the disease process and those are secondary which are due to a simultaneous *general psychic change* in which the environment plays its part. Thus torpor, epileptic seizures, headache are primary; some acute schizophrenic delusions arising in reaction to experience (Bleuler) are secondary and so is the singular reaction specific to the schizophrenic psychic state which along with the primary symptoms comes about as a result of what we conceive to be a physical event, the disease-process (the elaboration of normal environmental stimuli by the *diseased psyche*).

(ee) What is directly caused by the disease-process is primary; what is *further caused* by these direct effects and additional to them is secondary. If we take

the effects of alcohol the confused state is primary while the lasting psychic change of the chronic alcoholic is secondary; delirium, alcoholic hallucinosis and the Korsakow syndrome are again and further secondary.

(c) *The significance in reality of symptom-complexes*

In comparing actual clinical pictures with a typical symptom-complex we usually say as regards the *completeness or incompleteness of realisation* that the difference is one 'of degree'; either in a purely *extensive* sense—that is, there are more or fewer separate features than those which go with the complex; or in an *intensive* sense—the difference being due to the fact that in a given case the underlying process brings about rather more severe manifestations of the respective phenomena. Thus we may conceive, for instance, a series of steps leading from hypomania via fully expressed mania to manic confusion.

In the analysis of the particular case we have also to consider that the individual clinical picture can combine the characteristics of a *number of symptom-complexes*. Clear-cut symptom-complexes which lend themselves to description, as typical, belong to the pure or classical case. The majority of cases show a number of combinations. Only experiment will show us how far these clinical pictures, when compared with typical symptom-complexes, will be clarified by regarding such cases as 'mixtures'.

Symptom-complexes are not *universal in any arbitrary sense*. Sometimes they signify a greater, sometimes a lesser area of the illnesses to which they predominantly or wholly belong, and in all probability the symptom-complexes as generally conceived will show further characteristic modifications as they appear within definable disease-groups. For example, the amnestic symptom-complex shows a great deal of confabulation in senile patients but scarcely any in the case of head-injury.¹

We have not succeeded so far in finding any *causal explanation for symptom-complexes*. There are instead a number of theoretical possibilities:

They could be due to 'individual cerebral properties' (Hoche); that is, to the disposition of the individual which tends to react predominantly with various pre-formed symptoms that in some way seem connected. Linked hereditary predispositions could point in this direction. It is quite conceivable that paranoid, motor, and manic-depressive affective states, as well as neurasthenic, hysterical, etc., syndromes, should depend on inherited disposition which comes into play when activated by illness. It would be utopian however to expect to grasp these symptom-complexes in terms of cerebral topology, though the latter has some meaning as regards organic symptom-complexes and disturbances of consciousness.

Kraepelin wanted to regard symptom-complexes as if they were ranged at different levels. The type is determined by the degree of destruction and the remaining functions. When the higher levels of the nervous system have been destroyed there is disinhibition of the lower levels (a neurological fact which is transferred by analogy

¹ R. Kleist and A. Gral, 'Amnestischer Symptomkomplex nach Schädeltraumen', *Z. Neur.*, vol. 149, p. 134 (1934).

to the psychic sphere). The parallel with phylogenetic and ontogenetic levels of development implies that where destruction is greatest the most primitive elements will be laid bare, e.g.: circular catatonic movements similar to those in certain animals. This is a possibility and at times rather a suggestive interpretation.

Symptom complexes have remained hitherto mere speculative possibilities and have not managed to achieve any real significance; it is Carl Schneider who has been the first to try and make use of his observations—in schizophrenic disorders—to establish this significance in *biological processes*, manifesting themselves in a number of associated symptoms.

(d) *Carl Schneider's theory of schizophrenic symptom-complexes*¹

Schneider regards the present state of psychiatry as a chaos of investigatory theories. Psychopathology and somatopathology, localisation-theory, genetics and neurology each operates with entirely different concepts regarding the nature of living processes. This multiplicity of divergent approaches obscures any glimpse we may get of the unity of biological laws. There is no general hypothesis for research which from its insight into the life-processes could regulate 'the reciprocal relations of the individual branches and make possible some mutual verification of the individual conclusions drawn from neighbouring approaches'. 'Each discipline distrusts the findings of the other and yet would like to confirm, complement and elaborate them. But the starting-points are too heterogeneous for one discipline to help another and so deepen their methodology'. Now Schneider thinks he can obtain this needed general research hypothesis by observation of the symptom-complexes. We will first make a short dogmatic presentation of his teaching, then discuss the theoretical foundation and lastly we will attempt a criticism.

(i) *Outline of the theory.* We can distinguish *three symptom-complexes* in schizophrenia. Each of these may appear in pure form but usually they combine either in the presenting clinical state or subsequently, but even then they pursue an independent and parallel course. The symptom-complexes are as follows and are denoted by their main symptom:

1. *The complex of thought-withdrawal* (Gedankenentzug). Metaphysical and religious experiences—breaking off of thought, thought-withdrawal—perplexity—thoughts being put into the mind—'made' experiences (passivity experiences) which are imposed on the person or in which the will seems taken away—verbal derailment—blocking.

2. *The complex of inconsequence* (Sprunghaftigkeit). Inconsequential thinking—weak affect and lack of drive, lack of a vital dynamic, of elasticity and reactivity—deadening of grief and joy—states of anxiety, rage, weepiness and despair—alteration in bodily feelings, in somatic self-perception; 'physical' hallucinations.

3. *The complex of scattered thinking* (Faseln). Delusions of significance, primary delusional experiences—woolly and scattered thinking—loss of interest in concrete things and values—incoherence—inadequate affects—parabolic impulses.

¹ Carl Schneider, *Die schizophrenen Symptomverbände* (Berlin, 1942).

Each symptom-complex is characterised by its own particular way of experiencing. The complex of thought-withdrawal is characterised by the feeling of being alienated from one's own thoughts and of their being spoken aloud and heard. The complex of scattered thought is characterised by the primary delusion of significance, and that of inconsequence by a disturbance of the ordinary feelings and by haptic hallucination.

The *individual symptoms* in these complexes have no obvious psychological or other *connection*, whether they could be deduced from each other or conceived as belonging to each other. They are only observed as occurring together in fact. Their connectedness must be due to a normal complex of psychic function, which complex has been affected by the illness—in pure cases simply in respect to itself. The three symptom-complexes correspond to three normal function-complexes (functional groups), the existence of which comes to light through observation of the pathological. These function-complexes (functional groups) are biological radicals. There arises 'a new hypothesis regarding the structure of psychic life' which says 'In normal psychic life there are always a number of psychic events grouped together forming functional groups; that is they are gathered together into biologically independent entities.'

In healthy people these complexes work together in the closest conceivable way: in schizophrenics they become visible in isolation simply because they may be changed individually through the disease-process. 'The various unitary functional groups respond to the lesion by producing independent symptom-complexes each according to its own inherent laws.'

Thus a new conceptual 'element' is formed. Function-complexes (functional groups) become the elements of all somato-psychic life. 'The symptom-complex is, so to speak, the biological element for psychiatry as the atom is the element for physics and chemistry and the "strata of the earth" for geology.'

These new elements are *dynamic* not static. The complexes influence each other. There is a mutual play of biological reaction between them and between the pathological changes and what is normal. Their development is the result of interaction with the environment. The pathological event gives a glimpse into the dynamics of this and creates an objective basis for insight into the differentiation of psychic life in general.

The function-complexes (functional groups) are, however, not the final thing. There is over them a superimposed *directive* coming from life as a whole. And they can be invaded by the schizophrenic *disease-process*, which may overwhelm them selectively or 'in toto'.

To summarise: The decisive point for *observation* is that the existence of the three symptom-complexes and of their corresponding function-complexes (functional groups) is shown in the way they maintain themselves in interaction. What is decisive for the *hypothesis* is the notion of the biological radicals of psychic function. Thinking, feeling, volition and all the other categories of psychological experience so far known to psychology are built up from heterogeneous biological processes. But in the case of the primary

function-complexes (functional groups), we find life-processes which not only are the background of consciousness with all its manifold contents, affects and drives, but dominate it and under certain conditions can be recognised apart from it. It is not immediate consciousness with its experiences but these life-processes alone that correspond with life-processes in the somatic sphere.

(2) *The theoretical foundation.* The *existence of the symptom-complex* shows itself to clinical observation in the first place. The observation of rare 'pure' cases (incomplete schizophrenias) in which only one symptom-complex appears and the others are entirely absent makes identification possible. The combination of symptoms within the complexes does not therefore rest on a construct but on their concurrence when other schizophrenic symptoms have been absent.

The existence of the complexes is further proved by their *behaviour*: Within the individual complexes we see clinically a frequent 'sequence' in the appearance of symptoms. When it comes to *therapy*, the different complexes show a different response. The symptom-complex of scattered thought responds to insulin, that of inconsequence to convulsion-therapy and that of thought-withdrawal to work-therapy. The three complexes have different prognostic significance. The complex of thought-withdrawal shows a tendency to recovery or to biological inactivity. The two others have a decisively poorer prognosis. The more isolated the syndrome of the scattered thought-complex, the less favourable the general prognosis.

The function complexes (functional groups) are not observed but deduced. Their existence is hypothetical. The hypothesis is supported, apart from the clinical observations, by the *developmental history* during maturation: the sequence of the three typical phases of maturation are interpreted as a separate development of the three function-complexes (functional groups). Further support for this comes from the observation of *experiences that occur when falling asleep*, which—analogous to schizophrenic experiences—also show a variation in accordance with the different functional groups. It is reported clinically that certain *metabolic phenomena* are typically characteristic for each group.

Schneider emphasises that as yet there is no final verification in respect of a number of these basic arguments. He thinks that the *heuristic* importance of his hypothesis lies in the fact that it makes such questions possible and thereby encourages certain detailed investigations. In the last resort 'a counting of heads' will decide 'just as some genetic or biological law results from the counting of individual cases with certain connected characteristics'. 'Nosological laws' are derived—in similar fashion to Kretschmer's methods—from 'pure' cases and then from the relation of these to the mass of combinations and part-realisations. Schneider has not yet given any statistical confirmation nor any presentation of how to count in order to achieve the desired knowledge. The test of his observations can only be properly accomplished in a clinic where work-therapy has been introduced.

3. *Criticism.* In contrast with the resigned way in which Hoche and

Cramer dismisses the symptom-complex, Schneider wants to make this problem positive and a key to psychiatric knowledge in general. He dismisses Kraepelin's idea of disease-entities: he thinks it wrongly presupposes that the classification of psychoses would be unaltered whether this be based on aetiological, psychopathological or patho-anatomical criteria; the facts are only seen in the aggregate and there is a dogmatic presumption of what corresponds to them. Schneider's criticism in no way assails Kraepelin's central idea but only one of its schematic formulations. However, he too is anchored in a similar all-embracing conception: the idea of a dynamic of living events which consists of the mutual interaction of function-complexes (functional groups) directed by life as a whole. With this he loses sight of the idea of a disease-entity. The symptom-complexes are '*de facto*' the inevitable substitute. But their significance is achieved through the other all-embracing conception of how life is constructed. The complexes are not adapted for the acquisition of any knowledge of the disease schizophrenia in its essence, yet if Schneider were right they might help us to gain insight into the structure of psychic life. His master idea imparts to his work an unmistakable 'cachet' which sets it apart from the mass of other writings.

But the idea becomes the framework of a theory and this theory becomes in fact a new dogmatism on Being since without any 'speculative preconceptions' it firmly secures for certain isolated life-processes a relatedness to biological events. This master theory establishes the basic elements of life as physics establishes atoms in matter. There is no longer any search for a 'basic disturbance' in schizophrenia nor any assertion to this effect but the search is for a basic event in the psychic whole with its function-complexes (functional-groups), the disturbance of which accounts for the variety of the phenomena.

The power of this idea is shown by the fact that the new concept links together a large number of investigatory efforts and basic concepts, and thus becomes a nodal point for present-day knowledge. 'Functions' and 'complexes of phenomena', insights into heredity and developmental psychology all come together to form a comprehensive picture. This by itself in its theoretical form has a place in the ranks of enquiry into 'radicals' (elements, dynamic basic units, complex characteristics that can be investigated as genetic units).

To this theory's disfavour we find something common to all theories that turn into master-theories: that is, they rely on a wide range of mutually interdependent conditions, in which none of the links are wholly certain. They embrace so many assumptions that all the facts can be plausibly interpreted without anything in fact being proved. A master-theory can give a lead to research through the schemata that evolve, but as a universal theory it becomes inevitably false and misleading.

Hence the essential question is not whether the theory is true or false but whether this fresh theory on symptom-complexes has actually added anything to our knowledge. As Schneider admits, Kraepelin's idea brought an immense wealth of clinical facts. What are the results up to now of this new conception?

The starting-point for observation was the *three schizophrenic symptom-complexes*. Their existence is fundamental to the whole structure. The separation of these three is in line with the hitherto unsuccessful attempts to subdivide schizophrenia into various sub-groups and special types of disease-entity. The basic experience of Kraepelin's school was as follows: It was intended to make an exhaustive collection and description of all the phenomena occurring during the course of the individual illnesses and from the very beginning of the dementia praecox separate out particular groups from the general mass. On repeated occasions this seemed momentarily to be successful. The clinical descriptions were convincing and in diagnosis use was made of the new, more narrowly defined units. But subsequently one could see transitions and combinations and the separate entities were once again discarded. This has been the experience of decades and it makes for scepticism regarding any new attempts, should they want to be more than typical descriptions of a transient variety of forms taken by the disease in its course.¹ This method of division into a number of separate clinical disease-entities seemed an endless repetition of the fruitless efforts of the old psychiatry. Nowadays we ask for more than clinical description of typical cases if an entity is to be defined. We need proof in the form of the running observation of a large number of cases, as well as exact and vivid histories which need in their turn to be linked with statistics. We thus hope to achieve a result which cannot simply be negated a year or two later or tacitly forgotten because someone cites a few contradictory cases. In this series of classificatory attempts Schneider addresses himself to a new task. He does not want to delineate new disease-entities (nor to split schizophrenia up into diagnostic sub-groups); he does not want to describe typical symptom-complexes which merge fluidly into each other and derive meaning from some concrete inner connection. He hopes rather to find unitary functional groups which go to make up normal as well as schizophrenic psychic life and the separate existence of which can only be recognised in the morbid state that assails them selectively. Hence Schneider dismisses the earlier attempts as 'an incessant effort to separate shifting syndromes and put them together again into disease-entities that were supposed to be biologically explicable'. Meantime he believes himself to be on the track of real biological elements. But he only makes a beginning. Do we not encounter endlessness once more in a new form? Schneider regards his formulation of the three complexes as the first signpost. On reading him I do not find his observations on them convincing. It is quite conceivable that they do not exist at all in the way he imagines.

The whole theory stands or falls with the main thesis of the three symptom-complexes and the corresponding function-complexes (functional groups), a thesis in which clinical observation and theory are closely interwoven. It will have to be left to future observations to determine whether the three symptom-

¹ e.g. R. Leonhard, *Die defektschizophrenen Krankheitsbilder* (Leipzig, 1936); cp. Gruhle, *Krim. biol.* (1937).

complexes have any existence as separable entities not only in a typological sense but as definite actualities with real differences. Proof can only be arrived at by statistical means as Schneider himself says (and this means the exercise of a methodological critique as to what can be counted and how the correlations are to be interpreted). Clinical acumen and clinical observation by themselves and as they have been applied hitherto cannot furnish any final proof nor can the references made by the thesis to phylogenetic developments, therapy, hypnagogic experiences, etc. Each of these references is in itself a possibility, but no matter how many uncertainties are amassed they can never become certainty. Among the clinical observations the experiences with work-therapy are of principal interest. Here alone some new kind of fact seems to have been obtained whereas the passive observation of symptom-complexes has not in itself provided us with any fresh sort of facts.

It is probably not by chance that in this theory of schizophrenic symptom-complexes facts are relatively few compared with the wealth of concepts brought forward for discussion. A *way of thinking* is here expressed; it emphasises its novelty and develops possibilities for research. It is pursued with the enthusiasm reserved for theories of a universal character. The demand is for the development of a 'biological psychiatry'. 'Biological' in this connection means an orientation to life as a whole not to any of its particular manifestations, whether somatic or psychic. Schneider puts it very well: 'There is no justification for the postulate that somatic changes have to be assumed right from the beginning of schizophrenia. It is a mistake to be too previous in assuming that the inexperienceable determinants of psychic function are to be equated with somatic determinants and it is again wrong to conceive these somatic determinants right from the start to be merely morphological, materially mechanical or at best a form of energy. One must shed the idea that the soma exercises some sort of global effect as it were on psychic events. The biological relationship between somatic and psychic events is altogether different from what we are now expected to think it is.' This criticism of Schneider's seems to me to be true but the question then arises what we are to understand by the term '*biological*'. Obviously it seems not to be what the science of biology takes as its subject; that is, those ever concrete and therefore particular matters which research can explore, but rather something which a philosophy of life would like to comprehend as a whole, something within which all particulars occur and from which they all derive. But this whole is no object for research, it is only an idea, a philosophical concept of comprehensiveness. It seems to me that the biology of this 'biological psychiatry' therefore expresses the drive of an idea, a philosophical tendency, which perhaps does not quite understand itself but as an object for scientific research it appears quite baseless.

Research when guided by an idea takes definite form only when it leaves the broad outlook and comes close to the facts. If it is true that symptom-complexes originate in disturbances of individual biological function-complexes, then the connection between the phenomena which at first sight appear

heterogeneous must be conceivable as functionally linked in the complex. The question is: How are we to grasp the connection of the symptoms in the complex? How do they hang together? The answer is missing. The fact of their *statistical correlation*—if this indeed could be established—would only become a scientific fact if one knew the way in which the symptoms themselves cohere together.

PARTICULAR COMPLEXES

The following presentation of particular symptom-complexes offers us only a selection of examples. It should give us some idea of the concrete value of the clinical pictures of symptom-complexes which we have had handed down to us. These have had some measure of success yet by no means all such pictures have prevailed, only those which have managed to impress themselves time and again.

(a) *Organic symptom-complexes*

This is the term we give to those symptom-complexes which we attribute to a gross physical process in the brain. Here belong the aphasic symptom-complexes and the types of organic dementia. A very marked organic symptom-complex is the Korsakow symptom-complex (amnestic symptom-complex).¹ It is found as a result of chronic alcoholism, after severe head-injuries, after attempted strangulation, as the result of cerebral senile processes (presbyophrenia) and also, but rarely, at the beginning of General Paralysis. Without any actual disturbance of the intelligence the complex itself can exist as a circumscribed disorder of *memory* and *registration* with the necessary sequelae (*disorientation*, the filling in of gaps with *confabulation*). Patients forget everything after the briefest interval; they fail to know anyone, the doctor or other patients; they repeat the same story and believe they have said something new. They greet the doctor afresh every time he approaches, even if he does this repeatedly. At the same time they can behave quite naturally in line with the situation, take a certain initiative, seem composed and it may happen that a lay person does not realise for a long time how disturbed the patient is. There is complete disorientation for time and place and particularly so as the previous store of memories gradually dwindles away, working backwards, that is from the present. The closer the remembered time is, the less it is remembered. Memories of early childhood and youth are still retained and it may happen that an 80-year-old woman considers herself a 20-year-old girl, calls herself by her maiden name, does not know about her husband and children and calculates out-of-date money as if it were still in use. In addition there is the conspicuous ease and facility with which these patients confabulate in place of their real memories. They will tell whole stories. These begin as

¹ Korsakow, *Arch. Psychiatr. (D)*, vol. 21. Brodmann, *J. Psychiatr.*, vol. 3. Liepmann, *Neur. Zbl.*, vol. 29, p. 1147. Kaufmann, *Z. Neur.*, vol. 20, p. 488.

confabulations of embarrassment to fill in the missing gaps but sometimes they are produced with great detail and much embellishment. Nonsensical and contradictory ideas are expressed without any felt need to correct them even when the contradictions are pointed out. It is also possible to make the patients accept suggested experiences as real. They have no clear awareness of their defect though somehow they feel vaguely uncertain.

A recognised organic symptom-complex is the *state of weakness following severe concussion* which in the first place produces unconsciousness that may last minutes or hours: irritability (attacks of rage, emotional incontinence), failure of memory and registration, inability to concentrate (distractedness), increased fatigability, headache, particularly on bending down and often localised, attacks of giddiness, sensitivity to heat and intolerance of alcohol.¹

(b) *Symptom-complexes of altered consciousness*

Earlier on we tried to differentiate *torpor*, *clouded consciousness* and *altered consciousness*. These three types of altered psychic life combine with countless other elements to form the numerous and varied clinical pictures which we describe as states of altered consciousness in the wider sense. As typical symptom-complexes we will select delirium, amentia and the twilight state. They all have in common—in varying degree—*disorientation*, a greater or lesser *incoherence* of psychic life and a more or less *clouded memory* once the condition has cleared.

1. *Delirium* is characterised by the patient turning away from external reality. He lives in a delirious world of his own which appears to him in illusions, true hallucinations and delusional notions. He is dominated by an anxiety which is often extreme and a drive for aimless activity. Comprehension is poor and even at best the level of consciousness is low. When left alone the patient is always on the verge of sleep which however is never fully achieved. When there is a maximum effort at attention the conscious level can be raised for a time and if this happens there is a relative improvement in comprehension and the delirious experiences recede.² Clouding of consciousness in the direction of a dream-like psychic life, a certain cohesion ('scenic illusions') and an admixture of torpor as well are characteristics of the delirious type of symptom-complex and distinguish it most readily from:

2. The '*amentia*' type of complex.³ Let us recall our schema whereby we illustrated the difference between associative connections and act-syntheses which superimpose themselves pyramid-wise on the former. We will then recognise that the central characteristic of this type is the *reduction of act-synthesis* to the lowest level of act-connection, which brings the inability to have any kind of fresh thought or idea, or comprehend any kind of connection.

¹ Saethre, 'Folgezustände nach Kopfverletzungen', *Dtsch. Z. Nervenkh.*, vol. 150 (1940), p. 163.

² Liepmann, *Arch. Psychiatr. (D)*, vol. 27. Bonhoeffer, *Mschr. Psychiatr.*, vol. 1.

³ Meynert, *Jb. Psychiatr.*, vol. 9. Stransky, *Jb. Psychiatr.*, vols. 4-6. Raecke, *Mschr. Psychiatr.*, vol. 11, vol. 12, p. 120. Strohmayer, *Mschr. Psychiatr.*, vol. 19.

The simplest act-syntheses which lead to orientation and comprehension of a situation are no longer possible. The patient is unable to make any kind of combination whatsoever. As a result the psychic life is, as it were, disintegrated into a host of fragments since particular acts of object-awareness appear haphazardly and follow the individual's old habits without any relationship to previous or subsequent acts. The rules of association, perseveration and a haphazard bondage to sense-perceptions alone prevail and govern the sequence of conscious contents mechanically. Chance objects that enter the field of vision are noted and named but immediately another idea replaces them aroused by some meaningless association: alliteration of words, rhymes and similar things dominate the content of talk. (This is distinguished from flight of ideas by the absence of intruding but none the less productive associations). The investigator's questions are thoughtlessly repeated and no answer given; chance ideas enter consciousness without rhyme or reason and change abruptly.

In the less severe states—vacillation is usually great and may reach as far as a transient lucidity—patients are aware of having changed. They realise that they cannot think, that the entire world has become a puzzle and so fall into a *wondering perplexity*: 'What can be the matter? What does it mean? Where then am I? Surely I am Mrs. G.?' The trouble is that if they have once understood the answer they have forgotten it again immediately. At the same time, particularly in the early stages, the patients feel *strange*, they feel the approaching mental illness and the big upheavals in their consciousness. These feelings increase into senseless anxiety, further aggravated by the added appearance of incoherent and rapidly coming and going *delusional notions and false perceptions*. These however are quite unsystematic and therefore can sometimes be of a pleasant and happy kind and sometimes of an indifferent kind, so that the mood keeps changing from one extreme to another.

The delusion-like ideas and false perceptions are of course just as incoherent as the actual perceptions of the real world and the ideas to which these give rise. Reflection and judgment become impossible and so there are not even the rudiments of anything systematic. The patients are passively subjected to false perceptions which constantly change in content and direction. There is no lasting basic mood nor any definite delusional trend nor yet any meaningful complex to give the contents some kind of unity. Patients refer the most extraordinary things to themselves: that a curtain is drawn or a spoon on the table. Objects are transformed in an illusion-like way; for example according to similarities. True hallucinations mingle in all this. Everything presses in on the patient; he has to concern himself with it helplessly and immediately finds himself exposed to something else. Particular contents, turns of phrase, fragments of psychic life recur again and again through mechanical perseveration, but this alone is not enough for us to assume there is any connection, even when, for example, the doctor is daily mistaken for someone else and always received with the same question.

In this type of 'amentia'-complex, even if the degree of disorder is severe,

we can still come across 'perplexity'. Jacobi already found in such cases that the patient could be 'roused into self-awareness for a moment if one appealed individually to his sense of personality'. Perplexity and this special awareness of one's own personality—transitory though it is—differentiates this type of complex from every delusional psychosis. Recovery from this state leaves behind only a *summary sort of memory*. Sometimes it is striking how some unimportant sense-impression from the time of the psychosis is remembered in great detail and very vividly. Usually however there is a complete gap in the memory which lasts for a long time.

3. The '*twilight state*' type of complex is characterised by 'altered consciousness' without any marked clouding, torpor or incoherence. The onset of the state is clear-cut and so is its termination. The patient, as it were, wakes up. Duration can be for hours or weeks. The behaviour during the state is on the whole relatively sensible, so that patients can go on journeys. But along with the purposeful behaviour there occur unexpected, surprising, isolated and sometimes violent acts. The patients are dominated by abnormal primary emotions (anxiety, dysphorias of all kinds) and by delusion-like ideas (of persecution, danger, grandeur). Since the patients are relatively orderly and sensible their violent acts are particularly dangerous: they may burn their heads in order to take their life, or set light to their houses during some fit of wild anger. Others may kill their room-mates. On waking there is usually no, or only partial, memory. The patients confront their state and their actions as something quite alien.¹ To illustrate this I will describe a state which came under our observation in the clinic, though most such states run their course outside hospital:

Franz Rakutsky, a 41-year-old driver, was seized on 16.5.08 by severe dizziness. He had to lie down, covered himself up in blankets and broke out into a heavy perspiration. Shortly afterwards he was able to go back to work. After 10 days he again grew exhausted, felt his legs tired and suffered greatly from giddiness. He then went to the medical clinic and was admitted; after three days he was found in the evening completely disorientated, excited and very anxious. Next morning during investigations in the psychiatric clinic he was quiet and accessible and with a pleasant smile and in matter-of-fact tones announced that he was a major and was called 'von Rakutsky'. He claimed to come from a Silesian aristocratic family. Two lieutenants Ahlefeld and Fritz, had brought him just now here to the Eagle Hotel in Karlsruhe. The people present were soldiers who had been billeted here. He said it was July 1885. When leading questions were asked he replied firmly that he earned RM.10 per day and in the course of further questioning he increased this to 100,000 RM. in a year. When asked, he lent me RM. 2,000 and wrote out an unreadable cheque which he said could be cashed at Bank K. in Karlsruhe. Several other suggestions were taken up by him immediately: he had been with the Arch Duke and was going to be made a general tomorrow. He owned several millions and had 30 children. When asked whether he was being persecuted, he shouted loudly, 'What—me—persecuted!

¹ Cp. Naef, *Ein Fall von temporärer, totaler, teilweiser retrograder Amnesie* (Diss, Zürich, 1898), Heilbronner, *Jb. Psychiatr.*, vol. 23.

I shall call out the whole regiment at once if anyone says anything like that. . . . He could not do small sums—‘ 6×6 are 20 — 2×2 are 6 ’—but he could say correctly ‘ 1 and 1 are 2 ’. After examination the patient sat quietly on a bench in the corridor.

In the afternoon of the same day he was completely orientated. He did not know he had spoken to me in the morning. He knew nothing of his stories and disbelieved them. Neither did he remember he had been in the bath but knew he had been brought here by two people and been treated in the medical clinic over the last few days for attacks of giddiness. When he was having coffee at 4 o’clock he said he suddenly felt light and strong. When he sat up in bed he had seen at once that he was in the mental hospital. He did his sums better but not yet quite right. On the next day the patient was fresh, gave quick and appropriate answers. Last night he thought he was not quite well although he knew what was going on but today he felt nothing was the matter with him. He could do all the arithmetical problems correctly.

The patient said that he had had similar disturbances before which lasted for some time (confirmed by the case history). He also said that he had been having more frequent giddy attacks and noticed he sometimes grew quite stiff for a few moments; he could not feel anything in his right leg or index finger and sometimes he fell asleep without wanting to. (Diagnosis: Hysterical psychopath.)

(c) *Symptom-complexes of abnormal affective states*¹

The exceptional variety of affective states can be classified in the first instance into the oldest of types, those of *Mania* and *Depression*, which gives us an example of the relatedness of opposites.

Pure mania is characterised by a primary, unmotivated and superabundant hilarity and euphoria, by psychic change towards a *flight of ideas* and an increase in possible associations. The feeling of delight in life is accompanied by an increase in instinctual activities: increased sexuality, increased desire to move about; pressure of talk and pressure of activity which will mount from mere vividness of gesture to states of agitated excitement. The psychic activity characterised by flight of ideas lends an initial liveliness to everything undertaken but it lacks staying-power and is changeable. All intruding stimuli and any new possibility will distract the patient’s attention. The massive associations at his disposal come spontaneously and uncalled for. They make him witty and sparkling; they also make it impossible for him to maintain any determining tendency and render him at the same time superficial and confused. Physically and mentally he feels that he is extremely healthy and strong. He thinks his abilities are outstanding. With unfailing optimism the patient will contemplate all things around him, the whole world and his own future in the rosiest of lights. Everything is as bright and happy as can be. His ideas and thoughts all agree on this point most harmoniously; to any other idea he is wholly inaccessible.

Pure depression is the opposite of this in every respect. Its central core is

¹ Johannes Lange, ‘Die endogenen u. reaktiven Gemütskrankungen u. die manisch-depressive Konstitution’, Bumke’s *Handbuch*, vol. 6 (1928).

formed from an equally unmotivated and profound sadness to which is added a retardation of psychic events, which is as subjectively painful as it is objectively visible. All instinctual activities are subjected to it. The patient does not want to do anything. The reduced impulse to move and do things turns into complete immobility. No decision can be made and no activity begun. Associations are not available. Patients have no ideas. They complain of a complete disruption of memory. They feel their poverty of performance and complain of their inefficiency, lack of emotion and emptiness. They feel profound gloom as a sensation in the chest or body as if it could be laid hold of there. The depth of their melancholy makes them see the world as grim and grey. They look for the unfavourable and unhappy elements in everything. They accuse themselves of much past guilt (self-accusations, notions of having sinned). The present has nothing for them (notions of worthlessness) and the future lies horrifyingly before them (notions of poverty, etc.).

The symptom-complexes of pure mania and depression seem extraordinarily 'natural' to us because of the thread of meaningful connection which runs through their individual features, but very many of these patients do not correspond at all to these 'natural' complexes which are only ideal types of construct. All those states which do not fully correspond to these ideal types are termed 'Mixed states'. We conceive of mania and depression as broken down into a number of components which in varied combination allow us to account for the complexity of the particular clinical picture. The question only is what components are in fact there and how should we regard them?

Kraepelin and Weygandt¹ broke mania down into the following components, *hilarity, flight of ideas and pressure of movement*: they separated depression into *sadness, retardation of thought and of movement*. From this, for example, they derived: hilarity plus retardation of thought plus pressure of movement = 'unproductive mania'; hilarity plus retardation of thought plus retardation of movement = 'manic stupor' and so on. The significance of this was mainly *diagnostic* (a way of conceiving puzzling states as curable phases in patients otherwise suffering from mania or depression). The procedure is ambiguous as elements of meaningful connection are simply put together as objective components of psychic life (able to be separated and mechanically combined): an example of the frequent confusion of psychological understanding with objective explanation.

For the time being, therefore, we must leave undecided the way in which we should conceive those components, which, in combination, can explain the variety of affective states. But a beginning has been made with the help of subtle analyses of certain psychological experiments² (e.g. the separation of retarded association from retardation of the determining tendencies). Most experiments however only give a more detailed description and a quantitative assessment of what has already been observed. Thus Guttman, for example, found in his tests of output and attention (asking the patient to eliminate certain letters in a text) that performance is

¹ Weygandt, *Über die Mischzustände des manisch-depressiven Irreseins* (München, 1899).

² Guttman, *Z. Psychother.*, vol. 4 (1912), p. 1. Storch, *Z. Pathopsychol.*, vol. 2. Birnbaum, *Msch. Psychiatr.*, vol. 32, p. 199. Lomer, *Z. Neur.*, vol. 20, p. 447.

reduced in mania and depression, that in both more training is needed than normally required and hence performance tends to improve in the second half of the test, while pauses do not have the same favourable effect as in normal people. He found that manics work quantitatively better but qualitatively worse than depressives and that depressives tire the most quickly.

In the analysis of particular cases one must in addition take the following points into account: 1. Besides the changes in mood there are other primary changes which vastly enrich the picture (de-personalisation, derealisation, irritability, psychic hyperesthesia, etc.); 2. The appearance of phenomena of *increased intensity* so that the picture is greatly heightened: melancholy retardation is turned into stupor; the hilarious flight of ideas is turned into muddled manic excitement; 3. The picture may be complicated by habits contracted by chance in the course of the illness or by residual elements from severe states which may appear as stereotypies or other ossified and lifeless phenomena (such as grimacing, specific movements, the content of the pressure of talk, etc.).

There are a number of symptom-complexes which may be explained as characteristic and of frequent use in psychiatric parlance ('querulant mania', 'nagging depression', 'wailing melancholia,' etc.), each of which differs in its own way from the 'pure' picture; among them *Melancholia* is one of the most characteristic and we will make it our example:

In this state the over-valued or compulsive depressive ideas become delusion-like. They are fantastically elaborated (the patients are the cause of all the misfortune in the world; they are thought to be beheaded by the devil, etc.). The ideas are believed even though the patient seems relatively sensible. Underlying the experiences there are a host of *body sensations* (which soon lead to hypochondriacal delusions: the patients are filled up to the neck with excreta; the food falls through the empty body right to the bottom); then there are the most severe forms of *depersonalisation* and *derealisation*: the world is no more, they themselves no longer exist, but still since they seem to exist they will have to live for ever (nihilistic delusions); finally there is extreme *anxiety*: the patients seek relief from this by keeping constantly on the move and indulging in a monotonous pressure of talk which almost becomes verbigeration: 'God, God, what will come of it all, everything is gone, everything is gone, what will come of it?' etc. Even when the anxiety and melancholy have lifted, the patterns of movement, the facial expression and pressure of talk seem to maintain an *ossified* state until—often after a considerable time—the phase finally abates and recovery commences.

By no means all illnesses which show a phasic course are to be classed as affective illness. Thus phases occur in which we find depersonalisation, compulsive ideas, pressure of thought or retardation without ever any primary affective change.

(d) *The symptom-complexes of 'delusional states'*¹

These have in common the features of schizophrenic psychic life. The per-

¹ 'Der Schizophrenieband', in Bumke's *Handbuch*, vol. 9 (1932).

sonality undergoes a profound transformation. The patient lives in an unreal world, which however has its own inner consistency. In both respects it seems as if some 'distortion' of viewpoint has taken place. The wealth of clinical states is even greater than in the two previous groups. Among the most striking types we will select the paranoid and catatonic symptom-complexes as our examples:

1. The *paranoid symptom-complex*¹ does by no means comprise every kind of delusion. The superficial definition of the old paranoia in terms of 'false and incorrigible judgments' has lost ground to the stress laid on the patients' subjective experiences as the source of the delusional formation (the delusions proper), whereas in other cases mood-states, wishes, and drives give rise to delusion-like ideas (over-valued ideas) which arise in more or less understandable fashion from them. The following groups of experiences seem to come together: Various agents in the environment catch the patient's attention and evoke *unpleasant feelings, which we have difficulty in understanding*. The patients are bothered by these feelings. Sometimes 'everything is so intense' or 'sounds hurt the ears'; sometimes they are irritated by the least noise or by anything that happens in their environment. They always seem to feel *that it is precisely aimed at them*. In the end the patients are quite convinced. They 'notice' that someone is talking about them, or that something is done to spite them. Once this is formulated into a judgment the 'delusion of reference' comes into being. Throughout all this the patient is dominated by a number of feelings which we try to define as expectation, restlessness, distrust, tension, feeling of impending danger, fearfulness or premonition, but we never seem quite to hit the mark. In addition there is a group of experiences which includes all those (passivity) experiences of '*made thoughts or having the thoughts withdrawn*'. Patients are no longer master of their train of thought. Lastly all kinds of *false perceptions* complete the picture (frequent hearing of voices, visual pseudo-hallucinations, body-sensations). At the same time we almost always find traits belonging to the neurasthenic symptom-complex. The state of acute psychosis does not develop with all this. Patients are always orientated, *sensible, accessible*, and often able to work. They continue to occupy themselves busily with the content of their experiences. Their intellectual labour produces well-thought-out systems and many explanatory delusional elaborations, the hypothetical character of which they themselves often recognise. In the end after a longish interval there are only the ossified contents left of the delusions without any of the peculiar experiences. Two cases are given here to illustrate this symptom-complex; one is a self-description, the other was arrived at by investigation of the patient:

(1) A merchant called Rollfink was sentenced for fraud but considered the sentence as thoroughly illegal and behaved as a 'querulant'. He had applied for a revision of the sentence but withdrew because 'other persons had interfered'. His

¹ Margulies, *Msch. Psychiatr.*, vol. 10. Berze, *Das Primärsymptom der Paranoia* (Halle, 1903).

mental state at the time, which in the course of many months fluctuated greatly, was described by him as follows: 'From the fact that I had undergone *such great injustice* while never losing my faith in justice nevertheless gave rise at first to the belief that I was *destined for something special . . .* but as I had no particular faith in this belief a nagging doubt arose along with anxiety and delusions. This state became worse towards evening and at night and my physical health was so affected that I often fainted, fell and lay unconscious for a considerable time . . . the delusional ideas constantly touched on religious grounds and were as follows: on one occasion I believed the end of the world had come; *some insignificant peculiarities* struck me as a kind of inspiration supposed to prepare me for the end of the world. For instance, the movement of a curtain in the wind aroused terrifying fears. The flutter of the curtain seemed a mighty licking flame which could cause a world inferno . . . at another time I thought I was a public martyr and felt I had to go through five martyrdoms before I could be released by death . . . for a time I thought the Catholic priest who visited me as the prison chaplain *had started the whole thing against me* to win influence over me. I also thought he was not disinterested in this and intended great religious reformations. On this occasion, however, what had to be done was that I, his pupil, should die the same death as the Master. Only if I willingly agreed to this would the matter be successful. On another occasion I believed I was going to share the same fate as that of Andreas Hofer. . . . Once a grey cat was crying all day long and making the most pitiful noises and I wanted to shoot it because it was possessed by the devil . . . once I composed an application to the Reichstag in which I asked for half a million marks . . . I expressed myself like a perfectly sensible person and for some moments I was that . . .'

(2) The patient called 'Kroll' was happily married with several children. Over the years he slowly changed. At first there were neurasthenic complaints, pressure on the head, insomnia and loss of appetite. When he got up he felt dizzy, his legs trembled and he felt a pull from his forehead to the back of his neck. The front of his head was quite empty as if there was nothing inside or as if he had hydrocephalus. In the morning he felt dazed and giddy so that he had to hold on to things. He could not hold on to his thoughts; his head went cold, his eyes were fixed, he had to stop still and his memory had completely gone. He said his powers of thinking were quite deteriorated. It was as if everything had been wiped away and he had only a glimmer of thought. He felt extremely uncertain and in addition unjustly jealous. He even reported an alleged lover of his wife to the police. He thought he was poisoned, going to be arrested and that people were after his goods; also that he was followed by the Criminal Police. He foresaw terrible poverty for himself and his family and he decided to kill them all but never carried this out. In his view everything hung together; there was a real hue and cry against him. He had a feeling that the whole world was conspiring against him. He instinctively saw an enemy in everyone, a criminal or a traitor. His workmates made ambiguous remarks about him and provoked him. This was all done on the sly but he realised quite clearly that it referred to him. During the night he heard a knock on the door, a noise in the cupboard and voices; he got up and shone a torch all over the house but could not find anybody.

After a time the patient settled down and went to work regularly but soon fell ill again. He heard voices, sat up all night and felt observed; his inner life tortured him 'while the body rests, thoughts are at work. I make fantasies with my eyes open; when I am asleep I hear everything.' One day we witnessed the following experience,

harmless enough in itself but psychologically significant: the patient saw some bed-linen on the kitchen table, a candle on the wardrobe and a piece of soap. He was extremely upset. He was very much afraid and convinced that all this referred to him. He could not say how he came to this conclusion. It was absolutely clear to him in a flash; it must concern him. He told me this spontaneously, showing signs of extreme restlessness. He was so frightened he nearly jumped sky-high. He did not know himself what it all meant. 'I know for certain that it refers to me'. (Where does it come from?) 'I don't know.' (What does it mean?) 'Well, that's what I don't know.' Then he thought he might possibly be mistaken, 'I have laughed myself at this belief; but at the moment I am completely off my head'.

Sometimes it comes about that, unlike the latter case where the paranoia stretches its feelers out in all directions, the delusion instead centres round a person, a thing, a purpose, and the content becomes systematised and of identical extent with the system. This centring round a single point is not characteristic, however, for the paranoid symptom-complex as it is for over-valued and delusion-like ideas.

2. The catatonic symptom-complex. The external characteristics of this complex are either *stupor* or motor excitement without any noticeable accompanying affect. The external signs appear in the contrasting forms of movement and immobility: either *verbigeration*, stereotypies and mannerisms or bizarre and frozen postures (Schnauzkrampf, etc.). We also find the contrasts of uninhibited resistance and uninhibited compliance, complete negativism and automatic obedience. These are interspersed with impulsive acts and explosive movements. The patients are notably unclean, smear their faces, drool, vigorously retain faeces and urine, spit, lick, beat, bite and scratch. If we assess these external symptoms in a simple, objective and unpsychological way, they appear as the final *most remote results* of innumerable psychic events: manneristic postures, verbal repetitions, stereotyped movements, grimaces, etc., are all so common in what are otherwise completely different psychoses that one can only consider these symptoms as a conglomeration of objective signs that are in no way pathognomic.

'Stupor' is the term for states in which the patients are generally motionless, do not talk at all and do not give any sign of psychic events nor do they react to any attempt to communicate with them. Patients will stand for hours in a corner, hide under the bedclothes, lie for weeks in the same posture in bed, or sit up in a peculiarly unnatural way, playing a little with their fingers on the blanket or with their own fingers. Among these external characteristics of stupor a number of very different states are undoubtedly included, for instance: (1) *perplexed retardation*, the wondering perplexity of many benign psychoses; (2) *depressive retardation*, simple cessation of all psychic function and, in the severest states of depressive stupor, of apperception also; (3) *catatonic stupor*, which sometimes appears as a flaccid stupor and at other times as a rigid stupor (muscular rigidity).

If in classical cases we try to approach the catatonic symptom complex *psychologically* we arrive at some very interesting observations but never at an unequivocal conclusion. These psychic states are just as puzzling for the psychologist as for the lay person. We do not know how these patients feel.

We have hardly any self-description. When patients—just at first—do describe themselves they use words reminiscent of meaningful states in our own existence but probably they can only be taken as analogies: 'I am so passive' . . . 'I cannot give what I would like' . . . 'I am so dozy', etc. If we try to describe the state we can only give an approximate impression since we lack any proper knowledge of it.

These patients have no insight into their illness even though they may be exceptionally critical and though there need be no delusions or hallucinations in the symptom-complex itself. Objective disturbances, negativism, stupor or motor excitement may be abundantly present without the patients apparently noticing anything. They may feel a general change or feel ill, but as to the individual event they find some other explanation: 'I blame myself', 'I can't believe it is an illness'. These are observations which people make at the beginning of the symptom-complex.

Here as in the later stages there is a disturbance of activity. Though comprehension, orientation and memory remain intact, disturbances of this sort manifest themselves where it is not a matter of some simple psychic event taking place but where normally an instant of activity is actually experienced, in thinking, in imaginative construction, in speaking, moving and writing. There is verbigeration in speech, scribbling rather than writing, coming passively to a stop, sudden interruption of movement, stiffness, breaking off in the middle of a sentence, speaking just as one departs, etc. These cannot be mere motor disturbances which, no matter how complicated they are, the patients can confront as something alien, something physical. These disturbances must lie at a much higher level in the psychic sphere. Nor can they be compared with the other quite different apractic and aphasic disturbances. Occasional utterances of the patients such as 'I cannot' are not to be evaluated as 'insights' because of their quite sporadic appearance. But they add to the enigma of the clinical state none the less.

If we equate activity with *the personality at this moment* in contrast to the basic personality (as consisting of the constant motives, instinctual drives, etc.), we might say that the basic personality (the character as such) is not affected by the catatonic symptom-complex, although it is affected by the illness, which is also the source of the catatonic symptom-complex itself; it is only the personality at this moment that is affected by the complex. We sometimes get the impression that the basic personality simply disappears but no other altered one takes its place, only that mechanical and momentary event which makes up the catatonic symptom-complex. This would help us to understand the absence of insight (the basic personality which could have this insight has gone). Sometimes in these states it looks as if the patient's psyche were like a dead photographic apparatus; the patient sees, hears, records and retains everything, but he cannot react, cannot take up an emotional attitude and cannot act. He is as it were psychically paralysed while remaining completely conscious. Sometimes he utters such things as: 'My thoughts are a

blank; I have no thoughts; not a thought in my head!' At the same time by no means all psychic events have become impossible. Observations such as the following can be made any day:

Miss O. sits up in bed perfectly still, quite unremarkable; she fingers a piece of cloth and perhaps from time to time glances to the side where the doctor is. If one talks to her she casts a sidelong glance, takes a deep breath, blushes, does not reply and does not even move her lips. And so it goes on for weeks. Then she is shown a letter from her mother and the letter is read out. She looks obviously interested in the letter, obviously listens but does not speak. When asked whether she would not like to write to her mother she does not reply; at the same time tears run down her cheeks which she wipes away quite naturally. Five minutes later the old picture has returned; she plays about with a piece of cloth and from time to time looks round quite expressionless.

A similar case of stupor did not react at all even when parents came to visit. As soon as they left the patient was seen to cry bitterly. These observations (of expressive movement, blushing, deep breathing, etc.) are borne out by measurements of blood pressure and the registration of other physical accompaniments of emotion; we find patients in whom the psychic stimuli provoke big fluctuations, e.g. in blood pressure, though we also find others who seem to remain empty of all reaction.

Catatonic symptom-complexes appear with a great variety of *intensity*. Where they are there to only a slight degree, patients cannot finish anything, stay in bed, keep combing their hair, carry on mechanically with some activity once they have started or stare into a corner emptily, etc. We cannot always distinguish these symptoms from similar and much more common manifestations of neurotic and depressive symptoms on the one hand and organic symptoms on the other. Perhaps there is one difference from depressive symptoms in that the catatonic symptom-complex initially has no retardation. In severer states a typical flight of ideas is produced, which becomes again quite incoherent with no discoverable kind of connection. In the severest states of all we meet the picture of meaningless motor excitement, the so-called 'furor', or fully rigid and inaccessible stupor.

The following self-description indicates the kind of subjective experience that takes place in a typical catatonic excitement:

'During the excitement my mood was not one of anger; in fact there was no special mood at all, only a purely animal delight in movement. It was not a malignant excitement as when you want to murder someone—far from it—it was something quite harmless and yet it was a compelling impulse, so strong that I could not have stopped myself from leaping about. I can only compare it with a wild horse . . . As for my memory during the excitement this was generally quite good but usually it did not go right back to the beginning. You are woken up, as it were, by external circumstances such as a cold floor and called back into the real situation. You are then orientated and see everything but you do not heed it and give free rein to your excitement. You completely ignore persons though you see and hear them. You take good care, however, not to fall . . . If checked and taken to bed, you are astonished at the suddenness, are offended and defend yourself. The motor equivalent is then

no longer discharged in jumping about but in lashing out though not in irritability . . . your thoughts are not concentrated. Sometimes in sensible moments you are aware of this but not always. You notice you cannot construct a single sentence . . . It occurs to me that the whole time was a total decomposition . . . there was no feeling of perplexity at any time nor of inadequacy. I did not see myself as disordered but the chaos had started outside, that was it . . . I had no feeling of fear . . . I still remember the somersaults in the bath, the clatter . . . I remember also my long speeches in the evening though I can't remember what I said. Particulars have gone from me completely . . . my ideas have strayed . . . all my ideas were so vague and pale and dim.' . . . Regarding his rigidity ' . . . the muscles did not get rigid by themselves . . . I tensed them up with all my strength' (Kronfeld).

§ 4. CLASSIFICATION OF ILLNESSES (DIAGNOSTIC SCHEMA)

We have detailed knowledge of particular phenomena, of causal connections and meaningful connections, etc., but complex disease entities remain an endless, inextricable web. The individual configurations of disease are not like plants which we can classify in a herbarium. Rather it is just what is a 'plant'—an illness—that is most uncertain.

What do we diagnose?—is a question that has been answered by practice in the course of time through giving names to individual symptoms, individual connections, symptom-complexes, causal relations, etc., until the idea of the disease-entity came to have a significance of its own for diagnostics—a significance that can never be final. Diagnosis is expected to characterise in a comprehensive manner the whole morbid occurrence which has assailed the person and which stands as a well-defined entity among others.

In designing a comprehensive schema of psychoses (a diagnostic schema) we want to co-ordinate all the viewpoints which have been separately discussed. But however we devise this we realise that it cannot work; that we can only make temporary and arbitrary classifications; that there are a number of different possibilities which account for the fact that different workers construct entirely different schemata; and that classification is always contradictory in theory and never quite squares with the facts.

Why then do we keep on making this vain attempt? In the first place we want to see properly what this idea of disease-entity has *achieved* in respect of the *over-all picture* of existing psychic disorders, and particularly where we have failed because it is the basic and radical failures which make us aware of the actual state of our knowledge. In the second place every *presentation of special psychiatry* requires some classification of psychosis as its base. Without some such schema it cannot order its material. In the third place we need a classification in order to *make statistical investigations* of a large case material.

(a) Requirements for a diagnostic schema

An ideal schema would have to satisfy the following requirements: It must be such that any given case would have only one place within it and every

case should have a place. The whole plan must have a compelling objectivity so that different observers can classify cases in the same way.

Such a schema would only be possible if every mode of psychic disorder could be classified alongside others as a disease of an exclusive nature and so give substance to the idea of a disease-entity. As this is not the case our ideal formulation has to be modified as follows:

Simple broad basic outlines must emerge clearly.

Subdivisions must be made according to their essential importance for the total concept.

Items which seem to be of the same order must appear on the same level of meaning (as to the meaning of the facts, of the concepts used and the method of investigation). Heterogeneous elements must be seen in clear contrast.

There should be no obscuring of what is still unknown. Contradictions should come clearly to light. It is preferable to have a decisiveness which provokes discontent than satisfaction with a pseudo-knowledge won by approximations and a purely logical arrangement.

When we design a diagnostic schema, therefore, we can only do so if we forego something at the outset. We abandon the idea of disease-entity and once more have to bear in mind continually the various points of view (as to causes, psychological structure, anatomical findings, course of illness and outcome) and in face of the facts we have to draw the line where none exists. Such a classification therefore has only a provisional value. It is a fiction which will discharge its function if it proves to be the most apt for the time. There is no 'natural' schema which would accommodate every case. Even the most experienced psychiatrist comes across a number of cases repeatedly which are new to him and which he cannot classify no matter what schema he applies (this was admitted by, for example, Gaupp and Wernicke).

(b) Outline of a diagnostic schema

There are a great number of such schemata.¹ However, there seem fewer differences between the more recent ones. Certain basic views have asserted themselves as the result of actual knowledge and there is perhaps a tendency in our times to accept the conventional norms. In the following schema I shall try to gather together the present-day basic viewpoints:

Group I. Known somatic illnesses with psychic disturbances:

1. Cerebral illnesses

Cerebral trauma

Cerebral tumours

Acute infections: meningitis, encephalitis lethargica

¹ Cp. Schloss, *Jb. Psychiatr.* (Ö), vol. 34, p. 152. Hartmann, *Jb. Psychiatr.* (Ö), vol. 34, p. 173. Römer, *Z. Neur.*, vol. 11. *Diagnosentabelle des Deutschen Vereins für Psychiatrie* (1933). J. H. Schultz, 'Vorschlag eines Diagnosenschemas', *Zbl. Psychother.*, vol. 12 (1940), p. 97.

Chronic infections: General Paralysis, cerebral lues, multiple sclerosis (?)

Vascular diseases: Arterio-sclerosis, embolism, cerebral haemorrhage

Hereditary atrophic system-diseases: Huntington's chorea, Pick's disease, Parkinson's disease.

Organic deterioration associated with age:

Inborn or early acquired mental subnormality resulting from cerebral processes—Inborn subnormality as brain-defect. Transitions from this to abnormal variations (Group III).

Senile regression: senile dementia, Alzheimer's disease. Transitions from this to abnormal ageing without specific disease process.

2. Systemic diseases with symptomatic psychoses:

Infections: Endocrine disorders (e.g. of thyroid origin: cretinism, myxoedema, Basedow's disease). Uraemia, eclampsia, etc.

3. Poisons:

Alcohol (acute alcoholic intoxication, chronic alcoholism, delirium tremens). Morphine, cocaine, etc., carbon monoxide, etc.

Group II. The three major psychoses:

1. Genuine Epilepsy.
2. Schizophrenia (types: hebephrenic, catatonic, paranoid).
3. Manic-depressive illnesses.

Group III. Personality-disorders (Psychopathien):

1. Isolated abnormal reactions that do not arise on the basis of illnesses belonging to Groups I and II.
2. Neuroses and neurotic syndromes.
3. Abnormal personalities and their developments.

(c) *Explanation of the schema*

1. *Characteristics of the three Groups:*

(aa) The diseases in Group I are known somatic events. In this Group the urge to find 'real disease-entities' is satisfied but the Kahlbaum-Kraepelinian idea of disease-entity becomes coincident here with cerebral processes and somatic entities. In default of their original idea the unitary biological process with a well-defined cause is taken as sufficient to form the basis of a disease-entity.

(bb) Group II includes both the mental and affective disorders which remain as the chief big problem for psychiatry. To this group belong the vast majority of mental hospital patients. At present they are classified into three major psychoses: convulsive disorders which are not due to any known somatic process (epilepsies), schizophrenia and the manic-depressive disorders.

These three functional psychoses have four points in common. *In the first*

place their study gave rise to *the concept of disease-entity*. They become apparent only to an approach which goes for the psychobiological event as a whole. This special approach to the whole is negated by any narrowing down to a single phenomenon, be it a somatic or psychic one. Hence exploration of these major psychoses stays close to *the idea of the disease-entity* rather than tying itself to a concrete, somatic process as in Group I. When General Paralysis was taken as the model for a disease-entity this was an obvious misunderstanding of the idea.

In the second place the cases which belong to this group *cannot be subsumed under the disorders of Group I, nor under those of Group III*. One must, however, assume that many of these psychoses have a somatic base which one day will be known. Should this happen the disorders of Group II would move over into Group I. The epileptics in particular come close to organic disorders as also do the cases belonging to the schizophrenias where the character of the illness is thought by many psychiatrists to be almost certainly somatic and cerebral. Last of all and most disputable are the cases of manic-depressive disorder, which indeed are somehow somatic too, but up to now there are no anatomical cerebral findings (which are common enough in schizophrenia though uncharacteristic and by no means universal) and they must be much less of an intrusive event than they are in schizophrenia.

We may question whether it is not sufficient to classify the mental illnesses into organic disorders of somatic origin on the one hand and variations of human existence on the other, in which case all the illnesses of the second intermediary group would either have to belong to Group I (and probably this would be the majority) or they would have to be ascribed to Group III as particularly severe variations. Or we may ask whether the middle Group II does not really exist in its own right, in which case it would not be a hidden as yet unknown somatic aetiology that characterises this group but something specific, peculiar to man and something which would have to be recognised in its own fashion much more clearly than we can do today. This basic question cannot be brushed aside, particularly when we come to schizophrenia. The somatic findings are in favour of its organic somatic character, so are the obviously severe, morbid somatic states which appear in metabolic catastrophes and febrile episodes, the similarity of many symptoms found in mescaline intoxication with those in acute schizophrenic states and the general prejudice that all illnesses must in the last resort be somatic. *Against this*, we may note the profound psychopathological difference between, for example, General Paralysis and schizophrenia, between the crude organic destruction and the 'distraction of mind', the cessation of organic phenomena as the process advances, the absence of somatic findings in many cases and the unlikelihood that paranoia, for instance, should be based on the same principle as catatonic illness with acute febrile episodes.

The nuclear cases of the three major psychoses in Group II form perhaps something *entirely unique* in pathology. We are concerned with several modes of the organism in its totality, with events which are simultaneously somatic and psychic in character without the one taking precedence over the other. We cannot find any anatomical focus and no somatic cause nor any psychic cause. The totality of the

phenomena is linked together in an unending complexity both in the individual basic features as well as in their combination. The schizophrenic constellation is particularly fascinating and psychologically interesting. There is no underlying destructive organic process nor is the 'machinery' smashed up as in General Paralysis, but it undergoes change in a remarkable and alarming way though it goes on working. These diseases have a special productivity. They assail the individual like other illnesses but in this case the individual becomes one with the illness in a way quite different from the first group. If we want to characterise the absence of crude destructive processes in schizophrenia we can speak of psychic processes or biological processes. We can circle round the riddle with words such as these but we do not solve it.

In the third place these three psychoses are not exogenous but endogenous psychoses. Heredity is an important cause. The hereditary link is a concrete reality. But these hereditary psychoses are not all clearly of the same order and present us with a confusing manifold since we do not know what is inherited—the specific gene and gene-combination. All we have for the time being is the classificatory concept of hereditary psychoses.

In the fourth place they all lack an *anatomical cerebral pathology* which would demonstrate the nature of the illness. In the manic-depressive disorders no anatomical pathology whatsoever exists; in the schizophrenias there are repeated findings but they are non-specific and not universal; in the epilepsies there are anatomical findings due to seizures (in the Ammonshorn and elsewhere) but there is no anatomical correlate of the disease-process.

To understand what these three major psychoses mean we have to know their development in the history of science. Kraepelin took the psychological differences between natural and schizophrenic life into conjunction with the different course which the illnesses took (whether progressive and incurable or phasic and curable) and he distinguished the second and third of the major psychoses in a way which is valid to this day:

Schizophrenia. A process where something irreversible takes place and which is therefore incurable—symptom-complexes of schizophrenic psychic life—a trend towards 'dementia'.

Manic-depressive disorders: Phases, attacks and periodic illness with complete recovery—symptom-complexes of mania and depression and mixed states—outcome without 'dementia'.

The epilepsies are fundamentally different from the other two major psychoses and there are fewer transitions to these latter than there are between schizophrenia and manic-depressive disorders even though seizures can occur in the schizophrenias.¹ There is by definition no epilepsy without convulsions. The epileptic constellation is further characterised by other kinds of attacks: (absences, petit mal), by equivalents (dysphoria) and by epileptic person-

¹ Esser, 'Die epileptiformen Anfälle der Schizophrenen', *Z. Neur.*, vol. 162 (1938), p. 1.

ality change (viscosity, slowing down, explosiveness, dementia).¹ Although the psychological phenomena are important, definition in practice does not depend at all on a psychological whole as is the case with schizophrenic psychic life or the mood-states in manic-depressive illness which can be characterised clearly in a psychological sense.

The three major psychoses of this Group are therefore not all of the same order. They are not three different modes, events or vital transformations belonging to the same category but have been conceived on three entirely different principles.

(cc) In Group III the classifications attempted by various investigators show the least agreement. Diagnostic efforts have got lost in the establishment of individual facts, mechanisms, states and characteristics, etc.

In our own review we have emphasised *reactions*, i.e. reactive states and modes of behaviour on the one hand and on the other *types of personality* as they have developed historically. *Intermediary to these* we set the host of phenomena which we term neurotic, hysterical, psychasthenic or neurasthenic, etc. To this middle set of types we ascribe from the viewpoint of the *individual objective symptoms*: organ neuroses, tics, stammers, enuresis, habits such as nail-biting, behaviour disorders such as shyness, etc.; from the viewpoint of a *disorder of instincts*: sex perversions, compulsive acts, abnormal masturbation, addictions, etc.; from the viewpoint of certain *freshly arising modes of experience and varied states*: compulsive neuroses, phobias, anxiety neuroses, etc.; and finally from the viewpoint of *particular mechanisms*: hysterical, psychasthenic symptoms, etc.

It is difficult to bring any diagnostic order of practical value into shifting phenomena which continually keep merging into each other. Since for the psychotherapist the reality of such phenomena consists predominantly in the resistance they offer to cure, J. H. Schultz tried to get extremely radical criteria for their classification, drawing on the existing difficulties and the resistance itself. *In the first place* he differentiated between the *generally neurotic* personality and the *individual neuroses*, which occur in relative isolation (and then structure themselves along their own peculiar lines and persist in the same person for a long time). He was led to do this because so many heterogeneous features may appear in one and the same neurotic, and they not only differ in quantity and quality but constantly change. *In the second place*, because some characteristics, neuroses and reactions resist treatment and withdraw themselves from any kind of social integration while others show either a spontaneous loss of symptoms or do so with psychotherapeutic help and, as life goes on, change in the direction of adjustment, he differentiated the *curable neurotic personalities* from those suffering from *incurable personality-disorders* (psychopathic personalities). The diagnostic criterion is therapeutic success. Both classifications seem to me—as no doubt to Schultz himself—effective simplifications for practical purposes. Where we have to deal with persons everything needs a name and where we

¹ Gruhle gives some clear and discriminating information on the epilepsies in the *Handbuch der Geisteskrankheiten*, of Bumke, vol. 8 (1930), p. 669, and *Neue deutsche Klinik*, 7, Ergbd. (1940), p. 291.

are without knowledge we have to behave tentatively as if we had the knowledge. In practice we think it intelligent and legitimate to touch depths, which are unknown and generally inaccessible, by making use of a hidden tautology (the incurable springs from incurability). In the methodology of metaphysics tautology is one of the basic patterns. In psychopathology we cannot avoid it if we want to express the therapeutic experience which evades generalisation. But whether the patients, when one has unsuccessfully tried to treat them, have anything else in common than the therapeutic failure is doubtful (it is a valid principle, moreover, for all Medicine that classifications of disease and diagnostics '*ex juvantibus*' are only misleading). Schultz however accepts the consequences of his basic classification. He considers there is a distinction between hysterical psychopaths (personality-disorders) and hysterical personalities. He therefore separates out within the whole field of the neuroses (including disorders of instinct, immaturity, pseudologia, etc.) those persons who are incurable psychopaths and those who are curable neurotics. The same phenomena (neuroses, reactions, character-trait)s can be symptoms of the one or the other. He has made a classification of the neuroses from the point of view of the depth at which they are rooted in the personality. He differentiates *exogenous neuroses* (essentially conditioned by something external, readily curable by deflecting the harmful factor through supportive manipulation of the social environment); *psychogenic marginal neuroses* (for which somato-psychic conflicts are responsible), *structural neuroses* arising from internal psychic conflicts and finally *nuclear or core-neuroses* founded in the personality itself and its 'auto-psychic' conflicts, only curable very slowly and with much difficulty through personality development. In brief: whatever is cured through manipulation of the social environment is an exogenous neurosis; whatever is cured by suggestion, training or autogenous training is marginal neurosis, and whatever requires further catharsis and persuasion is structural neurosis, but where depth-psychology (Freud, Jung) has to be called on to change the person himself and by a lengthy process effect cure then we are dealing with nuclear neuroses founded in the personality, where the person has not so much got a neurosis but is rather himself a neurotic. However a diagnostic which rests on such ideas is a doubtful one. The viewpoint on which it is based is a comprehensive one, but again '*ex juvantibus*'. For the moment it seems to throw light on matters but such an approach is hardly capable of providing investigation with concrete results because the categories can be applied arbitrarily with wide variation, depending on the intensity of the exploration of the patient as a whole. In the last resort probably all neuroses point to a nuclear neurosis and even the severest neurosis will still allow simple exogenous neuroses to arise.

(dd) *The three main groups of disorders are essentially different from each other.* They have no single unifying and comprehensive viewpoint from which any systematic ordering of these three disease-groups could emerge. With each group we have a different point of view—somatic entities, psychological and developmental entities and variations of human nature—and with this the concept of disease itself changes. In each group the idea of disease-entity remains incomplete in favour of a particular point of view which becomes normative for that group.

2. *The meaning of the diagnosis in the three groups.* In Group I exact

diagnosis is possible. Here there are no transitions between disease and health. The diagnosis is either General Paralysis or it is not. The diagnosis is a somatic one. In Group II, we can still draw a sharp line between what is health and what is not, but the different psychoses are not clearly delineated from each other. Basic concepts regarding the extent and limits of the psychoses vary. The diagnosis is a psychological one (in the case of the epilepsies the diagnosis is made on the convulsive attack linked with a psychological diagnosis). In the majority of cases a diagnosis of one of the three psychoses is clear, but the minority of cases where this is not so is substantial. In Group III there is no sharp line to be drawn between the types nor is there a decisive borderline in every case between what is healthy and what is not. A diagnosis remains typological and multi-dimensional, including, to say the least of it, a delineation of the kind of personality as well as the character of the particular findings, states and mechanisms involved.

It follows that diagnosis proper is only possible and necessary in Group I. With Group II the majority of cases will fall by consensus of contemporary psychiatric opinion into one of the three major psychoses but the diagnosis has got no specific alternative character. Either it is clear as a whole or the differential diagnostic discussion over details determines nothing. In Group III the only thing which is of value is an extensive analysis of the case, in its phenomenological, meaningful and causal aspects and a precise grasp on the personality, its reactions and life-history and its more weighty developments; but apart from some separation into a great number of type-groupings, diagnosis is an impossibility.

Hence in Group I our diagnosis is according to the *classes of diseases* to which a case either does or does not belong. In Group III it is according to *types* many of which can be found together in the same case according to the particular point of view. In Group II we have classes of disease in mind although their definitive causes and nature are not known, but in fact one is always confined to types.

According to the kind of diagnosis possible—which is only definitive in Group I and in the others only refers to the major psychoses and to the groups as a whole—we find a *difference in the weight of the significance of the diagnosis*. In Group I it brings precise concepts because of the definite nature of the knowledge. In the two other groups it only leads into the wide areas of the major psychoses, which it is true form a basis for the formulation of further problems from distinctive viewpoints, but the decisive activity remains the analysis of the individual case from every point of view.

3. *Diagnostic hierarchy of symptoms in the three groups.* The principle of medical diagnosis is that all the disease-phenomena should be characterised within a single diagnosis. Where a number of different phenomena co-exist the question arises which of them should be preferred for diagnostic purposes so that the remaining phenomena can be considered secondary or accidental. For this reason we take our stand on the basic idea that the phenomena which

occur in their own right in the *subsequent* groups of our schema *also occur in the previous groups* and are then devalued either to symptoms of the other basic process or to unimportant phenomena. Thus neuroses commonly occur in organic illnesses; sometimes the initial picture of schizophrenia or manic-depressive illnesses appears as purely neurotic, and compulsive illness does not only occur as an essential in personality-disorder (psychopathy) but as an accidental in schizophrenia, encephalitis lethargica, etc. Further, we speak of neurotic phenomena superimposed on the basic processes. Thus in diagnosis the *previous group always has preference* over the latter. We diagnose neurosis and personality-disorder (psychopathy) when we have no evidence of a process and no physical symptoms of any organic illness which could explain the whole. We diagnose 'a schizophrenic process' as long as somatic signs are absent. Where such signs exist we think first of everything in terms of the physical process, perhaps encephalitis. The position can be illustrated pictorially: the disease symptoms lie on different superimposed planes; the neurotic symptoms are on top (psychasthenic, hysterical), then come the manic-depressive, then the process symptoms (schizophrenia), and finally the organic (psychic and somatic) symptoms. The lowest plane reached by examination of the individual case decides the diagnosis. What at first seems to be hysterical turns out to be multiple sclerosis, a neurasthenia turns out to be a General Paralysis, a melancholic depression a process and so on.¹

This hierarchy in the diagnostic value of symptoms coincides with a narrowing down in significance of what is diagnosed. In Group I this is just one element in a whole life, a somatic illness, which represents only a single circumscribed fact among all that embraces the total personality when conceived eidologically and in terms of its life-history. Inversely in Group III, when all the viewpoints have been taken into account, the revelation of the whole person is to a large extent realised, although each individual factor may be a symptom of processes that belong to Group I.

4. *Psychoses in combination (Mixed psychoses)*. The idea of disease-entity leads one to expect that *no more than one illness can be diagnosed* in any one person. *Psychoses in combination* are supposed to be an exception. Certainly a single diagnosis applies in the majority of cases only to the organic cerebral processes although even here true combinations exist; for instance, General Paralysis plus tumour, General Paralysis plus cerebral lues, etc. In this case two classes of disease are combined. On the other hand it is not only an assumption but a common finding that any given case draws its specific character from a number of types. Thus in the same individual one may find a number of personality-types, a reaction, neuroses, etc. Where a schizophrenic process is present we duly suppose that we should hold it responsible for all the symptoms, but that is a presupposition. In principle we cannot deny that the three major psychoses of Group II are related in some way which cannot be

¹ Kurt Schneider, *Psychischer Befund u. psychiatrische Diagnose* (Leipzig, 1939), (2nd edn., 1942).

compared with the well-defined illnesses of Group I nor with the almost arbitrary overlap of types in Group III. All the notions we have so far constructed are unsatisfactory. The clear differentiation of disease-entities fails when it comes to the dilemma of unresolvable mixed cases; but the notion of a gradual mingling and combining of many unknown genes comes to grief when faced with the clear delineation of proto-types which are the majority; and the return to the idea of a unitary psychosis for our Group II would be impossible. The picture presented by the psychological phenomena in their classic forms, course of illness, hereditary relationships, and in all their somatic, physiognomic, constitutional and personality aspects cannot be subsumed under a unitary and all-inclusive concept. This could only be done by the forceful exclusion of certain facts or by creating some blurred picture where everything is in transition into everything else. So far we have not achieved any comprehensive relationship of the facts to the real and essential nuclear entities as such. The three major psychoses remain enigmatic in their connectedness as in their differences. The most experienced psychiatrists in particular have asserted this repeatedly: what epilepsy really is and what the other two major psychoses may be seems to them to have become more, not less, obscure although concrete knowledge of particulars in this field has enlarged.¹

In principle we cannot deny that a process may combine with a manic-depressive disorder or that an encephalitis may combine with a schizophrenia.²

Gaupp writes:³ 'It is common knowledge that in a phasic illness, once the excitement has died down, there is complete recovery with no demonstrable defect; there is full insight and no personality deterioration but yet the patient may still show schizophrenic deterioration later on. It is also common knowledge that where there is a clinical picture reminiscent of a catatonia or a schizophrenic dissociation there is quick recovery but the trouble will often return again in the same form and again there is recovery without ever any deterioration. We also know the old circular insanities which in the end become incurable and the paranoid who never deteriorate, such as Strindberg.'

These are the cases which call in question the radical difference between schizophrenia and manic-depressive psychosis although this seems to be there in the majority of cases. The explanation of this by various combinations of genes or by the mixing of the genes of the two hereditary psychoses might be a possibility but we are as far away as ever from any certainty.

5. Fruitful significance of the discrepancies. The diagnostic schema has the most scientific interest where it shows discrepancies. There is a starting-point for further question with those cases which belong nowhere; for example, the

¹ Regarding psychoses in combination; Gaupp, *Zbl. Nervenhk.*, etc. (1903), p. 766. Sven Stenberg, *Z. Neur.*, vol. 129 (1930). Combinations of epilepsy and schizophrenia; Krapf, *Arch. Psychiatr. (D)*, vol. 83 (1928). Glaus, *Z. Neur.*, vol. 116. Minkowska, loc. cit. pp. 144 ff.; pp. 165 ff.

² Regarding psychoses in combination; Gaupp, *Zbl. Nervenhk.*, etc., (1903), p. 766. Stenberg, *Z. Neur.*, vol. 129 (1930).

³ Gaupp, *Z. Neur.*, vol. 165 (1939), p. 57.

disease-groups with no appropriate place or every instance where a particular case or group of cases can claim a number of places in the diagnostic schema. Theoretically it is unimportant whether such cases are rare or very frequent but it may be of practical significance. It is thus that the whole question of the definition of mental illnesses is kept alive; for instance, by the so-called *paranoia*,¹ which from the nosological point of view is of fundamental importance, though such cases occur extremely rarely. Kraepelin defined paranoia as 'an insidious development from inner causes of a lasting and unshakeable delusional system which continues while clarity and order in thinking, volition and action are entirely preserved'. The problem whether such cases really do exist has been decided in the affirmative by a few people. There are in fact perfectly sensible persons with an elaborate delusional system who have been under observation through their lives for decades. These cases have led to the discussion of almost every principle of disease-formation, as a consequence of the difficulty of finding a place for them in any diagnostic schema. Transitions seem to take place on the one hand into personality-development and on the other into a schizophrenic process. The statistical investigation of the family circle has revealed a strong correlation with hereditary schizophrenia (Kolle). In face of the tendency of most workers to subsume the paranoics elsewhere and let them disappear as a special group of their own, Gaupp retains the whole concept of paranoia (particularly in view of his own case 'Wagner' although the patient's great-uncle had been a schizophrenic). He does this, I think, under the influence of an intuition derived from real observation. He holds the last ditch, as it were, for a problem which would disappear as a problem if one allowed the general levelling of it into the body of the main disease-groups. The problem is not solved but there is a preservation of wondering and questioning. Gaupp writes: 'If I found Wagner more understandable and had more empathy for him than for many other deluded patients it was because he was not schizophrenic but a paranoid and because I was privileged to get to know a person and his whole life-story, down to the last recesses of his mind and because he showed me he had a rare power of self-observation and a rare ability to present his experiences; also because he reposed a rare confidence in his doctor throughout the whole quarter of a century during which I knew him.'

(d) *Statistical investigations with the help of diagnostic schemata*

One main reason for the designing of diagnostic schemata was the statistical requirements of institutions, polyclinics and medical practice. Why were such requirements necessary? In the first place to obtain some objective assessment of the clinical material for administrative purposes. In the second

¹ Critical summary: Joh Lange, 'Die Paranoiafrage' in *Handbuch der Psychiatrie* of Aschaffenburg (Leipzig and Vienna, 1927). F. Kehrer, 'Paranoische Zustände', Bumke's *Handbuch der Geisteskrankheiten*, vol. 6 (1928). Later fruitful investigations of Kurt Kolle, *Die Primäre Verrücktheit* (Leipzig, 1931). *Über Querulanten* (Berlin, 1931). 'Über paranoische Psychopathen', *Z. Neur.*, vol. 136 (1931), p. 97. The central case is Gaupp's Wagner (see Ref., p. 680).

place to enable the different institutions to compare basic trends in their actual material. In the third place to control the current over-riding concept and test its validity by application and in the fourth place to achieve some starting-point for research; if one wants to investigate a problem one must be able to lay one's finger on the relevant cases from amongst the vast material of the case-histories.

The problem of method may be briefly summarised as follows: What does one want to count? The case-material as a whole. According to what criteria? According to age, sex, origin, etc., and according to numerous ascertainable particulars—but here we never come to an end. We want to count according to what is essentially the entirety of the disease-phenomena—that is according to the disease-entities. But if there are none? According to what do we then count? According to comprehensive concepts that lie closest to disease-entities. Since the former, however, are often of a multiple and heterogeneous character, how are we to get a meaningful schema whereby we can count? We can only achieve an illogical and inconsistent schema which arises from the mutual influence of what we can grasp in fact and what we happen to know at the time. If the mass of our patients are viewed and compared according to the diagnoses of their illnesses we shall have to accept many mistakes because it is clear that a schema of diagnoses if it is entirely complete and applied without exception will only refer to the concrete cerebral diseases, the commonly known intoxications and the somatic psychoses; in fact to everything that is in Group I. In addition we can only find concordant ideas in respect of the main groups as a whole, and in the case of Groups II and III only to a certain extent and never completely unequivocally. The more subtle differences fluctuate between quite extensive margins.

It is therefore unavoidable, though hardly a justification, that we want to make a schema for 'practical' purposes which is relatively 'usable', and that we aim at combining various points of view to bring about a compromise between the various schools and their differing conceptions. Wherever what is being counted is not identical, statistics must rest on insecure grounds. It is therefore understandable that we are always making fresh efforts to construct a diagnostic schema although we never seem to find one that is completely satisfactory.

Let us recall the *demands* one makes on a diagnostic schema. Firstly diagnostic schemata must be *logical*; that is, they must contain clear divisions or else plain enumerations. The mixing of different points of view is confusing and the schema can then never be kept clearly in mind (but in the case of our own schemata it is just on the lack of clarity, logic and elegance that we rely, so far as we are after general knowledge and want our material to be concretely felt). Every diagnostic schema must remain a tiresome problem for the scientist.

Secondly statistics can only be applied meaningfully *when every investigator identifies and counts the data in exactly the same way*. When this is not the case, as with the psychoses and types of Groups II and III, we can only hope that in view of the considerable variations in the material as defined *some*

common nucleus will be discovered, so that investigations which make use of cases selected from clinical material may have a chance of finding in it what they are really after.

Thirdly in a diagnostic schema every case should appear only once in the place to which it belongs. Hence only that can be given a heading in the schema which is definitely there in the individual, either there or not. When this is not possible there should be no resort to statistical calculations. If the diagnostic schema fails other schemata must be built in which every case may appear as often as one likes according to the varying point of view. All the possible kinds of data can be enumerated but we are no longer enumerating diseases.

The statistics of case-material arrived at with the help of diagnostic schemata prove the *starting-point for valuable investigations*, particularly in genetics, demography and sociology and in special psychiatry with its descriptions of disease. With every investigation these statistics are only the starting-point. All the time they require further fresh information that can be statistically elaborated.

How productive and informative statistical work respecting certain cerebral processes can be is shown in the investigations into General Paralysis.¹ These covered its course, the period between infection and onset and its association with age, certain social groups, etc.

Institutional statistics and the diagnostic schemata they use may be followed through for decades and this gives an instructive picture of the state of our scientific knowledge, of the extreme fluctuations in the ruling concepts and our considerable uncertainty. However, it also shows the tendency towards an increasing common acceptance of categories. Conventional procedure is becoming enriched with actual knowledge and a more critical awareness.

¹ Arndt and Junius, *Arch. Psychiatr.* (D), vol. 44. Dübel, *Allg. Z. Psychiatr.*, vol. 72 (1916), p. 375. Meggendorfer, *Z. Neur.*, vol. 63, p. 9.

CHAPTER XIII

THE HUMAN SPECIES

(EIDOLOGY—EIDOLOGIE)

(a) *The idea of the Eidos*

The dissimilarities among men are biologically founded: mankind differs according to sex, race and constitution. In view of these facts, which apply to the whole of humanity, we are faced with the following problem: Is the vast manifold of individual differences only the consequence of equally manifold but differently distributed individual causes—that is, are people mere aggregates of some arbitrary mixture of elements? Or are there a limited number of complex unities which necessarily co-ordinate the manifold variations and make them mutually related members of certain comprehensive forms of human-kind? The principle of such complex unities would no longer be simply one causal factor among others but something that was an essential feature of humanity. Individual factors it is true can affect all functions, all the modes of human experience and behaviour, but they still remain individual factors, one alongside the other. It is the *idea* (methodologically subjective) of a complex unity which guides our conception of the *Eidos* (confronting us objectively) in the building-up of the body-psyché unity into a structural whole of a substantial nature, in which all the individual factors are held together, set in order and modified. A biology of personality would like to see this wholeness of the human being anchored in the vital ground where there are only a few broad basic forms as variants.

This alternative—man as an accidental aggregate of individual factors or as an original specific whole—is not a true alternative. There are rather two heterogeneous planes of research; on the one the rational and ultimately always mechanical mode of thinking has validity and on the other there prevails this intuitive grasp of forms under the guidance of ideas. But the scientific realisation of the idea-guided glimpse of complex unity depends on the rational analysis of the elements. This creates a movement of knowledge between the two in which we must guard against errors in both directions. It is wrong to think that analysis into elements can exhaust the object and it is equally wrong to think that the whole as conceived is by itself a factor which we could get to know and manipulate as such.

Hence if we ask: is the whole an entity in the form of a finite series of diverse entities, the answer has to be: there is such a whole as an idea but not as a finite series of any existing entities which we know to be such.

We can also ask are the principles of the complex unities nothing else perhaps than individual findings turned into absolutes because they can mould

the multiplicity of psychic-somatic phenomena so well? Or are these principles, in contrast to individual findings, principles in their own right; that is, principles of the whole which in themselves cannot be in any way simple particulars? The answer then has to be: the former is what we always find if we apply a causal analysis—when something of the sort is found (e.g. certain sexual hormones with their physiological and morphological effects), the finding is no longer the complex unity that was analysed. The latter issue, however, is always there waiting on the fringes of the causal analysis.

What waits there on the fringe are the principles of the complex unities, principles that have been derived from ideas, and cannot themselves be demonstrated. In the previous chapters everything that could be directly demonstrated was discussed in respect of its basic forms. Now we add nothing that can be directly demonstrated but something that can only be pursued by means of ideas and grasped indirectly through the pattern of the particular.

It lies then in the very nature of our material that while we pursue the whole we always only grasp it through the particulars. The whole evades our causal analysis and remains the guiding idea. It never becomes an object which our knowledge can possess.

For this reason the present chapter cannot bring us anything which we do not already know or could know as a particular by one method or another. What is fresh is this guidance by ideas as virtual points of approach. As we are guided by these ideas we not only see with a special clarity the developing relatedness between the many particulars but we put problems in a new way and discover particulars which otherwise would have escaped our notice and which can be established as such by the methods previously discussed.

What we are seeking through this idea of the whole we would like to term the *Eidos of Man*.

(b) *Sex, constitution and race*

The human being, as a human being, has it is true the same essential, basic structure whether it is male or female, mongol or white, and whether it is small and fat or long and thin. These differences are however such that they cannot all exist together in any one individual. The person must be either one or the other. Or he may be a third thing, something in between, a mixture or what we call a transitional form, something which, depending on the context of the individual vital destiny and rooted in it, may be inferior, degenerate or decadent or something of value which enlarges and harmonises life and brings development. Accordingly he either earns the name of hybrid, mongrel, trash or is forced to prove himself as a full human being with heightened possibilities.

If we take the essential differences as a whole, the vital patterns of our human life, and reduce them to their basic modes, we inevitably proceed once more from the particular findings: *sex, constitution* or body-build and the groups (*races*) which have been bred through long periods of history. If we begin

this way it may seem that what we grasp is once more only the particular in its singularity and not the biological whole of human life. Sex does not seem to be anything else than the possession of certain organs together with all that follows; the body-build seems nothing else than something determined superficially by certain causal factors while race appears as a mere fact of variation under certain external circumstances, a breeding process which could even be taken in hand and reversed. Yet we only need to formulate such thoughts to see their futility. We cannot use the methods we apply to particulars to demonstrate that the differentiation of the sexes indicates much more than the difference of particular organs, that body-build is not just something accidental and purely external and that race is a particular kind of existence. Yet all this is present in the whole if we will but look for it through the particular, even though we can never catch it for good and all.

Sex is a basic polarity of all life and deeply rooted in it. *Constitution* is an expression of type according to certain general human tendencies that determine the given nature as a whole. *Race* is an historically given consequence of breeding and in the constant but very slow transformation of the flow of life is a contemporary expression of a whole kind of existence which individualises humanity and gives it a living history.

The difficulties of clarifying the essential features of the biological whole are the same in the case of sex, constitution and race. There is however one difference: almost all human beings—with the exception of the rare hermaphrodite—belong to one or the other sex and the vast majority of mankind belong clearly to one or other of the great racial groupings—pink, black or yellow, though there are already many intermediary groups (even without hybridisation); in the case of constitution, however, it is the other way round: the majority of human beings cannot be assigned clearly and exclusively to this or that constitution. But the classification of individuals is not decisive for a grasp on basic essential features. Our comprehension of sex, constitution or race remains equally incomplete.

If we see the biology of personality in terms of the body-psyché unit and track this down through sex, constitution and race we find a close connection between the three in their type of actuality. We may say: sex and constitution are human universals; whatever belongs to them will be found in every human race; what is specific to the race need not be specific to the constitution; whatever the constitution may be it must appear in both the sexes. All the same, difficulties arise if we want to make some absolute division since in the given individual sex, constitution and race form a biological whole. As different points of view they can be clearly divided but when it comes to the concrete demonstration of the essential features we commonly find that they tend to include each other. The essential sexual features are at the same time constitutional features (e.g. the closeness of the female to the pyknic type). Constitutional features seem to coincide with racial features (the leptosome type and the 'nordic' race). Sex and race are similarly constitutional modes. That does

not prevent us separating the complex biological unity into several complex unities for purposes of presentation and finding a place for the human individual in each one of them.

Personality disorders (Psychopathische Charaktere), neuroses and psychoses are related to these three great modes of human existence. On each occasion therefore our presentation will point the problem: sex and psychosis; constitution and psychosis; race and psychosis.

(c) *Methods of eidology*

The methods are determined by the fact that the object of study is not a concrete particular but an idea. Hence the methods have to be indirect. The innumerable individual findings have to be collected and co-ordinated with the idea that they are manifestations of some unifying whole. This is first brought closer by the formulation of *types* and secondly by indicating the *correlations* which exist between the individual findings.

1. In eidology we have in mind actual entities but we only manage to arrive at *types*. The underlying principle in the construction of types is not the real principle underlying some actually existing whole but an attempt to make ourselves ask how far the construct is valid in reality. In eidology we think of the entities as complex wholes within the body—psyche unity but we cannot demonstrate these entities directly. Eidology makes use of typology for an indirect approach to the entities it has in mind. Typologies are constructs whereas eidology aims at the substantial vectors of reality itself. By making use of many different typologies, which are being constantly redesigned and offer a number of shifting perspectives, eidology tries to bring us nearer to human nature in all its aspects, nearer to the primary forces in human life as we grasp it empirically—those primary forces which integrate all the phenomena and thus bind them into complex unities. The type always remains a relative complex unity formed on the basis of a given principle for the survey of a given field. The eidos aims at being the whole itself.

We only need to recall the extreme multiplicity, even endlessness, of possible typology. Theoretically there can be pairs of opposites, groups of three and several dimensions along with their combinations. *In a material sense* we can construct different *ways of living*—we make constructs of *cultural attitudes* (active, contemplative, intellectual, aesthetic, economic—political—metaphysical, religious, etc.); or of *basic relationships to the world and transcendence* (in philosophic typology); or of *occupational types, types of environment*, etc. In every case we are constructing something which is of historical growth, something which is a *cultural product* in all its complexity. But if we want to grasp the primary variants we would need to find the un-historical, purely *biological foundations* in the human race, irrespective of all contents; we would need to look only at form and function and at everything that we can elicit from the body-build and from what is physical; from performance-tests, from modes of disease and from whatever we can investigate objectively. We include here the types which have been developed in personality-study (see pp. 435 ff.).

There are a large number of typologies. Nearly every one of them has something

usefully apt for those who work with it or have grown accustomed to it. Typologies war with each other more on account of the ingrained habits of investigators than because of any insightful conviction leading to fruitful discussion. The important thing seems to be that one remains master of one's typology, makes no unwitting surrender to another and remembers that a typology is only an aid and is not to be taken for any actual scientific classification of human beings.¹

In face of the endlessness of possible typologies we need to keep a methodological control of our own with an eye on the unity of the individual and on the unity of human life. All types are possible in every individual; *every individual is potentially the whole* with a varying emphasis that shifts unendingly from individual to individual, in every kind of hierarchy, evolving here and diminishing there. As potentialities are realised in the course of life, they vanish and the Anlage limits them in advance. Hence we can just as well say that 'no man is all'.

If we ask why some typologies impress us and why others leave us indifferent we have to say that patterns of concrete types impress us as we gain experience of them by the force of their objectivity; also that complex types rendered abstractly in a schema accord with the desire for orderly classification and review provided they bring into systematic connection all the concrete pictures that have hitherto been acquired. But above all we are secretly drawn to them by interest in the human form, by our basic conception of humanity and by the inner breadth and extent of our human vision.

2. Typology enhances our understanding at any time of the essential connectedness of many phenomena but it deals with ideal forms to which reality only more or less approximates. The *methods of correlation*, however, want to ascertain empirically how strongly the particular phenomena are linked; that is how often they occur together if one were to measure and count them. If the frequency of coincidence is such that it is present in every case (100 per cent), then the coefficient of correlation = 1; if the coincidence is no more than chance the coefficient = 0. The degree of correlation, therefore, is expressed by a series of figures from 0 to 1.

Such correlations may be meaningful—as for instance between personality-traits—or they may merely show the link between heterogeneous phenomena without any understanding of it. Thus *correlations have been sought between personality-traits* and expressed *statistically* by enumerating the frequency of their mutual occurrence.² This objective investigation is in complete contrast with the subjective method of understanding. What can we learn from it? In the first place how often characteristics which are meaningfully linked do actually occur together; in the second place how often characteristics which are not meaningfully linked also occur together. The question as to what is a characteristic depends entirely on the work of the psychology of meaningful

¹ G. Pfahler, *Das System der Typenlehren* (Leipzig, 1929).

² Heymanns, 'Über einige psychische Korrelationen', *Z. angew. Psychol.*, vol. 1 (1908), p. 313. Heymanns and Wiersma, *Z. Psychol.*, vol. 51.

connections and therefore the correlation can only be calculated on the basis of this psychology. In the investigations so far those persons who fill in the questionnaires are those selected by the same psychology. But the latter has not followed this procedure very far. However, the procedure can be and is universally applied in regard to intelligence tests, to establish which performances belong together and which are independent; it is much used in investigations into heredity and is also applied when one wants some objective indication as to what is related to what in the case of different constitutions.

The shortcoming of the procedure is revealed when it is used over lengthy periods. While the first correlations usually make a strong impression—one has got some real proof at hand—the impression quickly fades as soon as the endless possibilities of correlation are noticed and the way in which everything can be linked with everything else. We then become aware that unless the correlation is very marked it carries little importance for our knowledge. Correlations as such are empty affairs inasmuch as they only beg the question: why have they come about? They only become of interest if there are possibilities of answering the question as to what they are based on.

Typologies can convince by their vividness but they disappoint us through lack of reality. Correlations (in so far as their matter is unequivocal) convince by force of demonstrable proof but often disappoint us with the emptiness of the conclusion.

Correlations can be absolute (coefficient = 1) or closely approximate to this. They are then naturally of great significance. On the other hand they may be relative (between 1 and 0) and the question then arises whether they mean anything and, if so, what. They may express some remote link which the facts do not reveal, some endocrine relationships perhaps which one will have to discover by other means. As statistical correlations between individual performance tests are individual findings in a statistical sense only and do not signify a necessary link, and as they are usually of a moderate degree of significance, one encounters constantly dissolving clusters, particularly as the meaning of the individual findings is usually not of the same weight nor of the same order.

(d) Gathering the facts

All attempts to gather together individually varying facts have some meaning for eidology.¹

In particular by the application of a combination of tests the methods of experimental performance tests have been used to arrive at far-reaching elementary and essential features of human varieties. Kraepelin had already called the characteristics obtained from his 'working-curve' (fatiguability, capacity for recovery, drive, etc.) '*basic personality characteristics*'. In such tests the aim is to find formal characteristics of psychic function, not contents,

¹ The whole literature in this field up to 1911 is to be found in Wm. Stern, *Die differentielle Psychologie in ihren methodischen Grundlagen* (Leipzig, 1911).

and we look for speed, viscosity, distractibility, etc. We compare and test the ability for simultaneous attention to a number of objects, the mode of apperception whether directed more to the whole or to the parts, the degree of deception in geometrical-optical illusions, the intensity of the subjective colour-contrasts, the ability to pick out figures in a figured context, apperception in tachistoscopic reading, whether there is more determination by letters or by the word-pictures as a whole, the preference for forms rather than colours, eidetic capacity, etc.¹

In every case we obtain quantitative findings and can relate them to each other and to other findings. The intention is to discover among the many findings something which forms a context, 'root forms of human life' or 'radicals of personality' (Kretschmer). We want to find basic qualities that are biological and so run on essentially unchanged through millennia, unhistorical, all-pervasive and present in all experience, behaviour and individual creativity, but so far as their content is concerned still quite unspecific. In these investigations the basic question is whether we are really meeting something of this sort or whether we are only revolving among endless preliminaries, the physiological instruments perhaps but not the individual himself.

§ 1. SEX

Bio-psychological preface

(a) *The primary phenomenon of sex.* Division into two sexes seems to be a universal feature of everything living. Where at lower levels there are species which do not exhibit such division we still find in the course of generations events of cell-union which correspond to the later union of ovum and semen. What is universal in this respect is polarity alone. There are lower creatures in which the gametes can function on occasion as ovum and semen and are therefore as gametes still bi-polar. But that the resort to sexual procreation is in itself a necessity for the maintenance of life is by no means proven. The observation of degeneration in unicellular creatures (if after many generations of procreation by division one sees to it that the mixing of cells is cessated) and the immediate flowering once copulation is renewed, stand in contrast to the non-sexual reproduction of some plants which can be indefinitely continued without degeneration. The only consequence is the monotony of the forms, the mass of sameness, the levelling down of life with imaginative loss, when this continues without sexual reproduction and without any transforming movement in its configurations. Sex seems to be the source of creativeness and sexual reproduction a knack of nature to create manifolds and in the realisation of fresh possibilities develop the imaginative aspect of life. This may perhaps help us to comprehend that everything connected with sex not only has particular opportunities but also considerable risks. Hybridisation leads to enrichment of living forms but also to degeneration. Mixing can be productive or destructive. Sex in man causes

¹ We should draw attention to the extensive literature of a technical psychological character. Based on Munsterberg psychological tests form the main material of exp. psy. Kretschmer's efforts in particular made them useful for problems of constitution.

unrest; it can swing him to the heights or to the depths and it brings loyalty and treachery into his very existence as such. Puberty particularly is an age in which many diseases have their origin, but genius springs here as well as schizophrenia. All sexual phenomena have a link with an increase in psychic disorder.

Let us recall further the universality of sex relationships. It is surprising to see the multiplicity of its concrete manifestations, especially in plants. The sex-organs are only a particular effect of sexuality whereby procreation takes place in technically such extraordinarily different ways depending on the kind of living form but always ending in the conjunction of ovum and semen. In the biological sphere of this multiplicity of sex organs we gain a perspective on human sexuality that indirectly makes it clearer. The most important thing is that all living individuals originally contain deep within themselves the possibility of both sexes.

It is necessary to differentiate sexual characteristics of a primary character—children are already definitely male or female even before the sex-glands have begun to function—from sexual characteristics of a secondary kind, which are a consequence of the functioning of the sex-glands and only appear in humans at puberty. The morphology and physiology of the sex-glands therefore do not exhaust the topic of sexuality. Nor does the psychology of sexual impulse and its consequences exhaust the psychology of sexually polarised life.

We cannot say what sexuality really is. Life and sexuality seem to belong together. The manifestations, consequences and partial realisations of sex are to be seen but cannot be further explained. The significances found through 'a metaphysic of sexuality' do not give us scientific knowledge.

(b) *Biological factors in sex-differences.* Among the chromosomes there is one pair of sex-chromosomes. In the female this is called XX and in the male XY. Hence every ovum carries one X chromosome, and of the sperm-cells, one half carry an X-chromosome and the other half a Y-chromosome. The combination of one ovum and one sperm cell with a Y-chromosome produces a male and that of one ovum and one sperm-cell with an X-chromosome produces a female. Male and female differ in every single cell: in the female all the cells have a pair of XX sex-chromosomes and all cells in the male have an XY pair. Thus the male has in every cell one chromosome which is lacking in the female. The difference of the sexes is therefore to be found not only in the sex-glands, sex organs and secondary sex characteristics but is—in one minute factor—universal.

On the other hand the individual of both sexes comprises in the primary Anlage all the possibilities of the species which is only split into two sexes in the course of development. Both sexes have the disposition for both kinds of sex-organs and both kinds of sex-glands. Only in the development of the embryo does one of the two Anlagen grow defined. The other degenerates until only small residual signs remain. In rare cases this development may not take place and the result is a true hermaphrodite (in possession of both kinds of sex organs). Or—in insects at any rate—after an initially correct development of a female, an embryo can from a certain point onwards develop male sex organs in an originally female body (*Umwandlungsmännchen*).

The nature of sex therefore is not of easy comprehension. Sometimes it appears to be an absolutely fundamental difference; at other times again it seems a mere particular and partial deviation in what is basically a supra-sexual whole. We are cautious in considering the puzzle of sex as fully understood but we do know that the sex-

characteristics in body-build, function and instinct are regulated by at least three mutually dependent factors which we cannot reduce to any single denominator: *firstly*, by the *chromosome-set* in the cells; *secondly*, by the *hormones* of the sex-glands combining with the hormones of the anterior lobe of the hypophysis and those of the supra-renal cortex (Steinach could convert young male guinea-pigs into females and vice versa by removing or transplanting the sex-glands; not only did shape and muscle power change but the feminised males became shy and the masculinised females became belligerent); *thirdly*, through impulses from the *central nervous system*, shown to be transmitted from the mid-brain (by tumours, which can bring about a precocious puberty from this area) and by far-reaching effects of psychic events on sex-drive and its subsequent formation.

Sex-development proceeds by stages which are epochs in the life-history, as for instance and in chief *puberty*. Hormones of the sex-glands are the metabolic agents that go to form the secondary sexual characteristics (in males, development of specific masculine body-shape, growth of the external genitalia, pubic hair and beard, breaking of the voice). In the female the hypophysis produces a hormone which stimulates the sex-glands to the production of sex-hormones. If the hypophysis of an animal is removed sexual maturity does not occur. We do not know why this developmental step occurs at a given time nor where it is set in motion in the first place (the mid-brain is strongly suspected in the second place). It remains the problem of 'the inner clock which sees to correct timing'.¹

The second major stage is the *climacterium* in the female: the regression of the sex-glands and the cessation of active sexuality. The reasons for this must lie in the ovaries. The transformation of the whole body is profound. There is a disturbance of the hypophysis as the ovarian hormones fail. The storm of disturbance in the inner secretions—frequently the cause of illness at this time of life—calms down into a new adjustment. With males it is different. The man retains libido and potency right to the end of life; they diminish but do not disappear. The experience in males in the way of vasomotor disturbances, heart-complaints, mood changes and diminished vitality (falsely called the male climacterium) is merely the onset of old age.

(c) *Somatic and psychological sex-differences.* Sex as a type of body-build and constitution is the clearest and most well defined of all such types. It has been described in somatic and psychological terms. Sex affects the psychic sphere diffusively but the human individual is always more than his sex—within him lurks the whole human being—who exists there in the shape of one sex alone but who in his essential being does not coincide with that sex entirely. Hence we tend to waver constantly between an over-estimation and an under-estimation of the importance of sex.

The psychic nature of men and women has been generally sketched and descriptions made of the true man and true woman. These are in the last resort erotically determined ideal pictures. Alternatively male and female have been viewed as opposite poles of human existence so that the individual man or woman presents a mixture of male and female qualities. This picture gives rise to the possibility that someone with female sex organs may, for example, show a masculine nature or combine psychic features of an essentially male or female character whether this produces an uncomfortable division within the personality or some harmonious synthesis which alone achieves the fullness of the human experience.

¹ Jores, loc. cit.; see also H. Marx in his 'Inneren Sekretion' (*Handbuch der inneren Medizin*) on sex-glands, pp. 268-313.

In contrast to interpretations of this sort¹ which can quickly become dogmatic and to these artistic intuitions of form attempts have been made to reach some empirical definition of the differences by observation and enumeration. This one would think would be an easy task—in contrast to establishing constitutional types—since almost all individuals are undoubtedly constituted male or female by virtue of their sexual organs. But, in spite of this, research has not been very satisfactory because the typical male and female are ideal types subject to historical change and never provide average types such as statistics would reflect. In the psychic field we cannot show any absolute distinctions which would apply to every individual nor yet any qualitative ones but only quantitative distinctions. These suggest themselves to everyone according to their ordinary life experiences. Statistics can add very little that is new but may provide ideas that are better defined.² A difference of importance to psychopathology is the greater emotionality of women and their more profound capacities for experience.

We must of course separate the sexual differences which are rooted in the *Anlage* from those which depend on the current social position of women.

It is remarkable that the demarcation of sex differences remains scientifically so unsatisfactory. The formation of ideal constructs of male and female in their erotic aspect undergoes much individual and historical change but once these have given place to any sort of scientific knowledge we are confronted with a host of contrasting differences and frequent contradictions which in the end come to encompass every psychic potentiality. Finally an aspect appears in which psychic sexual polarity is not distributed as between two individuals in a mutually exclusive way but is carried as a contrasting whole within the individual himself. One-sided realisation will of course push the other side into the background but the tension of life depends on a maintenance of the polarity without which through ultimate one-sidedness and monotony life deteriorates into a general levelling, constriction and flattening of itself. On the other hand, life reaches its very peak when this whole polarity is preserved within the individual and there is constant movement between the two extremes.

(d) *Sexual drive.* Libido is in one sense both a drive for physical pleasure and a pleasurable state related to cutaneous contact and it exists from babyhood to death. The sexual drive, however, is specifically brought about by the hormones of the sex-glands and is therefore radically different in character before and after the development of these glands (at puberty). Although the child has libido-states with corresponding fantasy these are incomplete in character and qualitatively different. But once the sexual drive has been experienced it seems able to persist even when the sexual glands themselves have ceased to function. Among castrated persons we find those in whom the sexual drive and performance of the sexual act remain preserved although they feel that they themselves have grown cold. Ninon de Lenclos is said to have remained erotically active up to the age of seventy. This shows that sexual drive is essentially due to the sex hormones but has in addition other sources and a very complex structure. Libido can be aroused without hormonal action by stimulus from the central nervous and autonomic nervous system and from the psyche. Normally, how-

¹ The following are some attempts, of very differing character; O. Weininger, *Geschlecht u. Charakter*. P. J. Möbius, *Der physiologische Schwachsinn des Weibes*. G. v. Le Fort, *Die ewige Frau, die Frau in der Zeit, die zeitlose Frau*.

² Heymanns, *Die Psychologie der Frauen* (Heidelberg, 1910). Otto Lipmann, *Psychische Geschlechtsunterschiede*, 2nd edn. (Leipzig, 1924).

ever, this hormonal cycle—with its effect on the central and autonomic nervous systems and the repercussions of this on the sexual glands and above all on the psyche—will bring about its own mutual increase once the cycle is set in motion at one point or another. The libido-state is a qualitatively specific state of excitement which seizes the whole body and changes it in its entire vital appreciation of itself.

The *direction of the drive* is something quite different from the libido itself, which is essentially unchanging. The drive is guided by ideas and experiences. Its direction and the mode of the specifically effective stimulus will differ with the individual (the erogenous zones of the skin, the sensual stimuli of vision, hearing, smell). Variations depend on accidental happenings and the fixation of associations and habits. They also depend on the kind of repression which has taken place, whether due to external pressures or to inner moral censure. In the last resort they are perhaps founded in the entire somatic and psychic character of the individual.

A basic phenomenon of the human individual is that unlike the animals we are not destined to a disinhibited, instinctual sexuality which appears during limited periods of heat. Instead we see our constant sexual excitability subjected to order, inhibition and forceful repression which undergo a vast amount of change as between primitive and civilised peoples and yet are always there. Universally we find a radical discord between biological impulse and the demands of society, morality and religion. And indeed these discords cannot be resolved. Whenever they are set aside they reappear once more in a new form.

In the plain realisation of his sexuality however the human individual is forcefully presented with the complex unity of his existence as a body–psyche. The unity of body and psyche, otherwise one of his speculative problems, now becomes for him a fate that seizes him and which he in turn seizes upon, something more significant and decisive for him than any physical illness that might transform him. A single connecting thread travels from vital sexuality via cultivated eroticism to love itself across all the traps of shifting meaning. It has been repeatedly affirmed that sexuality affects body and psyche universally: that as mankind we are characterised by our sexuality into the ultimate recesses of our psychic life. Every idea, thought, directed impulse and every experience may assume an erotic colouring. But this is not a mere passive occurrence. That which gives this universal colouring remains at the same time a part of the personality and this receives shape and effect from sources other than sexual ones. Hence the continual discord—hidden for a while under the excitement and the intoxication—hence also the host of derailments, abnormalities and illnesses as well as the attitude which recognises all isolation—be it sexual or ideological—as a mistake, which has to be paid for heavily in terms of suffering, involvement, craving and deceit.

The instinctual drive cannot be exactly the same in both sexes. In so far as the entire body is sexually different so must be the sexual-erotic experience.

(e) *Historical aspect of research into sexuality.* Medical sexology only properly started in the second half of the nineteenth century. After a number of purely sporadic contributions we are left today with the comprehensive observations and extensive descriptions to be found in the works of Krafft-Ebing, Havelock Ellis, Moll, Fürbringer, Löwenfeld, Bloch, Hirschfeld, Rohleider, etc. In addition we must add the ethnic contributions: Kraus and others and finally the work of the psychoanalysts. Besides these this century alone saw the full biological investigation of the somatic

facts of sex with its astonishing results (hereditary and hormone-research). All these efforts have provided us with an enormous amount of material and a set of comprehensive viewpoints regarding sexuality in all living creatures, the sexuality of man and sexual love.

In all these active enquiries there is more than mere scientific research. This is indicated by the extensive circulation of medical books on sex and the fact that the whole subject has become a matter of wide concern. The obscurantism of the Christian occident on all matters of sex kindled a curiosity when faith deteriorated, though the conventions from the time of faith were still observed. This curiosity is characteristic of the literature of the nineteenth century as well as a certain zest for revelation, which in psychoanalysis somersaulted over into improbable imaginings. This whole trend of investigation has itself become an historical factor in the mode of realisation of the sexual life. Division, deception, new kinds of gratification, an uncurling of instinct and a modifying of impulse, all according to allegedly scientific points of view that belonged to a second-grade psychologism, have been linked with this literature, which as a whole is rich and varied but impossible to reduce to any single denominator and over a wide area impenetrable. We are only now extracting in any clear fashion the real results.

The psychic anomalies and illnesses associated with sexuality have to be presented from a number of essentially different viewpoints:

(a) *Different incidence of psychic illness in the two sexes*

Over many years of statistical investigation in respect of admissions to his clinics Kraepelin discovered some very interesting quantitative relationships. To summarise them: in respect of age, between 20 and 25 years more women fall ill than men (60 to 40 per cent); between 30 and 40 years more men than women (60 to 40 per cent); over 50 years the relationship is approximately the same, until in advanced age women again outnumber men (according to Kraepelin because of their greater longevity). Patients with alcoholism, paralysis and epilepsy are predominantly men, those with manic-depressive psychoses predominantly women, but mania is more common with men and depression with women. In schizophrenia the two sexes seem equally involved. Kraepelin emphasises the considerably more severe and frequent states of excitement in the female wards (assessed according to the amount of scopolamin used and the number of continuous baths) and also the more frequent refusal to eat and therefore more frequent tube-feeding in the case of women.

Relatively few suicides take place among women and few crimes. In their case hysterical states are more common as well as reactive and neurotic manifestations.

(b) *Sexual epochs and reproduction*

Puberty is clearly defined by the development of the sex-glands and its consequences. This revolution in the somatic-psychic life frequently marks the onset of mental disorder (cp. pp. 681 ff. on age-factors). One particular dis-

turbance is precocious puberty. There is a constitutional early maturity. Race, climate and individual constitution are considered causative. Here we are not dealing with an illness so much as with an otherwise normal development taking place at an unusual time. It is a different matter when the 'pubertas praecox' is due to premature hormone formation of the inner secretory glands. We must differentiate a hormonal pubertas praecox, due to tumour of the sex glands or the supra-renals and a pubertas praecox of the central nervous system type, due to tumour of the hypophysis and to cerebral tumour. Here the morbid state is always characterised by the fact that the physical sexual maturity is not accompanied by any corresponding psychic maturity.

The *climacterium* in women brings cessation of reproductive capacity (with the atrophy of the ovaries). This event leads to a transient storm in the interplay of endocrine exchanges due to the cessation of the ovarian hormones. This cessation retroacts on the hypophysis and the endocrine system as a whole and this in its turn affects the functions of the vegetative nervous system. There are, therefore, round about this age disturbances in the vegetative nervous system (vasomotor disturbances, flushes, changes in blood pressure, etc.). Sometimes masculine characteristics appear, the voice gets lower and hair grows on chin and upper lip. This is a period in which psychoses often begin without the climacterium itself being the cause. Psychopathic manifestations are reinforced. After the climacteric years have passed psychic manifestations improve.

The risks of the climacterium are heavily over-rated by popular belief. The reproductive capacity and menstruation cease but that does not mean that all erotic possibilities are then lost. The climacterium is not a catastrophe for women and their nature advances towards new possibilities of development.¹ There is 'no biological tragedy of woman' (Kehrer). A considerable part of the upset depends on the attitude to natural events and popular suggestion.

The sexual life of the woman, in contrast to that of man, lays continual claim on her during the reproductive period. In many kinds of psychic disorders and psychopathic states the menstrual period can be recognised by a worsening of symptoms and sometimes an entire illness is linked solely with menstruation.² With varying transitions to normal, menstruation may be accompanied by: moodiness, irritability and paranoid tendencies. Such neurotic changes are usually transitory and disappear as soon as menstruation begins. The reproductive processes (pregnancy, the puerperium and lactation) bring psychic disturbances along with the total change in the organism. In so-disposed women they are sometimes the cause or the precipitating factor for psychosis proper. According to Kraepelin over 14 per cent of all psychic disorders in women are these psychoses of reproduction, of which 3 per cent are psychoses of pregnancy, 6·8 per cent puerperal psychoses and 4·9 per cent

¹ H. F. Stelzner, *Gefährdete Jahre im Geschlechtsleben des Weibes* (München, 1930).

² Krafft-Ebing, *Psychosis menstrualis* (1903). Friedmann, *Münch. med. Wechr.* (1894). Hauptmann, *Arch. Psychiat.* (D), vol. 71 (1924), p. 1.

psychoses of lactation. We occasionally observe psychoses with a type of dementia, precipitated phases of manic-depressive insanity and lastly even the beginning of a schizophrenia related to the puerperium.¹ The actual cause of these disorders has to be sought in the constitution, the 'Anlage', and the puerperium only has significance as a precipitating factor. Between the psychic anomalies of pregnancy (hypersensitivity to smell, cravings, disgusts, antipathies, shifting moods) and the psychoses of pregnancy there are no transitions.² They are entirely different from each other so that in the case of psychotic women who were pregnant it could not be found that this influenced the psychosis in any way although the pregnancy brought the same anomalies as with healthy women.

(c) *Sexual disorders*

Sexual abnormalities are practically innumerable in their constantly shifting direction and characteristic form. This shows the importance of the drive and the inventiveness of man. However, none of these abnormalities are due to the sex-glands themselves but to a structuring of the drive through other and particularly through psychic contexts. Proof of this is that castration never abolishes perverse direction of the drive; it only diminishes the intensity of the instinct and reduces libido. As a consequence of this reduction the perversion may lose its aggressive element and compelling force but the perversion as such is not affected (Wolf). Out of the vast field of instinctual aims we will select only a few fundamentally important manifestations for discussion:

1. *Masturbation.* Masturbation is a normal phenomenon (Forel) during youth particularly, when there is a strong sexual drive without possibilities of natural satisfaction. The assertion that masturbation causes illness is totally wrong. Extreme masturbation is not a cause of illness but it can be a symptom (e.g. of Hebephrenia). The significance of the masturbation lies in the meaningful connections, in the experience of defeat and loss of dignity. It may be the starting-point for ideas of reference and of being watched (as if others knew about it and despised and teased the individual), but it cannot be the source of these ideas in itself.

2. *Perversions.* We speak of fetishism when the sexual excitement is tied to certain objects, shoes, plaits of hair, etc.; of sadism and masochism when sexual pleasure depends on the simultaneous torture of the partner or by the partner, and many other perversions are named in this way. Freud stated that libido can be transformed into drives and behaviour entirely remote from itself and maintained that there were connections between perversion and conduct (the anal erotic for example is said to be pedantic, tidy, careful with

¹ Runge, 'Die Generationspsychosen', *Arch. Psychiatr.* (D), vol. 48. Jolly, *Arch. Psychiatr.* (D), vol. 48.

² Steiner, 'Psychische Untersuchungen an Schwangeren', *Arch. Psychiatr.* (D), vol. 65 (1922), p. 171.

money, stubborn, obstinate and compulsively clean); a whole host of human modes of behaviour can be seen as the results of sexual perversion. This may be so but it is also a fact that almost without exception all individuals have an effective sexual drive and that disorders in the form of deviation and maladaptation are extremely common while the remarkable transformations (the parricide complex, etc.) and their related nervous illnesses are rare. This indicates that so far as Freud's descriptions are true he is dealing with certain idiosyncratic ways of elaborating sexual experience, ways which are not characteristic for the sexuality of man as such but for certain dispositions, personalities and situations. The generalisation of these ways remain unproven.

Perversions however as such are not simply inborn inevitabilities but the result of experiences, habits and cravings in certain personalities. They must therefore be analysed individually and can in part be corrected; they are connected not only with the sexual drive but with the whole psychic destiny of the individual. One particular sign is that perversions have a character of addiction (v. Gebssattel) and generally exercise much greater force than the natural sexual drive.

Even though perverse sexual drives may sometimes exist without necessarily affecting the personality as a whole in its essentials, we nevertheless find with abnormal sexual dispositions the beginnings of a profound variation of nature in the form of peculiarly cold, asexual personalities and some oddly sensitive, fastidious homosexual characters who apparently look at the whole world in a different light.

3. Homosexuality. Homosexuals can obviously not be brought under one common denominator. There is every grade from accidental homosexuality as a substitute gratification (cp. masturbation) to perversion as a deeply rooted habit. But the question arises whether in addition there is a homosexuality of quite another kind which is not based in the life-history of the individual and perverted practice, but which is a somatic Anlage of the sexual constitution.

There would have to be a primary sexuality which would manifest itself in its aim—as male or female—individually of whether the individual concerned had male or female sex-glands. The hormones of the sex-glands do not determine the sexual aim; they merely eroticise. The instinctual aim must have its source in the psyche or—if at all—in some localisable sexual factor in the central nervous system. The problem is how such an instinctual aim can be separated from the particular kind of sexual-glands. Goldschmidt's theory of the inter-sex gives an answer to this.¹ He assumes that the male and female factors have valences of different intensity. These valences signify the strength with which the one or the other sexual factor prevails in the psycho-sexual development. Now if stocks are crossed which have factors of unequal valence inter-sexes arise so that during the early development of the embryo a sex-reversal takes place owing to the stronger valence of the opposing sex-factor.

¹ R. Goldschmidt, *Die Sexuellen Zwischenstufen* (Berlin, 1931). L. Moszkowicz, 'Hermaphroditismus und andere geschlechtliche Zwischenstufen', *Erg. Path.*, vol. 31 (1936), p. 236.

An original female factor could thus turn into a male one. In that case the individual has morphologically in its sex-organs become a male but in the cells it has its own female chromosome set (*Umwandlungsmännchen*). The original femininity is preserved although male sex organs develop. The mixing of male and female depends on the time at which the reversal takes place. In exceptional cases both sex-organs can be developed (hermaphroditism of every stage). True homosexuality which comes about in this way is something radically different from hormonally conditioned alteration of the sex-characteristics (e.g. virilism in women following disorder of the sex-glands or suprarenals).

It is certain that homosexuality is not based in the sex-glands nor is it hormonally conditioned: neither castration nor treatment with hormones of the opposite sex affect the homosexual direction of the instinct.

But whether Goldschmidt's theory—plausible enough for the insects he investigated—can also be applied to man is not proven. Theo Lang¹ tested the theory by a comprehensive investigation and obtained results which at first sight seemed to confirm it almost conclusively but on further consideration were not perhaps so conclusive after all. He thought as follows: If it is true that a number of male homosexuals are transmuted females (*Umwandlungsmännchen*), one would expect to find even more men than women among the siblings than in the general population because the average ratio between the sexes is 100 girls to 105 boys. The homosexual males who are transmuted females would have to be reckoned genetically as female at birth. In these families a number of the genetically female individuals would then be masked among the cases reckoned initially as externally male and so would be missing from the number of women. The statistics, which as a starting-point took registered homosexuals in various big cities, showed without exception that the shift in the sex-ratio of the siblings in favour of males, which might be expected according to the theory, did in fact take place. The theory seemed brilliantly confirmed. However, Lang went on to think as follows: Transmuted males, in accord with their chromosome pattern XX (which they would be bound to have as original females) would have to have only female offspring. He tested for the children of married homosexuals; the ratio of boys and girls was contrary to expectation and proved to be completely normal. This could be understood if the married homosexuals were without exception not true homosexuals. This again would manifest itself in the fact that their siblings did not show the shift in sex-ratio as shown by the siblings of true homosexuals. Lang found however that the shift did occur here though it was not so marked and in certain cases 'approximated to normal'.

¹ Theo. Lang, *Z. Neur.*, vols. 155, 157, 160, 162, 166, 169, 170. A critique in J. H. Schultz, *J. Neur.*, vol. 157, p. 575.

(d) *Effects of castration*¹

The removal of reproductive capacity through surgical interruption of the ovarian or seminal tubes is called *sterilisation*. The sexual act is not affected nor are there any other bodily or psychic consequences as the inner secretions of the sex-glands remain intact. *Castration* means the removal of the glands themselves. Extensive experience is only to be found in regard to male castration. We differentiate between early castration (removal of the testes before puberty) and late castration (removal after puberty). The effect in the two cases is radically different.

Early castrates. Puberty and the entirely normal process of maturation from boyhood to manhood does not take place. The voice remains high-pitched and the growth of hair that of a boy; libido and potency do not occur. The body deviates from the line of normal growth and becomes very long; arms and legs become excessively long (eunoichoid growth). In youth the individual is slim but in later years he grows fat. Mental development does not suffer but a certain inferiority feeling may have consequences for the personality. It is asserted that castrates are suspicious, apathetic, cowardly and vindictive.

Late castrates. The pubertal development is complete and is not removed by castration. Libido remains though it is markedly reduced and potency is often preserved. Psychic changes are not unequivocal. The attitude to castration plays a great part in this according to whether it is suffered against the person's will, is due to an accident or is something that was desired. Wolf observed the following as fairly frequent: irritability (reduced in 7 and increased in 19 cases); improvement of nervous states generally but traumatic castration could evoke them. As a result of many observations Wolf maintained that it is not correct to say that castrates are lazy, apathetic and vegetative. There is no such thing as a castrate type among the late castrates although the expert may be able to spot the latter at first glance.

§ 2. CONSTITUTION

(a) *The concept and idea of constitution*

In *somatic pathology* constitution means the whole of the bodily life of an individual or of a type in its particularity in so far as this is a lasting whole. All bodily functions are related to each other and the idea of the constitution lies in this *infinitely related whole*, which conditions every individual function and on which again every individual function depends. The visible expression of constitution is the *habitus*. It is related to the constitution much as 'the symptom-complex is to the illness' (Wunderlich). The idea of the constitution

¹ P. J. Möbius, *Über die Wirkungen der Kastration* (Halle, 2nd. edn., 1906). Ch. Wolf, *Die Kastration bei sexuellen Perversionen und Sittlichkeitsverbrechen des Mannes* (Basel, 1934). J. Lange, *Die Folge der Entmannung Erwachsener—An der Hand von Kriegserfahrungen dargestellt* (Leipzig, 1934).

forming a whole is an indestructible one and when every kind of analysis of individual functions has been done enquiry always veers back to this idea repeatedly.¹

If we want to circumscribe a *psychic constitution* with a phrase, we may say it is *the whole experienced as indissolubly one with the body*. This concept seems closely related to others such as the quantum of psychic energy, the dissociability of psychic functions, irritability, fatiguability, powers of resistance and modes of reaction; also to concepts such as intolerance to alcohol, idiosyncracy, bodily rooted self-awareness and the vital basic mood; in addition the physiognomic bodily habitus, the modes of moving and presenting the self as well as the tempo of movement and of the passage of inner events.

But these tentative indications need more detailed discussion:

i. *The unitary whole.* If we want to grasp the constitution it can only be done through particulars. We may think we have grasped certain somatic or psychic phenomena as a structured whole, but it is still only *a* whole not *the* whole. This seems to recede the more urgently we try to grasp it. Yet it is precisely this whole that is the idea of constitution, the unity that holds all the particulars together and gives them colour and significance. The partial wholes are indeed the co-ordinating factors for many particular functions but they themselves are once more elements of an over-riding unity, the unity of the constitution. If we call constitution 'the physical condition which is peculiar to the individual and rests on the totality of somatic and psychic signs and modes of reaction' (Johannsen) we have failed to catch what is really the essence of this unity. We can try to define it as follows:

(aa) *The body–psyche unity.* The oneness is neither somatic nor psychic but appears in both these forms; it is neither psychic nor somatic but Life itself. It is grounded in the unconscious and from there spreads its influence upon all bodily functions and psychic dispositions.

But this unity is such that it never exists for us concretely as a whole. When we experience some unity of body and psyche—such as the understanding perception of someone's expression and physiognomy; the direct awareness of our own existence, drives and realisations; the reciprocal processes of somato-psychic causal connections—it is always a particular unity which belongs to the experience and not this unity of body and psyche as a whole. As our knowledge progresses we are not only forced to analyse into body and psyche, but we also analyse the wholly undefined and undefinable body–psyche unity into particular modes of this unity.

However, once we have made our analysis we have to synthesise. But whatever concrete success we have this always remains a particular that points on to something else. The final whole is never there in this sense of something fresh for us to grasp, something tangible to be won at a stroke.

¹ Martius, *Konstitution und Vererbung in ihren Beziehungen zur Pathologie* (Berlin, Julius Springer, 1914). I. Bauer, *Die konstitutionelle Disposition zu inneren Krankheiten* (1919), (2nd edn., Berlin, J. Springer, 1921). Kraus, *Die allgemeine u. spezielle Pathologie der Person* (Leipzig, 1919).

(bb) *The all-pervading co-ordinating and guiding Oneness.* Whatever creates this unity or by its absence or disturbance impedes unity as a whole, is a biological universal. The organisers in the cell-development, the order of the genes in the genome and the regulation of life by means of the nervous system and the endocrine secretions, all bring about the unity of bodily life. In the psychic sphere the unity of psychic life comes from self-awareness, actions, conscious and unconscious goals and creative constructs.

All these unities however are not all the unities of the whole. What we call concord and harmony in life or disharmony and disturbance can only be possible through some sort of unity which takes all the knowable unities a stage further. But at this point the field for enquiry is always open. The unity as such is not to be grasped. So far as knowledge goes it does not exist. And if all known unities in open situations strike us as 'senseless' and no longer take life a stage further for us but appear to leave it derelict, then Life as a whole must seem to lack all direction. But that Life should go on its own way thus haphazardly and by a mere interaction of 'senseless' unities is impossible, well nigh inconceivable.

The idea of constitution might well match with this guiding oneness. But it remains an 'idea'. We shall leave it to Part VI to discuss the fact that the unity of the self together with its independence springs from an entirely different source; as such it cannot be known empirically but it can be experienced existentially, and even before this unity is reached there are the encompassing modes of human existence and consciousness which themselves elude direct investigation.

At all levels the basic character of the guiding unity is that it can hold together the polarities, contradictions and antinomies of forces, drives, trends and goals. Any unity which is not a creative force that compels towards new forms is a dead and lifeless unity.

Constitution is the whole and hence is not itself a cause. Causes are always particular. Their effects are always conditioned by the whole. The way in which life runs its course and illness is survived is patterned by the constitution, not caused by it.

2. *Differences of constitution.* In the analysis of different kinds of constitution it is customary to make a few very general distinctions:

(aa) So far as his constitution is concerned the individual is at every moment a unity built up of *original and acquired factors*. From the primary disposition (Anlage) new dispositions are as it were created, as one's life proceeds through events and experiences. Modes of reaction are hereditary and established in the individual but the manner in which they operate in accordance with the environment and external fate changes them retrospectively. If constitution is the mode of reactive capacity and of the accompanying ability to perform and adapt then such a constitution will itself change through this very activity. Hence although we differentiate *inborn (inherited)* from *acquired* constitution, both nevertheless constitute at every moment a whole. The

constitution is always a transformation of the disposition (*Anlage*), a transformation conditioned by environment and human destiny and leading to the present total state.

(*bb*) The multiplicity of constitutional types is thought to be a healthy matter. They recur universally and are not *unique variations of human kind* set within well-defined limits. But they are thought to be *morbid* if they disturb life and are incapable of a full development in life or if they in themselves display a rather marked readiness for particular disorders. The problem of constitution becomes a problem for pathology in that it gives us the concept of *abnormal variations* of human life and because the *dispositions* towards certain illnesses offer themselves here for research.

(*b*) History of the idea of a constitution

For thousands of years the idea of the *four temperaments* has been current in innumerable forms: mixing of juices, body-build, *habitus*, personality-traits, human fate and dependence on the planets were all in some manner connected. According to Galen: preponderance of the yellow gall (taut physique, good circulation and choleric temperament), of the black gall (thinness, dark skin, gloomy outlook—melancholic temperament), of blood (fresh complexion—sanguine temperament), of mucus (pale, bloated appearance—phlegmatic temperament). The artists of the Renaissance have created magnificent examples of all these types.

But these artists saw more clearly and they also saw beyond what was theoretically established in the old teaching on temperament. As they saw and painted cloud-shapes before there was any scientific typing of such shapes, so they painted these human heads and bodies. It has only been since the beginning of the nineteenth century that doctors created a terminology and technically described what had once been vividly seen and approximately captured in a turn of phrase ('we are all either bootmakers or tailors', i.e., today, pyknics or asthenics). Throughout there have been three types (e.g. respiratory, muscular and digestive—or alternatively cerebral, athletic and plethoric). In every case under a variety of names we find a pair of opposing types of a similar order (growth in height and growth in width, narrow-chested and broad-chested, asthenic and apopleptic, etc.). The third type is either an intermediary one (lying between two extremes) or a special form on its own as a third type with new characteristics (e.g. a muscular type irrespective of the width and height of the total form but taking into account the particular strength of the muscle and bone development) The various descriptions give us such points of orientation as: preponderance of organ-systems (bones, muscles, head, limbs, thorax)—whether fat or thin and special distribution of fat—growth in length or width—posture and tonus (tonic or hypotonic, sthenic or asthenic).

In view of these many typologies there were three possibilities:

1. The sense of the visible phenomena of life gave rise to innumerable *observations*, registering and describing the wealth of somatic variations of form and function and of the dysplasias and the deviations in as much as they could be causally determined and known. To make oneself aware of these, sharpens and exercises an appreciation for form, colour, movement and the

visible physiological functions of the body. We enumerate the following as examples:

Shape of skull: e.g. tower-head, absent occiput, hydrocephalic type.—*Facial form*: strong supra-orbital ridges (as with Neanderthal man), prominent zygoma, angular profile, jutting jaw or small jaw (absence of chin).—*Form of ear*: e.g. ‘bats’ ears’, extremely large or small, amorphously thickened, absent lobe, Darwin nodules or absent nodules:—*Shape of nose*: e.g. thick and shapeless, unusually sharp, sunken bridge.—*Form of trunk and limbs*: e.g. cyphosis and lordosis, crooked fingers, atrophies and crude developments, overlong arms and legs, knobbly hands and fingers, thickened joints.—*Tissues*: flaccid, shrivelled or thin and bony face.—*Vasomotor and other vegetative phenomena*: e.g. grey or livid colouring of face, acrocyanosis, marbled skin, dermatography, sweat.—*Pigmentation and hairiness*: birthmark, baldness, heavy hair growth, overgrown eyebrows.—In addition, *phenomena which can only be seen after special examination*: e.g. many physiological variations and deviations, the form of capillary-branching, fingerprints, the movement of blood-corpuscles in the capillaries, reflex-anomalies and psycho-physical functions (type of after-image, eidetic capacity, all sorts of testable performance).

2. The common factor in all these classifications was reduced to the *most abstract contrast possible*: that is, the contrast between growth in height and growth in width (leptosome v. eurysome). Thus Weidenreich¹ saw these two morphologically and quantitatively as anatomical types, in terms of a polarity found in every human race and beyond that in animals ‘as opposite forms of development in an otherwise homogeneous series of forms’. This polarity is convincingly revealed in human groups all over the world not physiognomically but in a quantitative manner open to reason. From this limited point of view the same type is clearly now termed a ‘race’ and now a ‘constitution’; the author shows historically ‘that when these two types have been demonstrated in a certain ethnic group, they have always been interpreted as representative of two different racial elements’, that is a nobler and a more ordinary one; this is so with the Japanese and the Jews, etc. But this analysis, correct as it may be, loses the richness of concrete observation in favour of a formal quantitative characteristic and wholly banishes from consciousness the idea of constitution.

3. Hence it proved essentially more fruitful to take the other way and describe a constitutional type quite independently from any preconceived schema, to do this simply *from concrete observation*, and *use one’s eyes* to gather and structure the material. Stiller,² for example, did this in an outstanding way. He characterised as ‘asthenia’ that whole picture of increased fatiguability, the phenomena known as ‘sinking’ (enteroptosis), atonia of the stomach and intestines, obstipation and a physical habitus predisposing to tuberculosis. He believed he had found a symptom characteristic for the whole complex in the Costa fluctuans decima (the mobility not only of the 11th and 12th but also the 10th rib).

¹ Weidenreich, *Rasse und Körperbau* (Berlin, 1927).

² Stiller, *Die asthenische Konstitutionskrankheit* (Stuttgart, 1907).

There was also much discussion over the *infantile* type:¹ an arrested development of bodily form and function at an infantile level (for instance, amenorrhoea, childish habitus, defective growth, hypoplasia of the genital organs) with corresponding psychic phenomena.

Bremer's discovery of *status dysraphicus* is significant and illuminating.² On the basis of a number of morphological and functional anomalies which so far had only been noted in isolation he recognised a disturbance of the embryonic closure-mechanism, particularly of the closure of the medulla:

Spina bifida occulta, curvatures and cleavages of the vertical column, pigeon breast, pes cavus, club foot, crooked fingers, overlong extremities with exceptional arm-span, anomalies of the breasts, acrocyanosis, disturbances of sensibility and reflexes, persistent enuresis in childhood, syringomyelia. This constitution is known through the strong correlation of all these signs together. Often only a few are present. Using these as a starting-point and as guiding signs one usually finds something else in the same individual, occurring also in the family with here and there fully-fledged illnesses showing the appropriate neuropathy. Status dysraphicus was convincing and immediately accepted by medicine and it makes a much more modest claim than that of 'the human constitution in its entirety'. As a particular constitution it embraces (Martius) a circumscribed group of individual signs of a physical condition which can be explained in terms of a well-defined event in the embryonic development. While, for instance, the pigeon breast was formerly taken as an isolated abnormality this symptom now shows 'how an apparently ununderstandable individual symptom can be put into a clear biological context by a more comprehensive analysis which takes into account the developmental history and hereditary factors' (Curtius).

Lastly, great strides have been made in our knowledge of *inner secretion* and its effects on a whole host of somatic and psychic phenomena. But if we can definitely explain a morphologically visible habitus by means of anomalies of inner secretion, we can then no longer talk of a constitution which comprises the infinite whole of somato-psychic life in its ununderstandable foundations. Such anomalies due to disturbances of inner secretion are, for example, acromegaly (the hypophysis), myxoedema (thyroid gland) and eunuchoidism (sexual-glands).

All these investigations were of circumscribed interest. In psychiatry it was Kretschmer who made this problem felt for the first time in its whole breadth and depth and thus gave an impetus to research which persists to this day. With independence and courage he resuscitated in modern form the old teaching on temperament in all its comprehensiveness and took this far beyond the much narrower theories of his predecessors in the previous century. It is

¹ Mathes, *Der Infantilismus, die Asthenie u. deren Beziehungen zum Nervensystem* (Berlin, 1912). Di Gaspero, 'Der psychische Infantilismus', *Arch. Psychiatr. (D)*, vol. 43. Hirsche, *Z. Neur.*, vol. 72, p. 147.

² F. Bremer, 'Klinische Untersuchungen zur Ätiologie der Syringomyelie, des Status dysraphicus', *Z. Neur.*, vol. 95 (1926) Fr Curtius, u. J. Lorenz, 'Über den Status dysraphicus', *Z. Neur.*, vol. 149, p. 1 (1934).

essential for our fundamental viewpoints in psychopathology that we grasp the positive significance, the meaning and limitations of his explorations as well as perhaps the mistakes into which he fell.

(c) *Personality and psychosis*

Kretschmer's conception involved the posing of yet another question of decisive importance: the question of the relationship between the kind of personality and the kind of psychosis. In former times it was assumed (Heinroth, Ideler) that psychoses grew out of the personality whether through some personal fault or an overgrowth of the passions. Later, at a time when anatomical notions were predominant, the whole question was shelved until it again became the subject for lively discussion towards the beginning of this century.¹

In order to get our orientation we will deal first with a few self-evident points: The fact that the *psychoses* of mankind are *very different* in character and that a psychosis may appear in atypical fashion is, among other similar matters, rightly attributed to *an individual Anlage* or disposition, which however can only be postulated and cannot be demonstrated more definitely. This extra-psychic Anlage need have nothing to do with what we call personality. It is moreover self-evident that the *content* of every psychosis depends on the content of the earlier life experiences and that, for example, the delusional preoccupations of a shoemaker will differ from those of a publican. We further know that all psychoses differ according to the *degree of differentiation in the psychic life*, and according to the level of intelligence, the cultural group and the personal circumstances. This can be remarked in the most severe organic psychoses, such as General Paralysis, for example, in the case of Maupassant and Nietzsche. Finally, we might say that every illness and every psychosis too is *elaborated* by the affected personality; the attitude of the personality to the illness is to be understood in terms of the personality-traits. None of this is our concern here but only the question whether any connections exist between certain demonstrable kinds of personality and certain psychoses.

This question, however, is still somewhat ambiguous. Every personality alters during the course of life. We may differentiate the following *four kinds of change*:

1. Every personality as it grows passes through the different epochs of life and exhibits properties peculiar to each epoch. In so far as we conceive these personality-variants as the phenomena of a particular epoch we speak of 'personality growth'.
2. On this basis personality developments take place of another sort. There is often a profound transformation of the human personality depending on its environment, its own personal fate and particular experiences; the person's age plays no part in this except perhaps that of a precondition. These changes which arise from experiences and a unique reciprocity are called '*personality-developments*'. Examples would be the bitterness of dependent people, the blunting that comes from constant, heavy

¹ Tiling, *Individuelle Geistesartung und Geistesstörung* (Wiesbaden, 1904). Neisser, 'Individualität und Psychose', *Berl. klin. Wschr.*, vol. 2 (1905), pp. 1404, 1445, 1473.

manual work or a deeply affecting fate which burdens the spirit. 3. Also independent from the life-epochs are the *fluctuations in the formal personality*, which appear as spontaneous (endogenous) phases. The temperament changes groundlessly from time to time; there is a sudden mental inability to work or else a sudden productivity or a tendency towards hysterical manifestations. These varied and transient phases more commonly appear as changes in single psychic phenomena but sometimes they seem to be an alteration in the entire habitus of the personality. 4. All these changes should be distinguished from the changes in personality which appear at a given time as a result of a process and are *lasting*.

The 'personality-developments' and the transient 'phases' may be so conspicuous and so deviant that we consider them as morbid in the sense of a morbid development of the personality or as a psychosis.

With this the question regarding the relationship between personality and psychosis becomes a threefold one:

1. *The relationship of the original personality to its morbid development.* A jealous man can develop into someone with delusion-like jealousy, a person sensitive to his rights into a querulant and a suspicious person into someone with delusion-like ideas of persecution. By definition the development of a personality must emerge in a meaningful way from the previous personality. It is almost as if one were dealing with a 'hypertrophy of the personality'. There is a relation between a 'sensitive personality-type' and a paranoid transformation of experience.¹ A sexual lapse is transformed by embarrassment and remorse into a fear of being discovered and into delusions of being watched and finally of being persecuted. Sexual inadequacy and poor contact with the environment are transformed into the delusion that sexually one is being influenced and that one is being persecuted. Sexual deprivation is transformed into delusions of being loved and being asked to marry. Yet however understandable the connections the specific character of the relationship and of the transformation still remains ununderstandable—these do not appear in everyone but only in a few people of this personality-type.

2. *The relationship of personality to phase.* Phases range from slight but frequent manifestations up to the fully developed psychoses of a manic, depressive and other kind. As to the relationship of personality to a particular kind of phase we have the thoroughgoing work of Reiss.² He found that simple, periodic and genuinely circular forms of mood-disorder, psychogenically coloured alterations of mood, pictures resembling melancholia and retarded depression all present themselves in the same way in the most diverse types of affective predispositions. He discovered however that in general there was a preponderance of manic mood-states where there was a lively disposition and of melancholy mood-states where there was a pronounced depressive disposition. He also found that it was the most pronounced affective dispositions

¹ Kretschmer, *Der sensible Beziehungswahn* (Berlin, 1918).

² Reiss, 'Konstitutionelle Verstimmung u. manisch-depressive Irresein. Klinische Untersuchungen über den Zusammenhang von Anlage u. Psychose', *Z. Neur.*, vol. 2, p. 347.

that were particularly prone to psychoses of a kindred type. The circular affective disorders on the other hand were completely independent of the prevailing mood and temperament and stood apart from them as something alien.

3. *The relation of personality to process.* The third question is whether and to what extent the original personality-Anlage and the process reveal any relationship to each other. We have long suspected that schizophrenics are frequently shut-in, unadaptable and solitary beings before they become ill; also that they are sensitive to the impact of reality, egocentric (not necessarily egoistic), shy, unbalanced, self-tormenting, distrustful, cranky, insecure, and given to enthusiasms and metaphysical notions. The remarkable fact has also been shown that, in families where some members suffer from a process, other healthy members show personalities very suggestive of schizophrenia (which Kretschmer later called schizothyme or—when rather closer to psychosis—schizoid).

Künkel¹ tried to show through case-histories the frequent incidence of an unusual childhood personality in those who later became schizophrenic. Following Kraepelin he grouped his subjects into (1) quiet, shy, reserved children, who live for themselves (autistic); (2) irritable, touchy, excitable, nervous and obstinate children (irritable); (3) laggard, reluctant to work, inactive (asocial) children; (4) docile, good-natured, moralistic and industrious 'model' children who shunned any useful naughtiness (pedants). We can hardly deny that there is a relationship of some kind but it is not permissible to ascribe to a designated personality-type the specific hazard of becoming ill with schizophrenia. In any case a relationship between known cerebral processes (in General Paralysis, etc.) and the primary personality (which we must never confuse with the disposition as a whole), does not appear to exist.

Besides asking after the relationship of personality to psychosis we may also ask after the relationship between personality-type and specific psychic anomalies, such as compulsive ideas, phobias, false perceptions, etc. Friedmann thinks he has observed compulsive ideas particularly frequently in the case of weak-willed and highly critical people. Janet believes in the closest relationship between psychasthenic personality and all the symptoms which he ascribes to psychastenia and it is generally held as self-evident that there is a close relationship between hysterical personality and both physical phenomena (stigmata) and psychic phenomena (twilight states, etc.) due to hysterical mechanisms.

(d) *Kretschmer's Theory of Constitution*

All the above considerations were taken into account by Kretschmer in his new conception of constitution. I will first report his theory quite uncritically. Kretschmer started from the two major psychoses, schizophrenia and manic-depressive insanity, and found that they were related to types of body-build.

¹ Künkel, 'Die Kindheitsentwicklung der Schizophrenen', *Mschr. Psychiatr.*, vol. 48 (1920), p. 254.

Schizophrenics showed predominantly a leptosome type of body-build while manic-depressives showed a pyknic type (cp. above pp. 266 ff.). In the third major psychosis, epilepsy, he found the athletic body-build predominant. The relationship is one of statistical frequency—a correlation. It is true that figures from a number of different parts of the country and from different countries show considerable variation. Mauz averaged out a number of sources and produced the following percentages as a general confirmation of Kretschmer's thesis:

	<i>Pyknics</i>	<i>Leptosomes</i>	<i>Athletics</i>	<i>Dysplastics</i>	<i>Uncharacterised</i>
Epileptics	% 5·5	% 25·1	% 28·9	% 29·5	% 11·0
Schizophrenics . . .	13·7	50·3	16·9	10·5	8·6
Manic-depressives . . .	64·6	19·2	6·7	1·1	8·4

Related to the types of body-build we find *personality-types* (the schizothymic, cyclothymic and viscous temperaments). Kretschmer has depicted these most vividly and unforgettably. Where one scrutinises the physiognomy these personality types will reveal themselves in appropriate bodily shape (cp. pp. 266 ff.). Kretschmer tried further to show a statistical correlation between personality and types of body-build as he had shown in the case of the psychoses. He set out the basic properties of the two main personalities in the following table:

	<i>Cyclothymics</i>	<i>Schizothymics</i>
Psychasthesia and mood . . .	A <i>diathetic</i> ratio between elated (lively) and depressed (sad).	<i>Psychasthetic</i> ratio between hyperesthesia (sensitive) and anaesthesia (cold).
Psychic temperament	A <i>swinging curve</i> of temperament between mobile and sluggish.	<i>Erratic curve</i> of temperament between abruptness and tenacity, alternating modes of thought and feeling.
Psychomotility	Adequate to stimuli, well rounded, natural and pliant.	Often inappropriate to stimuli: reserved, uneven, inhibited and rigid.
Appropriate type of body-build	<i>Pyknic.</i>	<i>Leptosome</i> , athletic, dysplastic, and an admixture of these.

He then examined these types of body-build by means of *psychological performance-tests* related to tempo, modes of perception (whether more of wholes or more in detail), perseveration, motor mechanisms, dexterity, affectivity, etc. Once more he found statistical correlations which fitted the descriptions of the living personality extremely well, seemed to be complementary and could be interpreted in the light of them. The following table reproduces some of these statistical distinctions:

<i>Leptosome</i>	<i>Pyknic</i>
Sharper sensitivity to form.	Sharper sensitivity to colour.
Stronger tendency to perseverate.	Weaker tendency to perseverate.
Often indirect and erratic associations. Poor quality of association.	More emotionally toned associations with more detailed and more objective descriptions.
More intense, abstract, analytically persistent; given to single odd spurts of thought.	More expansive, objective, given to synthesis, responsive and adaptable.
Tends to be subjective.	Tends to be objective.
Emotionally reserved.	Frankly emotional.
Individual tempo higher.	Individual tempo lower (knocking with rod on a metal plate at the most comfortable tempo).
Difficulty in shifting tempo.	Ease in shifting tempo.
Deliberate over fine movements.	Slapdash and careless in motor tests.
Stiff, uncertain and inept in movement.	Swift and flexible; movements apt and well rounded.
Wary, cautious; increased psychic tension.	

Further correlations were established experimentally between type of body-build and *physiological functions* and reaction to *drugs*.

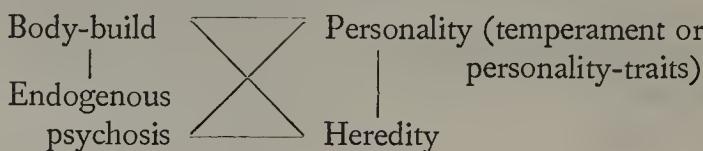
Correlations were also found between body-build and the *somatic disposition to illness*, e.g. the leptosome was prone to tuberculosis and the pyknic to arthritis and diabetes.

The whole edifice was however finally crowned by the discovery of the *relatedness of all these findings in the context of heredity* (the coincidence of typical phenomena in the nearest blood relations). Psychosis, the total personality of the patient and the individuality of the relatives had common ground. 'Everything comes out of a common mould.' 'Something breaks through catastrophically in the spasmodic crises and inexplicable moods of our catatonic patients, either as delusions of persecution, absurd systems, desperate blocking, stony rigidity, hostile autism or negativism and mutism; whatever it is it pervades widely as a familiar spirit in numberless guises in every kind of normal and psychopathological variation; it pervades whole tribes of pedants and stolid, conscientious money-grubbers, as well as unstable moody people who swerve a way through life, inventors and discoverers and sensitive outsiders with their fine-spun anxieties and mistrusts, silent ways and disgruntled misanthropy. Once we leave the psychic milieu of schizophrenic families and enter the world of circular insanity we step out of a cold closed vault into warm open sunshine. These latter families share a common goodheartedness, a warmth and geniality of temperament, a frank, sociable and natural humanity which is sometimes more lively, fresh, witty and actively busy and sometimes more deeply feeling, gentle and quiet; it reminds us on the one hand of the hypomanic pole and on the other of the depressive pole in the circular type of psychosis to which it is linked by a series of direct transitions.'

We reach full comprehension only if we bear in mind the total relatedness of personality and psychosis to body-build, psychic and somatic functions. We can never 'do biological justice to the endogenous psychoses so long as we

look on them as isolated disease-entities removed from their natural hereditary context and narrowly pressed into clinical entities'.

The following schema sets out the whole context and the various lines show the way in which everything is inter-related.



Thus there arose for Kretschmer the picture of a single vast unity.

All psychopathological phenomena are taken up severally and fitted into the whole. Even the relative whole of the personality, which can only be understood in psychological terms, comes to form an element in this all-embracing living whole. The observing eye searches for some kind of biological law, something which will be the central factor, an original source for a unifying conception of the somatic and psychic, the healthy and morbid, *the real human 'over-all' constitution* which fashions itself into the subtlest of personality traits as well as into every kind of bodily function. The idea is that of constitution as a whole and its variation into basic kinds of human life. Hence the body-build remains the focus of attention. This is the objective element in which everything coheres and to which everything is related—faithful to the starting-point of scientific anthropology: that constitution is manifested in the body-build.

This unity of constitution is for us an idea, but Kretschmer hypothetically conceived it as something that could be grasped quite concretely. *Personality and psychosis*, for instance, have *something in common*, something similar which differs only in degree, e.g. psychotic negativism has something in common with the personality-trait of obstinacy. The psychosis does not break away from the context of life as something fresh: 'in accordance with our way of looking at constitution the psychoses are still only single nodal points scattered about in a diversified network of normal, physical and psychological relationships of a constitutional character'; there is 'every kind of conceivable shading and transition between the well and the sick'.

We can also assume the *genotype* of the hereditary disposition to be a *unity*. Body-build, personality, psychosis, somatic morbid predispositions 'are only partial phenotypical effects of the entire hereditary substance'. We have to suppose that 'there is an entire genotype lying at the base' of the whole ramifying structure of the phenomena.

Now the unitary nature of this construct cannot actually be demonstrated directly in any thoroughgoing manner. On the contrary '*classic cases*' are *rare*. Hence Kretschmer uses this pure construct of the whole to frame primary causes for what in actual fact are mere correlations, with deviant cases perhaps in the majority. These primary causes are conceived as lying in the combination of hereditary substances and the consequence of mixing:

1. *Mixing.* In the pyknic body-build 'variants may show themselves as formal asthenic or athletic elements'. The mixing of types is termed '*a constitutional alloy*'. This concept of 'alloy' applies to the individual's psychic type as well and in general to the totality of inherited dispositions (*Anlagen*) that is to his constitution'. 'The more distant relatives of most schizophrenics and manic-depressives contain an admixture from both personality constellations but on the average the appropriate personality-type will predominate quite clearly'. Since mixing is almost universal we find that basic characteristics sometimes appear more clearly developed in the relatives than in the patients. The alloy in the individual as in the family may be such that pyknic and leptosome features combine in the body-build and cyclothyme and schizophrene traits in the personality and indeed these can cross so that one constitutional type is manifested in the physical sphere and another in the psychic sphere; for example, a schizophrenic process may occur where there is a pyknic body-build. Kretschmer called alloys of this sort '*cross-overs*' (*Ueberkreuzungen*).

2. *Modes in which the inherited genotype is actualised.* The intensity and direction of the *manifestation* changes. Neither body-build nor personality nor psychosis 'necessarily reflect to the full the entire genotype that underlies them'. It is conceivable 'that one part of the genotypical disposition (*Anlage*) penetrates more strongly as a phenotype in the body-build while another predominates more in the personality or in the psychosis'. 'The same biological agent which manifests itself as a somewhat long and pointed nose in an otherwise pyknic brother may for example become phenotypically clear and unambiguous in the sister in the form of an asthenic habitus. In the course of life first the one then the other constitution may predominate when there are mixings in the genotype'. Kretschmer calls this transformation in the phenotype '*exchange of dominance*'. He thus enables one type to convert itself into the opposite type in the same individual.

(e) *Critique of Kretschmer's researches into constitution*

Almost twenty years ago, shortly after Kretschmer's book appeared, I made some critical remarks regarding it in an earlier German edition of this *General Psychopathology*; I will set them out once more. I have rearranged the critique and made some abbreviations and factual clarifications but there are no real alterations:

Kretschmer's *intention* is to discover a constant relationship between complex types of body-build that have been empirically established and equally complex psychic types and to do this statistically with the help of numerical correlations.

How does he discover these types? The types are not to be 'ideal-types' but empirical types where averages can be determined. Kretschmer counts up large numbers of asthenics, pyknics, etc., and takes into account every measurable and visible attribute; he then presents us with a picture of the typical average. But how *did he select* the cases from which he drew his average? He took those cases where, as he says, a large

number of morphological similarities could be tracked down in a large number of individuals. He therefore intuitively preconceived the type. He testifies to this himself when he says that his type-descriptions were not strictly guided by the numbers of average cases but by 'really beautiful cases', and these 'classic cases' are 'almost lucky finds'. He further testifies to this when he writes, 'Everything of course depends on a severe and wholly artistic training of the eye.' 'A collection of single measurements without some idea, some intuition of the total structure, will get us nowhere.' 'The tape-measure sees nothing. By itself it can never bring us any comprehensive picture of biological type which is our aim.' Or again, 'The morphological detail is always only important within the framework of large-scale, over-all pictures of body-build that can give rise to types.'

What does Kretschmer enumerate? He takes body-measurements first and body-proportions and sets up tables of averages. We know that subjective intuition of the preconceived type determines the selection of the cases that are to be measured and enumerated. From a given number of cases two independent observers will not select the same individuals nor will their total count of pyknics be the same, etc. 'Classification of borderline cases will never be exact,' says Kretschmer. Further, he never compares his figures all round but simply produces his tables which have then no further part to play. Should the reader himself draw some comparisons he would in fact be unable to deduce anything of significance from these tables. Again Kretschmer does not merely describe 'beautiful cases' but adds his average findings so that more cases may be subsumed under the given type and his initially clear intuition of some unitary form grows blurred. He also enumerates the correlations between body-types, personality and psychosis. The diagnosis of schizophrenia and of manic-depressive insanity if strictly defined can be arrived at perhaps without disagreement but if it is taken in a broad sense diagnostic viewpoints will differ widely. Kretschmer however includes the extremely problematic 'schizoid' neurasthenics, the psychopaths, the 'dégénérés', so that any kind of reliable enumeration vanishes.

What he counts, then, are complex and self-evident unities, types of body-build, types of personality, types of psychosis—not simple, isolated characteristics which could be identified by anyone and counted in the same way. But statistics only have meaning and are conclusive when different observers achieve the same figures on the same material. Otherwise they are only apparent when we look to them for proof and depend on intuition and this should be declared. If we want to enumerate, not only do we need identifiable characteristics which can really be counted—either well defined or precisely graded—so that there is some definite numerical value, but we also need controls. The work of Beringer and Dürer¹ dealing with a similar group of problems shows how this should be done. They enumerated the dysplastic features in schizophrenics (the findings are clear but not very productive). It is illuminating to compare this piece of work with Kretschmer's. The latter possesses a high order of intuition. This however tends to get hidden and false scientific claims are made through an uncritical use of exact methods. In the case of Beringer and Dürer we find scientific precision of investigation but no intuition. Great people like Kretschmer may well retort that one should not talk but test. We have to answer that this is so and Kretschmer's types will always be recognised because of their concrete vividness but in spite of this we shall not begin to assess them statistically because pure methodological reflection will show us in advance that any figures so arrived at are inconclusive.

¹ Beringer and Dürer, 'Über Schizophrenie u. Körperbau', *Z. Neur.*, vol. 69, p. 12.

Kretschmer's enumeration is not arbitrary although it is subjectively determined. Reality does reveal cases which are almost an objective confirmation for his intuition and which can be enumerated (his 'really beautiful cases'), but it also reveals others which do not seem to fit in at all even for the most well-intentioned intuition and a great mass of cases which fall in between the main types. In order to overcome these accepted difficulties Kretschmer *makes further interpretations*, in which he transports concepts from genetics (such as crossing-over, exchange of dominance) and uses the *idea of alloys* of different types in the same person. By this manœuvre it became impossible for any case to arise which could not somehow or other be interpreted. In this form his theory cannot be contradicted by any single case. If this is so there can be no real proof of the theory either. There is a certain 'plausibility' in this combination of genetic biology, theory of body-build, psychopathology and personality-study though it never has any firm, empirical and undebatable anchorage and constantly permits the use of supposedly scientific speech for the inconclusive interpretation of a picture which intuition has drawn.

There is nothing to be said against the admirable, descriptive creations of Kretschmer except that their pseudo-exact scientific disguise confounds everything. Artistry and enumeration unite together and the one smuggles in the other. The creative artistry engages our interest and the scientific reader whose critical faculties are not particularly strong is lulled by the apparent exactitude which is only a cloak. The professed aim is a synthesis of methods to allow the recognition of a new whole which exists in reality but in fact we are dealing not with a synthesis but a confusion of methods. Kretschmer's book does not really breathe the air of the natural sciences in as much as these latter make critical differentiations and are exact even in their rudiments.

I consider the whole theory untenable (though it does spring from a meaningful source) and it seems to me a naïve anticipation of a scientific knowledge of the ultimate factors of life whereby the individual man could be classified and, what is more, classified as a clear case. The positive value of Kretschmer's attempt I take to be (apart from the personality-typing and physiognomic aspects) the creation of the pyknic type of body-build (the two others were already known though Kretschmer has described them in infinitely greater detail). The pyknic type was a new one which was concretely vivid and could be confirmed from experience.

When I made the above remarks I went wrong on one point: that was the fruitfulness of this initial attempt and the weight of this idea of constitution when it was applied in earnest and extensively to all kinds of somato-psychic phenomena and the entire range of causal and meaningful connections. At the time I only appreciated its value as a contribution to physiognomic studies and beyond that I only felt the enthusiasm. It is true that I consider my remarks still hold today but they seem to me insufficient and scarcely congruous in tone with Kretschmer's creative performance. I was also mistaken in that I did not foresee the wide effects of the theory.¹

We can partly understand this perhaps because the mass needs of our time

¹ The majority of the many publications are tests and confirmations of his work; some contradict it, a few give vivid extension of it to other types of illness. For the latter see Fr. Mauz, *Die Veranlagung zu Krampfanfällen* (Leipzig, 1937) (interesting presentations rather than methodical investigations and proofs).

are all for concrete methods whereby scientific work can be repeated and analogous investigations made without any call for original ideas; also because there is a tendency to combine a certain grandiosity with pseudo-exactness so as to reach truth quickly and comfortably. I had this in mind at the time when I was writing in support of painstaking, psychological exploration and empirical precision as against 'speculation as to possibilities', recalling the older natural philosophers who thought they could recognise the 'essence' of things and to whom Kepler retorted, when he was accused of knowing the surface rather than the essence: 'As you say, I grasp reality by its tail but at least I have it in my hand; you may be trying somehow to get hold of its head, were it not in a dream'. Even in a scientific age an illusion can arouse an enormously wide circle of interest, particularly when it appears in scientific garb and outside the specialist field.

However, the most decisive thing of all has been the open enthusiasm for an idea: the reawakening of the ancient and deeply rooted notion of human life as formed from a plurality of temperaments. This is basically no illusion. I would now like to understand this idea, test its conclusions critically and affirm its positive meaning. I have therefore to make a critical analysis as well as a positive adaptation. I have indeed found subsequent confirmation for my earlier criticism but because of the fruitfulness of the research which has been set afoot I think I have now arrived at a clear acknowledgement whereas initially this was both obscure and insufficient. I cannot convince myself that my methodological criticism was at fault but I can be convinced of the truth of the basic idea, which in any case I only understand in so far as I understand the meaning of the mistakes and clarify the basic misunderstandings of the theory. In so doing I also try to grasp the surprising phenomenon that those investigators who apply their methods positively and with infinite care can at the same time occasionally make critical comments which seem to destroy the whole meaning of their activity.

We must first repeat the criticism and then complete it:

1. *Criticism of the statistics.* The old objection remains. The comprehensive pictures which Kretschmer detects with such obvious acuteness are either physiognomic configurations held together by a glimpse of their essential nature or morphological patterns held together by a sense for biological form. In either case enumeration is impossible because of the particular sort of object—we have to take into account the fluid manifold of human forms, the rarity of 'pure' forms as types and the characteristic of 'being a mixture' or of 'being in transition' which applies to the majority of individuals. There is no firm basis whereby we could identify the measurable units in each case or quantify them according to the degree in which they are present. We can only count data which different observers using the same methods can recognise as identical in respect of certain unambiguous characteristics. Types of body-build with their fluid transitions are not of this order and types of personality are even less so. The diagnosable major psychoses, within narrow confines at

least, come the closest. The weakness is always present that the selection of cases is not made according to any unambiguous criteria and therefore will vary in the hands of different investigators.

But counting has gone on in numerous and extremely carefully conducted investigations in Germany and other countries. Confirmations and contradictions have followed each other, but the confirmatory findings are in the majority. If they were the decisive thing Kretschmer's categories could be considered proven. But it is the critical contributions¹ which convince, particularly where they have been carried out with the greatest attention to detail and combine methodological awareness with exactness of procedure.

Yet the confirmatory investigations themselves are very diverse from each other. 'What is striking' [writes J. Lange²] is the remarkable difference in the reported percentages . . . there are so many disagreements that they can hardly be explained by chance. One would rather have to conclude that the material is not really compatible with a statistical approach.'

In the face of so much deviation investigators were required to start from the same premisses. Kretschmer demanded a training in observation: tape-measure and compass were not enough. But here was the root of the insoluble antinomy. Either the trained observer assigned the case to one or other body-build according to his general impression—in that case the demand for training in observation was really a demand to let the master's procedure entice one into an acceptance of the truth of his premisses, while the anthropological measurement became of negligible importance, a sort of scientific frill. Or he relied on measurements and classified according to given unambiguous anthropological indices (the selected relationships of certain measurements to each other). In that case, he lost sight of the type of body-build, since what could not be measured lacked importance, and found himself caught up in an endless mass of figures, abstract, bloodless correlations where there was no comprehensive unit or complex unity to be found.

But the master's ways were not unequivocal; they were not transmitted in identical fashion nor did they remain the same in his own hands. Kolle³ describes examples which give a drastic demonstration of arbitrariness in the individual case.

Thus it seems impossible to make a uniform and statistical analysis of the large groups of body-build, so much so that J. Lange writes: 'Kolle has shown convincingly the arbitrary nature of most of this and it is hard to understand why he harks back repeatedly to the anthropological line'. This, as Kolle shows with scrupulous care, is due to the fact that *not everything is arbitrary*. *Certain statistical relationships* did emerge from these methods even if they were not exact and when roughly definable groups were compared some clear differences came to light, the *truth* of which was either generally acknowledged or could at least be debated. If the groups are circumscribed—say,

¹ Above all Kolle, *Arch. Psychiatr. (D)*, vols. 73, 75, 77 (1925–26). *Klin. Wschr.*, vol. 1 (1926).

² Bumke's *Handbuch*, vol. 6, p. 43.

³ Kolle, *Klin. Wschr.*, vol. 1 (1926), pp. 8 ff.

classic manic-depressive psychosis and severe schizophrenia—then we see that the pyknic body-build is much more common in the manic-depressive psychoses than in the schizophrenias or than in healthy people. We also see that the proportion of leptosomes in schizophrenics although greater than in the manic-depressives is roughly the same as in the case of the healthy population.¹ Where the comparisons are made by the same observer absolute statistics cannot claim validity but relative ones can and the total picture will fall into line with them if the investigator proceeds in an unprejudiced way. Thus Gruhle convincingly argues that Kretschmer amongst his schizophrenics simply got hold of a type belonging to the population at large and not a somatologically particular group. He points out on the other hand that a much larger proportion of pyknic types do in fact exist among manic-depressives, which poses the question whether one should be satisfied to agree with Krisch that the pyknic habitus plays the same role for manic-depressive illness as the asthenic type plays for tuberculosis.

The figures can perhaps be taken still further if we do not start from schizophrenics in general but simply include certain groups within this constellation, which have certain narrowly defined characteristics. Mauz² did this in an interesting study which shows that in young severe hebephrenics who quickly show a serious deterioration we can find a large collection of leptosomes while a pyknic type is generally absent so that the presence of pyknic body-build in a patient improves the prognosis. These and other points made by Mauz, which will recall to the psychiatrist relevant cases from his own experience, are well based statistically so that in spite of the necessarily inexact foundations his findings seem quite acceptable. A careful confirmation of the thesis would be practicable but so far it does not seem to have been carried out.

In spite of findings which we can evaluate positively we are left on the whole with the following picture of statistical methods when applied to body-build and psychosis (and still more so when they are applied to body-build and personality): An uncritical start is followed by a highly critical procedure; but the inexactitude of the basic data cannot be annulled by the exactness of this superstructure. Max Schmidt's comment on the types however seems a valid one: 'they seem to be more and more generally accepted though their significance remains in doubt'.

In the practical application of Kretschmer's constitutional theory we come across other figures where the starting-data are exact and unequivocal (so far as this can be so with psychological experiments). The position is the same here as when one sets out to make measurements in respect of body-build. We can make endless correlations which in themselves give us no picture and which because they are not usually at all marked make little impression on us. Only by an interpretation which falls back on the picture of the personality

¹ Gruhle, *Arch. Psychiatr.* (D), vol. 77—(with confirmation from Kolle).

² Fr. Mauz, *Die Prognose der endogenen Psychosen* (Leipzig, 1930).

and remains constantly in flux do the findings gain some meaning through purposeful selection; especially is this so when the investigator is making some comprehensive observation in respect of his cases. Such observations are much more productive for a third party than the figures of the findings and it is just through such observations that the procedure becomes interesting in fact for the person who applies it.

2. *Interpretations in face of discrepancies (the inability to be proved or disproved).* Exceptions from the predicted facts and figures are in fact in the majority and are interpreted by hypotheses which stem from concepts of genetics: Hybridisation (alloying), exchange of dominance, crossing over.

The exceptions lie in the large number of transitional cases which cannot be properly accommodated; the pictures of schizophrenic psychoses appearing in a pyknic body-build and of manic-depressive psychoses in asthenics, etc. (always supposing that the elements which are thought to be mixed do in fact really exist). Further we have to admit 'that there are individuals who show a leptosome habitus in their childhood years yet in their latter forties show themselves of pyknic type' (Max Schmidt).

The interpretation of the situation by means of alloys, crossings-over and exchange of dominance is in this context a pure speculation. These concepts only have reality when they can be tested experimentally (as in biological genetics). Interpretation further draws on the effects of other additional— inhibiting or enhancing—genes in the hereditary disposition as well as on exogenous influences on the individual structure. The objection here is never directed against a particular possibility. All this is in fact possible. The objection is that if we can use so many interpretative concepts the interpretation itself is reduced ad absurdum. If we can prove everything we can never be shown to be wrong but really we are hovering around in a wide circle with a large number of purely repetitive concepts and in spite of our apparent movement we never get a step further.

3. *Tendency to leave concepts and methods ill defined.* Kretschmer's theory tends effectively to create plastic and convincing structures within a holistic framework but with this always goes his tendency to logical ambiguity and to vague and approximate ideas. Thus, he likes to speak of an 'affinity' when it is only a matter of correlation and the impression of some inner relationship then slips in unwittingly through his choice of words when in fact there is only an external and superficial connection. Kretschmer says clearly, it is true, that by 'affinity' he means a comparatively large frequency of correlation and that he cannot say anything definite as yet about the inner determinants of these correlations (pyknic body-build he says shares an affinity with manic-depressive psychoses as contrasted with schizophrenia). However, there is no doubt that Kretschmer's work as a whole is directed towards the inner relationships and that the attraction of his theory is due to the impression he gives of a meaningful whole of psychosis and body-build. There is however a constant intermingling of one thing with another: physiognomic concreteness which is

subjective intermingles with the measurable data which are objective but without any concrete meaning as a whole; enumerations of single characteristics and proportions that are identifiable merge with those of complex unities which are not identifiable; 'correlation' merges with 'affinity' or correlation with the meaning of the correlation; what is psychic with what is somatic; inexact observation with exact elaboration; free-ranging scrutiny with a straitjacketed schematic classification; the evidence of physiognomic or morphological observation with the evidence of scientific measurement; body-build as an expression of the complex unity of a living creature with body-build as a consequence of certain endocrine effects or disturbances; unequivocal observation with equivocal interpretation; actual experience with untestable speculation.

The theory when applied does not therefore provide the true synthesis of a comprehensive whole but only a confusion of methods and concepts. In spite of the apparent clarity of the ideas presented and the genuine clarity of what was in fact seen, the basic theory remains invincibly obscure. It rests on a fundamental error which for thousands of years has notably recurred in philosophy and occurs here in the field of psychopathology.

4. *The underlying mistake—ideas transformed into entities (hypostatisation).* All known and knowable Being has a definite concrete form, an objectivity which we can grasp. Ideas however strive after the whole as it appears in the particulars but this cannot become an object neither as the underlying event which we have construed nor as an illustrative image. Types, images, and theoretical systems are used by us purely as schemata of ideas to illuminate the path of our knowledge of particulars but they are not significant for knowledge in themselves. If now we objectify these schemata, images and theories and give them a being as if they were there as an object is there, then we 'hypostasise' an idea. This is the way in which ideas lose all their élan as a break-through movement of knowledge into the open and the knowledge we are left with is a sort of pseudo-knowledge which sooner or later will have to reveal itself as 'lacking in objectivity'.

Kurt Schneider is therefore right¹ when he says that Kretschmer's types are not discovered realities and disputes their claim to provide the supporting constitutional base for the entire teaching on personality and psychopathy. Max Schmidt is also right when he says that the types are good as working-concepts and as illustration even though they are not well-founded syntheses.

If I transform an idea into an hypostasised existence, I fall a victim to a natural and insistent appearance, which is moreover comprehensible and must therefore not be allowed to mislead me (Kant) even if it persists like an after-image in the eye. If it is allowed to mislead me I am in danger of losing the idea in favour of a supposed entity. Then I get to the position of treating the content of the idea as an object of reason, thinking of its elements as combining, mixing, crossing and constantly approximating it to a mechanism—and

¹ Kurt Schneider, *Psychopathen.*, 4th edn., p. 40.

yet I can still be moved by the truth of the idea which brings me the conviction that I am not pursuing an illusion. The important thing is to overcome this obvious misunderstanding. Only then will we liberate from objection not only what is seen but also the formulation of what is seen; not only intuition but also the methods of research which are guided by it. It is then impossible for any stupid successor to set in motion the mechanism of apparent knowledge for the speedier and more comfortable classification of human kind. We can then also answer the thesis that there is no such thing as constitution (except as the specifically determined effects of endocrine glands on the body as a whole) by saying: it exists not as an objective fact but as a necessary idea. If anyone undertakes to observe mankind without such an idea, he will remain poor and limited in his observations.

Once when Schiller, while agreeing with Goethe, wanted to explain to him the meaning of the 'primary plant' (*Urpflanze*) he said 'it is "merely" an idea yet it is true' and Goethe replied that he was happy to see the idea because it was the reality. In fact the word 'merely' only has an application when we oppose the idea to the finite concrete reality of the objects of reason which belong to our direct investigations. The idea is reality which leads us on though we are never in possession of it, the reality which appears to us in images, draws us to itself in thoughts and schemata and gives context and meaning to all that we know.

5. *Special and fundamental points of view.* Once we are aware that we have fortified ourselves with some vision of the whole we tend either to see the whole (as a oneness in everything) *in undisguised transition* or to reduce it to a schema. Among the various formulations of Kretschmer's theory we detect the former in his thesis of a *transition between personality and psychosis* and the latter in his tendency to think *as if there were only two or three types of human being*. Neither is at all necessary to his idea. But it is, so to speak, the result of the way thoughts work once there has been a complete hypostatisation of the idea.

(aa) *Personality and psychosis.* Observations were made on the pre-morbid personality of schizophrenics and it was believed that a frequent abnormality of personality had been found in those who later became schizophrenic. However, while the nature of this relationship continued in question and people were only asking about the extent to which it existed, Kretschmer not only saw a dimly defined relationship but a transition: he saw the psychosis as an exaggeration of a constitutional variant of personality. This signifies much more than the predisposition of certain kinds of personality for certain psychoses.

Kretschmer was able to illustrate in a very suggestive way the hidden similarities between heterogeneous phenomena. It is important to be clear about the methods which he used. Here is an example: He uses *an analogy* to express the common basic feature between physiological properties, temperaments, personality-trait and psychotic phenomena. But the question has to be left open as to what is in any sense

identical here once we have passed beyond the illustrative aesthetics of the analogy. When Kretschmer discusses the viscous temperament in its relationship to the athletic type of body-build and to epilepsy he writes: 'This *viscosity of the psychic course* manifests itself again and again in other types of phenomena; in the quiet measured movements, the sparseness of speech, the limited fantasy, the great tenacity and the persistent attentiveness as well as in the equilibrium of the emotional life, the sluggish and meagre affectivity, the lack of elasticity, the moderate intellectual and social activity and the integrity and responsibility of the social behaviour. Viscosity, the sluggishness of flow, has to be considered as the basic common characteristic of athletics.' This is obviously a vivid analogy—that of sluggishness of flow—which will serve for a number of completely heterogeneous data, such as slowness of body-movement and reliability of character; in each case the analogy is apt enough but the sense is different. This is not a way in which empirical knowledge of human basic qualities can ever be expressed.

Sometimes it appears that Kretschmer has lost his sense of the *differences that gape between personality and process-psychosis*. If the latter only appears as the culmination of a personality-development at a given juncture in the hereditary connections, we should once more have to allow the vaguest of concepts. We would have to introduce a series of transitions from average schizothyme persons via schizoid psychopaths to schizophrenics. Kurt Schneider¹ takes a stand against this blurring of boundaries by transitions and says: 'On the basis of plain clinical experience we have to admit that these transitions do not occur though on analogy with certain illnesses they could not be regarded in themselves as an 'a priori' impossibility. The cases where one is doubtful (whether there is an abnormal personality or a schizophrenic process) are quite exceptionally rare but even these cases can almost always be decided in the long run. If there is a relationship between schizoid personality and psychosis, it is certainly not of the nature of a transition but a sort of leap, as, for example, from the state of chronic alcoholism to delirium tremens. The leap from personality into schizophrenic process-psychosis is decisive, and equally decisive is the leap from personality into manic-depressive psychosis. If there is any relationship it is certainly not that where the one form is a milder form of the other.'

The mode of thinking which hopes to grasp the unity of the psychological event by illustrative analogy and then endows this latter with a real identity was employed by F. Minkowska (*loc cit.*) in her structural analysis relating to the *epileptoid constitution*. By structure she means 'a formative principle which in contrast to all forms of living existence is something primary and expresses itself in a similar way in the biological sphere as well as in the sphere of personality and mental creativity'. The basic characteristic of the viscous constitution is supposed to be the slowing-down, stasis and agglutination (even the circulation is slowed down in the capillaries and affects the colour of the skin) and the motor seizure grows from the damming-up. The same *polarity* shows itself in the personality as a viscous *slowing-down* on the one hand with concentrated and tenacious affect and on the other as an explosive and *violent reaction*.

¹ Kurt Schneider, *Psychopathen*, 4th edn., p. 43.

In the personality (which is said to be common in the healthy members of families of epileptics) the basic characteristic of a sluggish flow expresses itself in such a way that these people tend never to leave their original groove; they stick to their home ground, cultivate tradition and family ties, work conscientiously, remain uniform, concentrate their affect and have no capacity for dislodging themselves from their particular world. When illness occurs the sluggish individual turns into an excited one and the damming-up which is at a peak owing to lack of any natural discharge or resolution of conflicts leads to a sudden clouding and loss of consciousness, an elementary panic and twilight states with the experience of elementary forces, religious visions and 'end of the world' premonitions. The epileptic psychosis is a severer degree of the phenomenon of sluggish flow polarised between damming-up and sudden discharge. The same polarity manifests itself in *fall and rise*. In the motor seizure there is the bodily fall and the motor discharge; in absences, twilight states and psychosis there is the mental fall into loss of consciousness and the rise into religious and cosmic delusions. This polarity has reached a creative self-portrayal in Van Gogh's recent painting (the Ravens flying over the Cornfield). The cornfield wants to rise, the catastrophe is imminent. In views of this sort I fail to find any discovery of a basic biological or psychological event; it rather seems to me a sort of game where the similarities between the different facts in so far as they can be verbally characterised gain an arbitrary identity. It is just this plausibility of direct and vivid vision which misleads us, linked as it is with the seductive notion that the deeps of life are being touched. This in no way detracts from the significance of the description of the genealogical findings.

The relationship between the kind of personality and the process-psychosis poses an uncommonly difficult problem. We will draw attention to two aspects only:

1. That there is a relationship between the original kind of personality and the later psychosis is not an absolute fact. No matter how often we find premorbid abnormal personalities in schizophrenics and similar personalities in their relatives we can, nevertheless, not speak of any abnormal type of personality as such which would predispose the individual to become schizophrenic or signify that there was this risk. Moreover, there are not a few cases where healthy personalities are affected by these process-psychoses.

2. When there are genealogical investigations to find some relationship between personality and psychosis these readily become a circular argument; a type is termed schizoid because it occurs in families with schizophrenic psychoses but the same type is not regarded as schizoid when no psychosis is found in the family. So Luxenberger says: 'Considered as an individual apart from his family ring the affectionless psychopath is an extreme and inferior variant of the personality with shallow affect. But if I find, for example, that he has a schizophrenic father then there is nothing against my conceiving him as a carrier of the schizophrenic disposition and from this point of view calling him a schizoid psychopath' (or someone suffering from a schizoid personality-disorder). Thus what at one time is only a variant of human disposition becomes on another occasion a manifestation of the hereditary substance of a psychosis.

Luxenburger, it is true, thinks that 'the coldness of affect in schizophrenic patients is something essentially different from the lack of affectivity in psychopaths or the poverty of feeling in relatively normal personality'. But it is only the genealogical investigation which seems to reveal what is there exactly in the individual case. But according to Luxenburger 'it will not do to align the self-concern of the psychopath or even the reserve of nordic man with the autism of schizophrenia'. Schizophrenia is 'not a variant of personality attributes but the symptom of an illness'.

(bb) *Two or three orders of men.* At first it appeared as if Kretschmer's theory supposed there were two or three constitutions and the intention was to classify all men under them. That was not the intention. Kretschmer thinks in terms of what he observes. He sees types and then describes them. In principle he has nothing to object against new types. Describe them to me, he might say, and show them to me! He would hardly object to new forms. He did not in fact take his start from any schema or system but from his own morphological and physiognomic acumen. Nevertheless the schema subsequently took shape unwittingly. And thereafter it was applied generally throughout the world as if it were a classification of universal human types.

(f) *Conrad's influence on the transformation of psychiatric teaching on constitution*

The fruitfulness of Kretschmer's approach showed itself finally in that it could lead to a further theory which was to remould the older one and replace it. The teaching on constitution has entered on a new phase with the excellent work of Klaus Conrad.¹ It is true this did not supply new investigations so much as new interpretations but that is something of importance in the problematical field where complex unities are conceived. The concern is to reveal fresh paths through some vision of the whole and open up new areas through the use of ideas. In so far as Conrad's theory presupposes Kretschmer's theory and the facts as he affirmed them, our criticism of Kretschmer applies to Conrad also. However, Conrad not only modifies but provides a radically new formulation. Kretschmer's theory as a whole fails but his concrete findings and formulations remain and appear all the clearer in their concrete significance and valuable singularity where they are not multiplied. Conrad first criticises the types in their statistical aspect; he secondly designs a new schema of types and arranges them in polarities; thirdly he gives new significance to the design by constructing a number of developmental hypotheses. I suspect that his genetic hypotheses are all wrong but that does not prevent them from being of the liveliest interest as a new 'schema of the idea'. Large-scale questions arise although testable answers are still in abeyance. An account of his theory now follows:

1. *Critical discussion of the type-statistics.* Conrad agrees with my own criticism and is himself quite clear that the statistical treatment of typological

¹ Klaus Conrad, *Der Konstitutionstypus als genetisches Problem* (Berlin, 1941).

problems 'is always a double-edged affair'. 'As we have ourselves determined the type as a classifiable item we should not of course try to prove it statistically. Averages in typology do not have the character of proof but only an illustrative value.' This sentence shows once more that the starting-point is a visible form and not a quantitative measurement so that it will not be possible to base any exact proofs on the figures.

Conrad however attaches no importance to the averages by themselves. The most important things for him in the types are the margins within which they severally lie but these too have little significance for him as quantitative absolutes because a type only gains meaning *when contrasted with its opposite*. The type therefore is only to be grasped through a range of relative marginal determinants.

The range of a type lies between an outer and an inner margin: between a purely ideal construct of the type and its quantitative average. The ideal configuration (the outer margin) can be seen in the individual classic case; the quantitative average (or the inner margin) derives from 'calculated averages drawn from as wide a group as possible' (but here the old question remains: how do we decide whether a particular case belongs to a group or not?). Conrad does not conceive the margins as rigid and since 'the type is not anything rigidly defined, there are no methods whereby fixed limits may be discovered'. 'Our only concern is to draw some kind of borderline in an arbitrary manner perhaps but in a manner that is methodologically correct'. (This may be so but arbitrary methods at the start presuppose some inviolable criterion for the classification of the individual cases; however arbitrary this criterion itself may be, in its application it must function in exactly the same way for every observer.)

Conrad's comments on the statistics of measurement for the types of body-build (that is, that they prove nothing and only have an illustrative value) extend unavoidably—one would imagine—to all statistics in which correlations between enumerated types occur. All these have an illustrative value only and must be assessed accordingly; that is, according to whether they are concretely convincing or not. Mere abstract figures, percentages, correlations as such, are quite indifferent—this would be the consequence—inasmuch as they can afford no proof. In truth all the statistics applied in this field are not real statistics.

2. New arrangement of types in polarities. Conrad is quite clear in his own mind that all the types are relative, particular and tentative. To this extent he is an unprejudiced observer of the whole wealth of human forms. There is no schema of types which would include from one viewpoint alone the immense variety of human body-builds or even order this according to two or three formal types.

This would be impossible for him since the fruitful forms are not the types themselves but shifting forms which have to be grasped from the standpoint of *broad polar principles of growth*. With Conrad the framework of his type-

schema is not to be determined by any existing ideal forms but by the principles which underlie them. The leptosome and pyknic body-builds come into being through a principle of growth which is polarised within itself. Another principle is at work in the athletic body-build. 'Other types can be defined according to yet other principles of growth'.

The various types so far discerned—including the dysplastic—were ranged by Kretschmer *in parallel*. Conrad set aside this unsatisfactory state of affairs by creating a hierarchy. The types are differentiated according to their underlying growth-principle and the requirement is that only comparables should be compared. In this way Conrad finds three main groups of types of body-build. Their common factor is that they are all growth-tendencies which manifest themselves more or less in the body-build as a whole or affect it in some way. 'Such tendencies manifest themselves throughout right down to the shape of the nose-tip and the curve of the little finger'. A further common factor is that they produce their own specific phenomena in the psyche and the personality. All the principles of growth occur in polarities and between the two poles lie a series of variants. The three main groups of body-build are as follows:

(aa) *Leptosome* (leptomorph) and *pyknic*: the tendency to grow in length at the expense of girth or in girth at the expense of length; also *metromorph*: well-proportioned growth which is regarded neither as a mean nor as a norm.

(bb) *Hypoplastic* and *hyperplastic* (or *asthenic* and *athletic*): growth-tendencies which make for insufficient or excessive tissue-, muscle- and bone-development. Hypoplastic (*asthenic*): thin sharp nose, hypoplastic zygomata, receding chin which leads to a shortening of the middle and lower face, narrow shoulders, small hands and feet, thin skin and scanty hair; hyperplastic (*athletic*): large, broad nose, accentuated zygomata, protruding chin, long middle and lower face, broad shoulders, large hands and feet, coarse skin, excessive hair; also the *metroplastic* type, representing measured growth between the above two poles.

(cc) *Dysplastic* forms of growth with endocrine aetiology (e.g. obesity or emaciation, eunuchoid growth in height, acromegaloid constitution, etc.) and defective structures, *dysmorphic* tendencies of growth (e.g. *status dysraphicus*, etc.).

The classification of types of body-build is associated in Conrad's schema as in Kretschmer's with an appropriate wealth of physiological and psychological reactions (experimentally established) and personality-descriptions.

With the help of this classification there is, in the first place, along with the third group an isolation of all the pathogenic forms of growth which are *illnesses* of known origin. They are not really characteristics of constitution. Secondly we find a *separation* of what had previously been confused together, that is, the *leptosome* form of growth, which is polarised with the *pyknic* form and is in itself another vigorous form of growth, is now separated from the *asthenic*, which is a weak form of growth and polarised with the *athletic*. A

hypoplastic as such is not yet a leptomorph; he can be that in addition. A hypoplastic leptomorph had up to now been called an asthenic but as such he contained a growth tendency, the hypoplastic, which is in no way directly connected with the leptomorphy.

The three groups are not all of the same order and parallel but every individual first lies in the polarity of leptosome-pyknic, secondly in that of asthenic-athletic and thirdly may suffer in addition from one of the morbid forms of growth found in group three.

Conrad compares these three groups and thereby characterises their meaning: in the leptosome-pyknic polarity he finds an exclusive relationship; in the extreme variants the typical signs are not found together in the individual case but cancel each other out as opposing types. On the other hand in the asthenic-athletic polarity, the typical characteristics are found together. Impulses from both forms of growth may manifest themselves in the same individual.

Further: the leptosome-pyknic polarity even in its extreme variants remains within normal limits, whereas the asthenic-athletic polarity merges into the morbid at both extremes, that is into pathological weakness on the one hand and acromegaly on the other.

Finally: the leptosome-pyknic polarity penetrates the human species profoundly right down to the realm of physiological and psychological reaction. In the case of the asthenic-athletic polarity 'the penetration is not nearly so profound'. The principle of differentiation shows itself 'in certain constellated characteristics which influence the constitution as a whole only to an unimportant degree. In the psychic sphere also the differentiation does not reach particularly far. There is hardly any question of a differentiation which would affect the whole personality in its very foundations.'

This classification is a predominantly plain and clear one. The consequence of course is that only the types of the third group survive as phenomena that are concretely defined, conceptually clear and causally unequivocal. In the second place, the 'transition' of the extreme variants in the second group into forms of illness (asthenia as Stiller's constitutional disease and acromegaly as a definite endocrine illness) remains debatable and brings this polarity into a doubtful light. In the third place, Conrad reduces the first group to a universal and indisputable polarity in the same manner as Weidenreich and with this the rich physiognomic detail and the specific constitutional characterisation are lost (hence Conrad writes: leptomorphy is not yet a constitutional type but only a growth tendency).

However, the classification is only the first step and we have not yet reached the basic conceptions of Conrad which give this outlined classification its meaning and in the light of which it must be confirmed or questioned.

3. A developmental hypothesis as the basis of the classification. The types of body-build are an expression of growth-tendencies. These tendencies have to be differentiated. Firstly, according to how profoundly they influence life as a whole: Conrad calls the leptomorph-pyknic polarity a primary variant of

human life; the asthenic–athletic polarity he calls a secondary variant. This means that the position which the individual will have in the first polarity is decided earlier in the embryonic development and therefore takes more radical effect while his position in the second polarity is decided later and no longer reaches down to the same depth.

Secondly, the growth-tendencies are differentiated according to their polarity at any one time. They are polarised through the developmental target which is embedded in them at differing range. Here lies the decisive factor.

The Dutch anatomist, Bolk, explained certain types of foetal malformations resembling animals as a development that had run to excess. Animals are extreme developments into a cul-de-sac. In contrast the normal human remains as a whole at a level of structure-formation which approximates to the embryo. Hence the human embryo and that of the ape are much closer related than full-grown man and ape, though the full-grown man is much closer to the embryonic ape than the full-grown ape itself. Bolk expresses this summarily by saying: man is like an ape that has stayed embryonic.¹

The underlying idea behind this theory is that of supposed growth tendencies characterised by their particular target: either specialisation or the preservation of flexibility and potentiality. Expressed differently: either a drive forward to an extreme or a holding back within a comprehensive and balanced harmony. This underlying idea is used by Conrad in an original way for the comprehension of types of body-build and constitution. The developmental target is set between extremes—between growth in length and in girth, between the asthenic and the athletic structure—and already in the primary patterning it is set at varying distances, that is at one of the two extremes or at one of the many different intervening possibilities. But, as distinct from the foetal malformations found by Bolk, in the types of constitution we are dealing not with a normal ‘coming to a halt’ and an abnormal excessive development but with normal targets extending over a variety of given polarities.

With the body-build the accompanying personality-trait have also to be understood as the developmentally earlier (as for long enough we have liked to conceive of the female of the species as developmentally earlier than that of the male and closer to the child). By this means Conrad gains sight of a great psychophysical oneness, a structural whole of body and psyche, genetically fashioned and determined at an early stage of embryonic development through a number of discontinuous processes or leaps.

The normally varying growth-tendencies are characterised by Conrad in terms of their contrasting ‘temperament of development’. This is either *conservative* or *propulsive* and it is decisive for the developmental target set for the constitution. The pyknic remains closer to an earlier stage and is related to childhood; the leptosome presses on to a later stage of development and is more

¹ Bolk, *Das Problem der Menschwerdung* (Jena, 1926). Cp. Wesenhofer for a criticism, ‘Cephalisation and Fetalisation’, *Z. Neur.*, vol. 170 (1940) p. 291. Bolk’s findings re the malformations are indisputable, as are the anatomical similarities of the morphological proportions.

remote from childhood. What is revealed in the bodily proportions is also revealed in other but parallel ways in the psychic qualities of the personality. The pyknic must be a cyclothyme because both the pyknic body-build and the cyclothymic temperament are more closely related to the *habitus* of the child. 'The pyknic body-build and the cyclothymic personality-structure are nothing else but correspondencies in the morphological event of the ontogenetic process of individuation.' The two polar types of constitution are just different (conservative or propulsive) developmental modes of ontogenetic changes of form, function and structure. 'Body-build and personality must correspond because they are the result of an identical developmental event'.

Conrad views all the constitutional types as polarised; that is, as a polarity of conservative and propulsive tendencies, applying particularly to the somatic phenomena: hence the constitutional types which are endocrinally determined are the result of tissue reacting to hormonal influences that brake (conservative) or accelerate (propulsive); hence also with the disposition to certain somatic illnesses we are to conceive the constitutional types 'as particularly favourable or unfavourable genotypical milieux for the actual disease factor'. The basic rule is: 'diseases of the diathetic type (that is, exhibiting abnormally increased reactions) show themselves more commonly at the conservative pole of the constitutional range while diseases of the systemic type (that is, all progressive, destructive processes) are more common at the propulsive pole.'

One final idea comes to crown this review of Conrad's developmental theory. Where, we may ask, do the greatest chances for development lie? Within the conservative temperament or the propulsive? The answer is 'in neither'. 'The pyknomorphic-cyclothymic variant of constitution presents an unspecialised "youthful stage" as the result of a conservative development and it has developed no further because of the lack of the corresponding temperament of development. The leptomorphic-schizothymic variant on the other hand shows itself to be a propulsive, highly specialised form of "later-development" which has reached specialisation too early and has thereby, because of being fixed prematurely lost its potential for further evolution. Only the metromorphic-synthymic types—midway between the two poles—represent those forms which, after the two first big steps in development involving the first and second major changes (that is, during the childhood years of six and eight and during puberty) reach as far as the level of the second equilibrium and are able eventually to accomplish further steps in development'. In respect to body-build in particular: 'between the two extremes it is only the metromorph who passes through the second bodily change (that of puberty) and attains the second level of equilibrium and with it the balance of proportions which meets us in the ideal of a perfectly balanced body-structure (the Greek ideal of beauty).'

This developmental approach gives us a biological vision of human possibilities that carries us to the very margins of life. It is not a concrete

vision based on physiognomic factors and an insight into personality-trait as in Kretschmer's case but it is a biological and speculative vision which operates theoretically and systematically and makes use of already existing and discovered facts and shapes them into a compelling whole. The speculation is performed clearly, handsomely and fascinatingly. On reading the book we constantly want to believe that it is true. But we must not let ourselves be deceived. In the first place, the facts which underlie the interpretation are by no means so reliable and unambiguous as the presentation of them suggests—in spite of the number of critical limitations: the plausibility of the picture, which indeed is biologically fascinating, tends to vanish when viewed more detachedly and as a whole and when one has access to the concrete facts. In the second place we are not dealing here with the findings of some new and convincing piece of research but with an interpretation of a hypothetical character helped out by the most modern of biological views. This interpretation is a new 'schematisation' (in Kant's sense) of the idea of constitution. If such a schema should be accepted as genuine scientific knowledge the following objections will have to be laid:

(aa) '*Development*' must either mean the vast undefined range of boundless possibility or a *limited development* which is a complete whole with different stages accomplished in a given time. When we talk of *stages* we already *presuppose* a definite *type of development*. If we differentiate this developmental type once more into different kinds, any one particular kind of development becomes a complex unity of its own and cannot very well be explained as a stage of this unity. Or again the developmental target cannot be grasped in terms of a developmental stage nor can the whole of the development be grasped as one of its own stages. An arrest of development (which can be recognised as a fixation at one stage) is pathological. The constitutional type must not be an arrest but a fullness of development. The type of this full development is characterised by a developmental target which 'corresponds' to a stage in this development but this correspondence is only a 'comparison'. The female sex is neither an arrested development nor is it nearer to the child than the male, even though certain morphological characteristics and tested properties seem to 'correspond to' those of a child but such a child, were it a male, would be further removed from itself than a full-grown woman. We may compare the female sex with a child or types of males with females or we may compare constitutions with the sexes or with childhood stages but we should not forget that on each occasion it is only a comparison we are making and we must not convert what is comparable into what is identical nor a correspondence into complete coincidence. Comparisons do not bring with them any causal knowledge but only perspectives of approach arising from the interplay of essential differences; in this case they do not bring us any scientific genetic knowledge but only plastic presentation of complex unities which we cannot grasp in any definite or final way.

(bb) The distinction between *conservative* and *propulsive* temperaments of

development is ambiguous. They are supposed to be extremes and midway between them lies the '*mean*' and the '*measured*'. They are deviations which have to let whatever is whole, fulfilled and pregnant with the future go its own way between them while they themselves have run to ground.

Under Bolk's stimulus and in concert with a number of comprehensive biological views (Dacqué) we are led on to see life in terms of a human uniqueness which has preserved developmental possibilities for life at the full while the animals have landed themselves out of the sea of possibilities and grown fixed into special living structures which they can no longer transform. Man on the other hand contains ever present within his own nature the whole of life in its entirety because in principle he is something balanced, pliant, apperceptive and capable of containing all things. He is still the oldest and the youngest of living creatures. This view of life so reminiscent of the romantic philosophy of Nature—in no way a knowledge but an indistinct vision expressing the intimate experience of an unfathomable riddle—is transferred by Conrad to the different kinds of human constitution. He sees these as fixations that deviate to one side or the other—into leptosome and pyknic, asthenic and athletic—and midway between them there runs the road of creative life. The preservation of an earlier stage as a finality is not for him a preservation of the possibilities for further development but a premature abandonment of them. The attainment of a later stage is not seen as a fulfilment but as a fixation in the maturation of the type. But we may object that the midway position, that of the metromorph and metroplastic, is not a preservation of possibilities either *in so far as it is midway* nor is it something creative. Somatically and psychologically it is impossible to comprehend the fuller and more living form in terms of the mean. Conrad's viewpoint however draws its meaning from quite another source; that is, the experience of development in thought and feeling through contradiction, through the creativity that arises out of opposites, through the holding together of antinomies; that is, in short, through the dialectic of the mind.

When we hear of the opposition of the conservative and propulsive temperaments of development this involves a number of different meanings which are more or less present according to the context in which they are used:

1. Where the *measure* is a generally indefinite developmental whole that is not known but dimly felt perhaps as something capable of infinite fulfilment, then the propulsive factor is something pregnant with an infinite future.

2. Where the *measure* is a well-defined developmental whole that is known in all its forms and stages of growth, the propulsive factor is an extreme which has reached its limits and now drives on to ageing and death. There is not only an ageing of the individual but of the generations.

3. Where the *measure* is a well-defined developmental whole but one that is regarded in its presenting form as life in transit to further ever-changing complex unities of development, the propulsive and the conservative factors become forces of fixation in contrast to which the middle factor is not only a

mean but a constant equilibrium of life which protects from all extremes, preserves every potentiality within itself and therefore throughout the generations alone harbours a future of progressive increase.

With Conrad the third meaning predominates but the other two seem to be involved repeatedly.

The *forward drive of development* (the propulsive temperament) can thus mean: (1) further differentiation and maturer formation of the individual as leptosome and athletic; or (2) the same thing happening in the course of the generations (phyletic ageing) and leading to living forms which are over-differentiated, specialised and ultimately die; or (3) the preservation of potentiality and creation of new structures in the individual (in spite of ageing); or (4) the same thing happening in the sequence of living forms through the generations (without ageing). In polar opposition to this is the *choice of an earlier stage as the final target* (pyknic and asthenic), the conservative temperament of development with no preservation of potentialities for further development but a self-limitation without any process of ageing and hence constantly alive in the generations to come. But for Conrad the true chances for life lie in the developmental tendencies that spring from the preservation of potentialities and the creation of a balanced mean.

The fact that this whole point of view is matched with a direct and convincing intellectual approach (the dialectical conjunction of opposites, the refusal to be quietly confined and the daring acceptance of the infinite) should not mislead us into thinking that the philosophical attitude is at all clear in the book nor that it is going to be easy for research to obtain fresh reliable facts with the help of these broad and ambiguous concepts. In the last resort the book applies certain basic truths of thought and feeling to the morphological, somatic and constitutional spheres. Nevertheless Conrad's view is full of meaning as an idea though a little summary as a theoretical schema and it opens up new ranges. But while it is against all kinds of dogmatism as a kind of prison, it introduces the risk of making a dogma of indefiniteness through hypostatizing the idea. The indefiniteness from which Conrad constantly derives his quite definite judgments of a total kind is mistakenly accepted as an absence of all dogma.

4. *Reduction of constitutional determinants to a single gene.* Max Schmidt remarked that: 'none of these types could with any degree of probability be reduced to a simple biological function nor to a simple biological principle'. Conrad opposed this by saying: 'A single genetic factor decides whether a given development runs a propulsive or conservative course'. Such ideas as Conrad developed on this point are of course purely hypothetical: they do not lend themselves to any investigation but this use of the concepts of biological genetics provides us with a very imaginative set of possibilities. He is well aware of the difficulties and asks: is it hopeless to think of some genetic explanation in view of the astronomical number of supposed genes which underlie a constitutional type?

The reply has to start with the polarity of constitutional types, which is related to the double character of genetic criteria. The geneticist cannot make use of isolated characters or groups of isolated characters. He needs the alternate presence or absence of a certain character or else a bi-polar series of variations which he can explain as multiple alleles due to the declension of a gene. This demand for an alternate presence or absence or else a bi-polarity of all the properties is not merely a methodological requirement but is rooted in the objective fact that the hereditary structure of organisms is always paired; every organism has two parents, not three, and all chromosomes appear in pairs. The constitutional types in Conrad's classification are polarised and are thus adapted for examination from a genetic point of view. The single gene searched for must have the power to determine the position of the individual in the polarity of the constitutional type.

But the constitutional types must certainly be determined by an exceptional number of genes. 'How is it [asks Conrad] that all these genes have such a preference for getting together within a single genome? In the whole of genetics there is no example of such a vast number of genes displaying such an affinity within a single genome' (but we can object that such an affinity is by no means an established fact; it is only a wealth of correlations which are not particularly strong at that).

The coupling of factors (the coincidence of genes in the same chromosome) cannot be the ground for the conjunction of a number of characteristics within a constitutional type since it is very improbable that a constitutional type would be anchored in a single chromosome. Moreover, in coupling, the factors are 'separable to an unlimited extent which in the constellations we are dealing with does not seem to be the case' (experience however shows the opposite whenever the co-efficient of correlation is less than 1). The uniting principle must therefore be of some other character: it is a single gene which through an ontogenetically early decision determines the effectiveness of all the other genes. It is not one gene among others but it is the one in the gene-hierarchy that leads the totality of the genes and it does this by determining the temperament of development. The 'assumption of a single factorial principle which underlies the formation of types' leads to the hypothesis of a single determining gene.

Conrad compares the total characteristics of a typical constitution to a pattern as perhaps seen in the colours of a caterpillar or of a butterfly's wings. He compares the basis for the formation of constitutional types with the genes which were found to determine the way in which these pigmental patterns developed. But this is only a comparison, because the difference in meaning between pigment-distribution—no matter how manifold this may be—and the distribution of personality-characteristics—even just bodily-proportions—is really too fundamental for us to talk of them as if they were the same. The manifold human kinds cannot be ranged in a series like the markings on caterpillars. Instead of patterns that vary continuously we are presented with an infinite criss-cross multiplicity of correlations of varying strength that relate

to characteristics and forms. According to Conrad in his own early statements the typical kinds of human constitution only exist as marginal and ideal cases defined by the observers' particular viewpoint. The actual manifold as observed is in no way covered by such a viewpoint, not even by the polarity of conservative and propulsive temperaments of development since this too is not an actual fact but only a way of comparison and an interpretation.

In the end Conrad's whole structure becomes untenable. It is a system of mutually supporting hypotheses which do not rest on any valid substructure of experience nor have they led to any new experiences. Very likely the whole structure will vanish without trace in spite of all its mental ingenuity.

(g) *The positive value of theories of constitution*

i. Theories of constitution belong to the great movements in psychopathology which have an import far beyond the speciality and seem confirmed by countless contributions but which remain continually in question and in the end seem to ossify by repetition. They cease to rouse any interest but after the passage of time they are taken up again because they are the carriers of an eternal problem. Hence we may ask, *where does the truth of this whole effort lie?* Findings may be firm, yet straight scientific progress is lacking. We may also ask, *where do we start to go wrong?* We will summarise our answer once more:

(aa) The *idea* of the constitution as the entirety of the physical and psychic state is true. *Hypostatisation* of the idea into an objectivity which we can know is false. Hence all scientific knowledge follows the path of this idea and becomes a finite and specific knowledge, not a knowledge of the whole. There can be no complete fulfilment of the idea but the idea poses a task. Each clearly conceived complex unity is then in fact no longer *the* complex unity but always one complex unity, one particular, one factor among others while in contrast the whole itself always tends to recede as it draws our knowledge further on and guides it. If we call this whole the given whole of an individual constitution it is not wrong but it is then a concept which only allows us to conceive the other definable complex unities in a negative and tentative way.

Any particular piece of knowledge is always only a particular in relation to the whole; it is never the whole itself. All theories of constitution therefore are wrong if they set out to grasp the whole of human life and believe that by direct (diagnostic) application of the theory they have got to know the individual human being down to his roots.

(bb) We have tried to distinguish truth and falsehood in the following particular respects: morphological observation and the sensitivity to physiognomy that finds the psychic element in the morphological are true. Hypostatisation of what has been observed into a measurable objectivity and the confusion of what has been seen with what can be counted—so that the two are made interchangeable and interdependent—are false.

The individual describable forms are true and so are the morphological and

physiognomic categories that extend our vision—the generalisations into laws and valences whereby we classify isolated cases as complex unities are false.

As an orientation for purposes of observation the pure classical cases, as described, are true; the schemata which would classify everything that occurs within a system of derived types are false.

2. Certain phenomena and facts are brought to light in the train of the idea. They provide us with concrete dilemmas and are thus pointers towards the ever-receding whole and in the form of limited insights they extend our knowledge. Everything that is true in eidology follows in the train of the ideas. What is revealed in the train of the idea of constitution? We gain orientations; ways of approach become apparent to us and our attention is focused upon universal relationships.

Thus *biometric* methods give us more than figures and correlations. They foster clarity in all the fields in which biometric variations can be established. Moreover, through the application of these methods we have concrete experiences which we would never have had without them though they may once more be lost to sight in the purely statistical results.

The idea of the whole provides us with a *method of describing the essentials* of body-build and personality and of all the phenomena by which men differ. Specific methods have their place; for instance, in the study of physiognomy and gesture and in the psychology of meaningful connections, etc., but all these particular methods gain their impetus, their essential force and their point of reference to each other from the idea of the whole. They are the ways we must take to gain perspectives of approach to the differences that are most profound; they teach us to take note of essentials and through them the manifold of life takes on pattern and form.

We gain hold of *complex unities* which immediately become *mere particulars*. The well-defined constitution is no longer the constitution as such but only a part-factor in the somatic-psychic whole.

We look for *something systematic* in the *universal* relationships. Limitless possibilities of relatedness disclose themselves when our eyes are focused on the whole. We bring together body-build and personality, biological genetics, endocrinology, psychoses and neuroses and this opens up the widest of horizons in which we discover partial correlations that offer us some relative aspects on the way to the whole. Possibly all things are inter-related.

3. As we proceed we acquire concepts and ways of looking at things which in fact are *unanswerable questions*. They are the key to wide possibilities but they bring us no definite knowledge. Our mind is kept open for the true whole in its present concrete form as an experience which constantly gains in depth. It is as if we could tangibly grasp it but it evades our clutch while it never opposes our efforts to penetrate yet further and advance.

Our basic attitude is: that the individual human being as a whole cannot be subsumed under different categories of Being except according to the given aspects and isolated phenomena of his existence. Human beings cannot be

classified but every individual as an original source is unlimited possibility, though empirically limited in his realisation by heredity and environment.

§ 3. RACE

Biological preface: By race we mean the concept of a particular biological order which is shown in the morphology and physiognomy of the body, in characteristic functions and in the manner of the psychic life.

Race is a special order of mankind that has differentiated out over long periods of time through involuntary breeding. It bestows on the individual's whole nature at any given time certain unique features which are most easily discerned and grasped if we compare the most marked of the differences—negroid, mongolian, white, for example.

Where we distinguish different races in a mixed population—and historically speaking every population is a mixed population—this can only mean that these races have at some time existed on their own before becoming mixed. Differences in type are dubious when there is no means of proving them as existent races in this sense. They may be races which have been deduced without any compelling ground for this or they may be local variants which have evolved in the population without ever becoming separate as a race, and they may be constitutional types.

The difference between *race* and *constitution* can be easily defined but when it comes to concrete application the distinction between racial and constitutional types is not always by any means clear-cut. Races are forms of human life that have come about in the course of history on the ground of individual mutations and variations of the human order. Constitutions are variations that pervade all races universally and are unhistorical in character since they are always re-emerging in typical form.

Methodological preface. Methodologically speaking there is a relationship between the intuitive grasp of racial types within a mixed population and the perception of constitutional types. But as distinct from constitutional types where the pure instances are of an ideal character and empirically hard to find, there are races which in fact are entirely separable en masse and investigations into racial psychology can be made on this basis. In so doing when we are comparing the kind of psychic disturbances that occur, it is true we are not comparing pure races but rather populations that have been geographically defined. It is also possible to compare two populations in the same area in so far as they have mixed relatively little, such as the Jews and the surrounding population. There is then little doubt over the majority of the individuals as to which 'race' they belong, should one want to call differing population groups by that term.¹

Our first problem is: what is the *general human* factor that precedes all

¹ Johannes Schottky, *Rasse u. Geisteskrankheiten, Rassenfragen beim Schwachsinn u. den Psychopathien* (gives all the literature and a critical discussion). Beringer, *Rasse u. Metaboles*. Wülker, *Rassenmischung u. Krankheit*. Collected in I. Schottky, *Rassen u. Krankheit* (München, 1937).

racial differences and hence pervades all the races of mankind? Observation teaches us that all organic cerebral disease—e.g. General Paralysis—is of a universal character and that schizophrenia, epilepsy and manic-depressive psychoses are found everywhere. We do not know whether we are dealing with hereditary dispositions that belong to man as a whole or with those that have been acquired by mutation and are of similar universal occurrence. Nor have we any answer to the question whether mental illnesses came into being at some point in history through mutation and have then spread themselves according to genetic laws.

The *second* problem is: whether essentially similar forms of illness have *different racial manifestations*? Answers to this have not got beyond the obvious: with a rich cultural life we find greater richness of content, and the content depends on the traditional culture: e.g. where the Chinese hear the voices of birds and spirits, and are impregnated by dragons, the European experiences electrical or telepathic influences.

The *third* problem is: whether there is a difference in incidence of illness in general and of the individual illnesses in the different races. Owing to the lack of satisfactory statistics, answers can only be given in terms of impressions or on the basis of methodologically inadequate figures.

Some individual investigations may be mentioned. In comparing the populations of areas geographically separate we cannot disentangle the significance of the physical milieu and of the social and cultural relationships from that of the racial predisposition. We possess a large number of descriptions of psychoses and abnormal states—usually brief and not very clear—from *all over the globe*. They usually depict curiosities and freakish occurrences. Thus Kraepelin noticed among the Malays in Java that initial depression was very rare in dementia praecox, there were few auditory hallucinations and delusional ideas, and on the other hand there was frequently a simple deterioration following a transient excitement. In the case of manic-depressive psychosis he found only manias and no depressions. Other authors report the so-called ‘running-amok’ in the Dutch Indies and sudden murderous attacks of rage.

As to the *differences in the European population* the impressions are rather more certain. Thus Schwabians are said to have a marked tendency to constitutional moodiness; it is also affirmed that the Germanic populations have greater tendencies towards melancholia than the Slav or Romance peoples. The frequency of suicide shows some clear statistical differences. There is a marked tendency for this among the Danes and the Saxons in Germany, while it is much less common among the Slavs and Romance peoples. Kretschmer¹ found that the Hessians in contrast with the Schwabians were immune from typical manic disorders which would correspond with the slight manifestations of hypomanic temperament among the healthy Hessian population.

¹ Kretschmer, ‘Familiäre u. stammesmässige Züchtungsformen bei den Psychosen’, *Munch. med. Wschr.* (1933).

A comparison of psychosis among *Jews* and among the surrounding population seems up to now to have been the most favoured subject for investigation in racial psychiatry. Sichel¹ found fewer epileptics and alcoholics among the Jews but much more manic-depressive psychosis (in institutions four times as many Jewish patients as non-Jewish patients), more hysteria and more frequent personality-disorders. He also emphasises the frequency of 'atypical' cases among Jews which are apt to mislead into an unfavourable prognosis in the case of an actually recoverable manic-depressive psychosis. These are findings which have been confirmed by most other investigators, such as J. Lange,² who gives a particularly well based and vivid account of manic-depressive disorder among Jews.

¹ Sichel, *Die Geistesstörungen bei Juden* (Leipzig, 1909). *Neur. Zbl.*, vol. 27, p. 351.

² Joh. Lange, *Münch. med. Wschr.*, vol. 58 (1921), p. 1357.

CHAPTER XIV

BIOGRAPHICAL STUDY

(BIOGRAPHIK)

The psychic life of everyone forms a *temporal whole*. If we are to comprehend a person this demands a view of his life from birth to death. In the somatic sphere the physician is only concerned with a transient or chronic illness, an aspect such as sex or constitution but never the personality as a whole. Psychiatrists, however, have always concerned themselves with the past life of their patients in the entirety of their personal and social relationships. *Every good case-history grows into a biography.* Psychic illness is rooted in the person's life as a whole and it cannot be isolated from this if it is to be comprehended. We term this whole the individual's 'Bios' or life and any description or account of it we term his 'Biography'. (In ordinary speech the 'Life' of a person is customarily called his biography.)

(a) *The biographical material*

This consists of all the facts that can be elicited from the individual. There is no finding that does not belong to the biography and have its temporal relevance within it, even a life-long relevance should it be a matter of the personality itself. The exact dates of a person's experiences, of the events that happen to him and the actions that he takes are all part of the individual picture.

(b) *The use of biography for apprehending the individual life*

The time-aspect of the biographical details is not so much that of a regular sequence, a quantitative matter, but more of a qualitative shaping of the living elements into temporal form. We familiarise ourselves with this first of all in the *biological sequences*, then in the history of the inner life and lastly in the actual individual performances and achievements.

1. Each kind of living creature—and therefore man too—has its own typical duration of life which is within considerable limits of variation but has a final uncrossable boundary, as well as its own typical epochs and critical stages. Hence the self-transformation of the human species shows itself in temporal form as a biological process.

2. On this basis there takes place an inward unfolding of life as a unique development closely tied to its beginnings, to first experiences and to events that leave their mark. From the unlimited possibility of the beginning possibilities are excluded one by one with every realisation, until the possibility of the individual life exhausts itself in a final realisation. Around the narrow

confines of what has really come to pass lie the rejected, missed and vanished possibilities.

3. Essentially significant for the history of the inward life are the performances, acts and achievements of the individual where he participates in what is general and valid and so objectifies himself.

All these developments happen in the quiet processes of becoming, growing and maturing but then there come the critical reversals, the sudden entry of new things, and the individual's forward stride becomes a leap.

The biography always concerns a single and unique human life and sees it embedded in an all-embracing set of temporal connections, *biologically* in its heredity, *psychologically* in its family, community and society and *culturally* in an objective tradition of values. Hence the biographical aspect leads on to the wider historical perspective where man is seen within a broader stream of events, his ontogenetic development (as a unique individual), his phylogenetic development (as a species) and his personal history within the traditions of humanity at large and of his own specific culture. We wish to see the over-riding unity within which the individual grows and of which his growing is a part and towards which he himself trends and which he as it were represents, reflects and reproduces in the unity of his life-history. But we have no knowledge of the phylogenetic history of the human psyche and hardly any knowledge of psychic prehistory; all that we have is a more or less extensive historical knowledge of a few thousand years and of our own people together with some scientific knowledge of the developmental history of children and of some of the hereditary links. The large-scale genetic aspects of a historical panorama that stretches back into the darkness of a prehistoric world and the assertion that this world takes effect on the present-day psyche are certainly true in the most general sense, but in any concrete, well-defined sense they remain in the world of fantasy. Biographical study has to confine itself to histories of individuals and can only yield such facts as throw light on hereditary and cultural tradition where these are directly linked with this one particular life.

(c) *The limits of the individual life and its history*

We are looking for the unity, natural close and full completion of an *individual life*. By this standard few lives reach their natural close (the majority die prematurely) and none is completed. The way in which we meet a man at the moment of his death is revealing. The finality transforms our picture of him into a fixed and complex unity. During life everything had an 'up to now' quality; there was still possibility, still life ahead which could betoken a fresh reality, new actions, which could give fresh significance to the past. When confronted with the dead person we are jolted from the notions with which we faced the living. But if we were to regard the living person as we see him at his death it would be inhuman and would make any real contact impossible. We would be drawing a line, as it were, under the individual and acting as if we

were burying him alive (an analogy of this would be to face a current happening as if it were already past, to distance oneself from life as if it were already history and drop into the passivity of the onlooker from the activity of participation). In the picture we form of the individual as he dies we come to feel two things: we feel the *unfinished nature* of things—particularly when there is early death ('the un-lived life draws and smoulders . . .', C. F. Meyer), and the *lack of fulfilment*: no life has realised all its possibilities. No human being can be everything but can only dwindle down in realisation; the individual can only become a 'complete' person through understanding, beholding and also loving everything which he himself can never be. Thus the *unity and complex whole of an individual life* is never anything but *an idea*.

The *biography* however cannot discover all that lies in a single life-time. The factual history *has no end*. It includes everything which we have explored in the shape of individual psychic facts and individual meaningful and causal connections. It is grounded in dispositions which we can never fully comprehend and it is equally determined by the chances of life, by situations in constant transformation and by opportunities and all sorts of external events. It contains *inner elaboration*, the appropriation or distortion of things, the construction of the psyche and its world or their mutual destruction, submission to things or active planning, all that inward activity, the dialectic of which pervades the historical aspect of any individual life. If we are to conceive such a life as a whole we cannot ramify too far. But there is no knowledge beyond the empirical world, beyond the margins of what we can definitely grasp, the point beyond which we lose ourselves in vague speculations. L. Binswanger¹ reflected on the ways in which philosophers from Plotinus to Schopenhauer have viewed human life and commented aptly that 'they bring us up against the idea of a divine *world-order* within which the inward life of man, all living function and the least significant of external happenings are in some way predetermined and inter-related. It has fallen to our disenchanted age to explore these *part-territories* of human life in a scientific way . . . but yet to examine them so sharply as to their methodological meaning that we understand what science is after in each one of these fields and what it means there.' In other words, a biography of absolute value would allow for the picture of the essential individual in the entirety of his metaphysical Being as it encompasses and carries him along. But with our empirical knowledge we have no possibility of ploughing through the unending facts as they appear in this one life nor of achieving such a biography of the unique individual '*sub specie aeternitatis*'. An empirical biography which believes it knows something about an individual and tries as it were to strike a balance would always contain the individual within biographical categories of a particular kind which it would be wrong to take as exhaustive. As scientists we must stand by the biography that is inconclusive, which leaves the essential reality of the whole

¹ L. Binswanger, 'Lebensfunktion u. innere Lebensgeschichte', *Msch. Psychiatr.*, vol. 68 (1928), p. 52.

untrammelled, those depths of human life which can no longer be psychologically explained but which only the poets and philosophers can illumine. In the biography the best we can do is to give a unique account of the individual and then what cannot be known may perhaps be felt through the telling.

(d) *Investigation guided by the idea of the individual life*

In pursuit of the absolute and complete biography of a unique individual (which we can never get) we acquire a number of specific scientific categories, *biographical categories* which enable us to catch sight of a relative totality in the temporal form of the individual's life. These are the means for our biographical study and with their help general factors in the biographical material become clear. In scientific biography we do two things: we depict and describe what becomes available to us in the course of generally getting to know the biographical details, that is the biography becomes *a case*—and secondly in our account we contact, try to feel and inwardly engage ourselves with this unique individual as he really is. Then he becomes *not only a case* but an irreplaceable illustration of humanity in its historical form; so long as our friendly eye can see him as such he is unforgettable and without substitute whether he is of historic significance or not. Everything that can be thought is already a generality, yet if we make use of these particular forms of thought in our account we can bring to light what cannot be generalised but simply remains what it is.

This chapter is concerned with the specific forms of apprehending and classifying our biographical material. These are characterised by the fact that they harbour this double function: they afford a means of acquiring some general knowledge and at the same time they direct our attention to what is unique.

§ I. BIOGRAPHICAL METHODS

(a) *Collection, arrangement and presentation of the material*

The *collection of material* means bringing together all the facts of the individual's life, his own statements, reports on him, his test-performances, every way in which his life has been objectified, whether this is directly or indirectly accessible. Nothing is immaterial for the biography that can tell us something about this individual's life. The *arrangement* of the material may be various but it should always be from the viewpoint of making details readily accessible, easy to lay hands on and easy to handle. For biographical purposes however the arrangement is specifically *a chronological one*. Events, reports and letters, etc., in chronological order with dates form the starting-point for the later biographical effort. This basis should be as full and complete as possible. The *presentation* that follows on these technical preparations is the real problem. The individual life as a whole should become apparent in the

abbreviated, carefully selected and structured picture that is presented. We get no picture at all from a mere collection of particulars nor from a simple gathering together of the data in chronological order. The question arises: how can the individual be brought vividly into focus as a whole as well as in his innermost being? Even the living person who is present is present only in this one moment of his existence; he is never concretely present as a whole. This whole can only be brought into focus by summing up the temporal whole of the individual's life-history and presenting it for inspection. The collection of the material and the presentation are mutually exclusive. If we try to combine them painful confusion is the result. In any individual case both are needed: the finished collected material lying ready for any new investigation over the same ground and the presentation, a momentary configuration which can be reconstructed under other ideas so that a series of presentations may help and complement each other. Presentation is spoiled if it is a mere presentation of material and the collection of material is the poorer if presentation interrupts it. Arranging our facts is already an interpretation and a presentation, when this is not carried out according to some external technique for collecting and ordering the data.

(b) *Case-record and biographical study*

There is a fundamental difference in meaning between depicting a patient as a particular case of some general disorder and describing him as his unique self. If I direct my attention to the general aspect I do not need a whole biography but I do want all the relevant facts and I look for these as much as possible in the descriptions of cases. But if I direct my attention to the individual, I try to represent to myself the whole of his life; the general elements serve as a means of grasping and presenting the matter but they are not my target. Desire to make a 'case' forces me to make this more than a case. My inner store of individual living forms that I have seen takes in this individual as something historical and unique. Case-records are related to generalised knowledge while biographical study is always directed to the individual.

In the *case-record* there is *one* point of view which will govern the selection of the phenomena that are essential and worth reporting on. In the biographical study the governing factor is the unity of this individual as a connected *whole* and this selects the viewpoints that will serve to give a due perspective on the whole.

The individual may also have historic significance. But for the psychopathologist once he has given his interest to the case the individual is simply there without any historic importance or any objective valuation. It may then happen that the individual represents to him the concrete expression of an ideal type.

(c) *The present as the starting-point*

The biographical material can usually only be obtained by enquiry and by
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a collection of documents. An observer can only participate in transient fashion in the life of another. The doctor has his patients in front of him, he has dealings with them, helps them and affects their life over more or less long periods of time. The patient's individual life is revealed to him in the complex unity of its present development if he will only perceive it. The closer he is to this the more complete it grows in its essentials and the greater is the chance that decisive elements will be perceived. The whole foreshortened temporal form from birth to death, as it is presented to him and as he has to deduce it, can be concretely experienced in the present events if the doctor will give his attention to the whole past life and what may possibly still come. v. Weizäcker¹ has made us aware that psychotherapeutic activity makes the experience of total engagement more possible inasmuch as the doctor's personality becomes a factor in the inner happenings of the patient's personality. The therapist, now become a fellow-actor, participates in the patient's destiny and goes through his crises with him in all their actual decisiveness. v. Weizäcker is anxious to make this '*biographical perception*' a basis for new insights:

He expresses the typical *style of biographical events* in general terms as follows: 'There is a given situation, a tendency arises, a tension mounts, a crisis comes to a head, an illness intervenes and along with or following it there is a decision made; a new situation is created and stabilises itself.' Event, drama, crisis, decision are for him the biographical categories in which he comprehends a 'total event', from which 'chance events' (as they used to be called) can no longer be excluded and in which somatic illnesses like angina tonsillaris, etc., may in due course play an essential role. He discovers that these illnesses arise at turning-points of the biographical crises or are interwoven with the more insidious crises of a whole lifetime . . . and that illness and symptom take on the value of psychic strivings, moral positions and cultural forces so that in the biography there seems to be something like common ground for the somatic, psychic and cultural aspects of the human person. He defines and limits the meaning of his '*biographical perception*' as follows: 'It is not permissible to apply the categories of the biographical approach wholesale to everything that occurs in the record or in the examination. The biographical method is not an explanation but a kind of observant perception. It does not yield any fresh factors or substances, such as X-rays or vitamins. But it alters the basic categories of explanation. The introduction of the subject into the methods of investigation is the point where fundamentals begin to shift.'

Yet biographical perception can be misleading and it can produce almost arbitrary conclusions when the empirical material is unrewarding. This is illustrated by the following two sentences: 'In an epidemic an individual who is psychically upset is easily infected and may die while others remain immune. This is a fact that is known and recognised, especially with cholera—Hegel's and Niebuhr's deaths from this illness resulted from the impression made on them by the Paris Revolution of 1831.'

Although there are no concrete 'findings' attendant on v. Weizäcker's presentation, at least in the way he meant, he nevertheless has drawn attention

¹ Freih. v. Weizäcker, *Ärzliche Fragen*, 2nd edn. (Leipzig, 1938). *Studien zur Pathogenese* (Leipzig, 1936).

to an aspect of case-history in medicine which the scientist only too easily forgets. There is a radical difference between our perceiving in a case an instance of something general (the scientific approach) and perceiving something which immediately confronts us as unique, an enigma which can never be turned to good account by the use of general statements (the approach of mutual living engagement, of existential and metaphysical experience). The difference is radical because here at the margins of scientific knowledge and arising from the immediacy of experience the essential communication is that 'I recount but I cannot generalise what I know'. v. Weizäcker says that 'the most important stimuli cannot be conceptualised' although on another occasion he says 'conceptual definition should not be omitted'. This however can hardly be successful if we intend such a definition to imply testable and objective knowledge. The general element which can be pointed to here is not a general insight but either a philosophic universal for the illumination of an historical absolute or else one of the categories he uses in the simple recounting of style, type and form—though to be successful this has always to be done in a unique and unpredictable manner.

There is also a radical difference between *scientific uncommittedness*, where free from any preconceived schemata we surrender to the facts and yield to intuition so as to sharpen our perceptions and the *doctor's participation in the fate of his client*; where he is himself engaged and carried along and the chances of life, the unique occasions, intuitions and unlimited possible interpretations become for the moment metaphysically unambiguous. He does not look merely with the empirical eyes of reason. He can therefore only recount and try in his story to make tangible what was apparent to him but unverifiable because he can never really know whether it was or was not so and can never put it to the test. The power of the story is rooted itself in the animation of present sight: 'the same story as it happened cannot be told twice'.

(d) *The idea of the individual life (the Bios) as a unity*

The individual throughout his whole life is undoubtedly a single entity, not only with a body that remains the same, though it constantly changes in substance and transforms itself in form and function, but also with a self-awareness that knows its own oneness and remembers its own past. But it is not these formal unities which we have in mind when we speak of the unity of a human life. Here we mean rather that unity which is found in the essential connectedness of a person's inner and outer experiences and actions and which is objectified in the sum total of the phenomena of that person's life. This however is a disputable unity. The human being dissipates himself and lets whatever happens to him go on in a disconnected fashion; outside events overtake the individual as something apart from himself; he forgets, he is false to himself and he changes radically. But even in face of a rather more unified picture than this the biographical study can do no more than separate out what it wants to present. It cannot however manage to reunite what it has once divided. But the

unity which the living individual himself comprises and around which his biographer circles with his own images and concepts is in any case not something concrete but an accepted idea. This idea of the unity is itself a structure. It is indispensable for the biographer but he need not contemplate it all the time.¹ In all its different modes it is a marginal concept of our knowledge and at the same time gives it its impetus. It keeps our eyes open so that we do not confine ourselves to premature unities as if they were presenting us with the whole.

(e) *Basic biographical categories*

Although the idea of the unity of the individual life (*Bios*) does not become an object itself except in schemata that begin with the temporal form, the use of this idea nevertheless reveals categories to us, whereby we may grasp in general terms what can be presented methodologically as biographical material, that is, not the unity itself but a number of relative unities. These categories fall into two groups which correspond to causal and meaningful connections. In the first group we find the *biological categories* of the course of life, e.g. the different epochs, typical phases and processes (section 2). In the second group we find the *categories belonging strictly to the life-history*, such as 'primary experience', 'adaptation', 'crisis', 'personality development' etc. (section 3). These signify general factors in the various life-histories which in themselves always remain highly individual. We can discuss the general factors but what is specific and particular can only be concretely described. The biographical study is not a mere application of general categories but brings together the general and the unique within a clarifying medium. The general knowledge that can be gained from the use of these categories is the subject-matter of this present chapter.

(f) *Comments on literary biography*

Literary biographies apply themselves to a whole world, to cultural movements and historic periods as they are represented in and through an individual or they will concern themselves with those objective performances and achievements which have made the individual of their choice an interesting subject. We may observe that authors are very often indifferent to the psychological realities and gloss over them or do not recognise them or interpret them in an unrealistic way. But these are not biographies in our sense at all in which the '*Bios*', the individual life in itself, is the whole object and meaning. Those literary presentations where the actual material is interspersed with comment come closest to this rather than those that take the form of '*Life and Letters*' where there is no definite purpose in view. But even the latter are not appreciated by the literary world who treasure biography only in so far as it houses the achievements of a creative spirit and despise the so-called purely

¹ See my *Philosophie*, vol. 3, pp. 116-27, for a philosophical discussion on 'oneness'. .

private and personal aspects. Hence the remarkable lack of authentic and realistic biographies.

But the Humanities generally are of the greatest significance for our biographical interests because of the actual data they provide. Only historic personalities are preserved for us with fullness of record. We never get such broad perspectives on patients or delinquents or on the average man as are possible in the case of these individual historic figures. Quite apart from the greatness of Goethe's thought and life, he is, for example, an invaluable object for biographical study because of the wealth of documentation (books, letters, diaries, conversations and reports) and the convenient aid given by the 'Goethe philology' whereby everything has been well arranged and made so accessible.

(g) Pathographies

Our richest biographical material is of course to be found in personalities of historic importance. But the care with which modern case-histories are compiled and the efforts made to obtain anamneses and catamneses have yielded biographies which in individual patients have attained considerable vividness and force. This is no new task. Ideler was already writing 'Biographies of mental patients'. Biographies are those case-records which do not try to illustrate a particular phenomenon or the individual simply as a case of illness but do try to show a person's life (in this sense Bürger-Prinz calls his pathography of Langbehn a biography and rightly so). Ideally the psychopathologist aims at clear, vivid and representative patterns of life; these are just as much 'a case' as they are patterns of individuals and they are therefore of interest as an illustration of a particular kind of illness as well as of the individual himself. Nosology and biography are bound together into a single polarity.

On surveying the whole series of psychiatric biographies and case-records we can see the shifting interest of the different historical periods and cultural backgrounds in the way they determined what was seen and represented. Thus there was the fascination of the sensational figures, particularly the criminals, and there were the case-histories that confined themselves to supposed universals and so grew more and more inadequate. Then came the Kraepelinian school with its description of the course of illness (guided by the idea of disease-entities and sometimes accompanied by a friendly sympathy for the individual case; the procedure was a method of nosological investigation which unwittingly turned into biographical study). There was an exploration of the pathological phenomena in famous people and psychopathological viewpoints were expanded by the richly differentiated material which only such cases can provide.¹

The interest in biographies has so far only had a small following in psychiatry and there has been little awareness of their stimulating effect. We find few

¹ An exceptional example of biographical observation: Robert Gaupp, *Zur Psychologie des Massenmords: Hauptlehrer Wagner von Degerloch* (Berlin, 1914), continued in 'Der Fall Wagner. Eine Katamnese', *Z. Neur.*, vol. 60 (1920), p. 312. 'Die dramatische Dichtung eines Paranoikers

biographies among the case-records. Even psychotherapeutic case-records which would necessarily be directed towards the idea of a biography have proved unrewarding. We cannot be satisfied with what has so far been produced, quite apart from the difficulties of publication when the patient is still alive. Too often there is a vague and endless mass of material, cramped by theoretical preconceptions, sometimes anecdotal and sometimes merely sensational reportage on the happening of therapeutic 'miracles'. The biographical study should give us a positive picture of a life from an over-all point of view which has been won through a consideration of the individual from every possible angle. This picture should be unique and representative and give a concrete orientation through the actuality of its psychopathological insight.

If we had a collection of such carefully pruned biographical pictures this would be the best of introductions into psychopathology. It is only in the biographical presentation of fully developed cases that we can see clearly what features in the general concepts are still arbitrary and empty of meaning, what the moment of limited human contact has not managed to reveal and what is not disclosed in the average case.

(h) *The art of publishing case-histories*

The case-histories reported in scientific publications serve to give support to certain general theories. It is surprising how little thought is given to their composition. Excellent investigators are often lax with their case-histories and therefore a few pointers will perhaps not be out of place.

It is important that the reader should get a picture which is built up step by step, sentence by sentence and section by section. Hence we find the following requirements: the presentation should always create something that exhausts the subject completely, in other words there should be no repetitions; what is repetitious in the material must be pulled together into one in the history; enumeration should be reduced as much as possible (it is even more important to keep the collection of data of all kinds separate from the presentation, it is not good manners simply to reproduce the case-notes in order to give an impression of pseudo-objectivity). Briefness enhances the impact of the picture. Chronological and psychographic data can sometimes be given as tables. But the presentation as such must create a picture which the reader will retain as unforgettable.

The presentation will vary according to the theme: phenomenological details, meaningful developments, dramatic events, enlarging circles of facts that illustrate some break in the course of life, presentation of the somatic findings, etc., all this will be modified in every biography according to the actual material and the point of view involved.

'über den Wahn', *Z. Neur.*, vol. 69 (1921), p. 182. In the *Jahrbuch der Charakterologie* (ed. Ulitz), Year 2 and 3, 'Vom dichterischen Schaffen eines Geisteskranken' (1926). 'Krankheit und Tod des paranoischen Massenmörders Wagner. Eine Epikrise', *Z. Neur.*, vol. 163 (1938), p. 48.

An attempt at structural analysis of a wealth of data can be found in my *Nietzsche*, pp. 22–100 (Berlin, 1936).

See p. 677 on biographies of criminals, and p. 610 on pathographies.

K. Wilmanns, *Zur Psychopathologie des Landstreichers* (Leipzig, 1906).

The structure of a biographical case-record should not be designed according to any preconceived schema but should arise from the material itself. The concepts used must simply articulate our observations. This presupposes an observant surrender to the individual in all his factuality. The art of seeing and the inner necessity of the thing seen will bring a natural growth of order and lead to a happy formulation. The presentation should be close to reality and speak from observation of it; concepts should only be used to give structure to what has been observed; they play a part as tools of selectivity and as a general awareness of what the presentation is about.

The particular can only be clearly presented if all the facts are there and seen from the aspect of the whole. Hence the task proceeds by stages through collection of the data via the technical ordering of them (chronological and psychographic tables) and on to a detailed presentation. The first attempt will increase our sensitivity for what the material tells us and hence there is a need to recheck and reformulate in the light of what has been forgotten, glossed over, too little emphasised or lacked empirical support.

§ 2. THE INDIVIDUAL LIFE AS A BIOLOGICAL EVENT

The constant transformation of the organism as a whole manifests itself in a series of *age-epochs* and in a *typical series* of phenomena such as attacks, phases and processes. In human beings the biological event in so far as it is psychically expressed is always psychically elaborated; it becomes a modifying determinant of psychic events and manifests itself in a non-biological way in the mind which then takes it up and either furthers or inhibits its effects. The purely biological factor is something only marginal to our explorations of the human psyche; it is something that can only be grasped indirectly with the help of something else. Hence when we discuss biological events we always have to throw a preliminary glance at what is non-biological, just as we need to look back at the biological factors when discussing the individual life-history since without them the psyche has no reality at all. Biological, psychic and cultural factors are an indivisible reality; they have to be pulled apart and interrelated so that we can explore them scientifically; they are radically different in meaning.

(a) *Age-epochs*

The profound difference between a living and a merely mechanical event is shown by the fact of endogenous change in the organism, in the ascending direction of growth and maturation, in the continual slow phases of self-transformation during maturity and in the final descent of involution. The age-epochs in their sequence differ from each other in the morphology and function of their physical characteristics as well as in the mode of the psychic life. All illnesses, therefore, are stamped specifically by the age-epoch in which they occur. Certain illnesses are completely confined to particular epochs.

1. *Biological age.* Every kind of living creature has a typical duration of life. Giant tortoises can live up to 300 years and elephants to 200 years. In rare

instances man can live to 100 years, more rarely still perhaps to 108 and never to 110 years (Pütter). Most animals have a shorter life-span: horses, for example, may live to 40 years. Life is immortal only through procreation. Every living individual has to die, if unicellular by division, if multicellular by death. Death is a result of unilateral cell-differentiation for division of labour. Through differentiation the cells lose their capacity for further division and the nerve-cells in particular lose this capacity completely. But every cell that cannot divide perishes after a time. The natural biological process provides the organism, as it were, with an 'inner clock' which regulates; for instance, the hormone-formation that develops the sex-glands in puberty or sets time-limits to the use of cells that cannot divide. The process of transformation in the successive constitutions of the different age-epochs is irreversible. At the crisis points, particularly during puberty, there is as it were a re-organisation of the individual's characteristics. It is a complex matter to determine what is constant through the changing forms since this constant itself undergoes its own modifications.

The totality of human life has been divided into sections of 7 years (Hippocrates), 10 years or 18 years (J. E. Erdmann) or some such other grouping. Any such partition falls broadly into three main divisions which can be increased in number if one takes transitions into account and their subdivisions. The three main divisions are: growth, maturity and involution. What great fluctuations are possible in the actual ages involved may be seen from the figures for the menarche, which range between 10 years and 21 years (average: 14 years), and for the menopause, which range between 36 years and 56 years (average 46 years). Corresponding to these biological groupings the psychic peculiarities of the different age-epochs have often been described.¹

*Childhood.*² The psychic life of the child is characterised by a rapid growth, the constant appearance of fresh capacities and feelings, great fatigability coupled with a capacity for quick restoration after disturbance, great learning ability, openness to influence, exceptional powers of imagination, and a slighter development of psychic inhibition. As a result, the psychic life is over-abundant; affects are violent and drives unruly. The majority of children and young persons have eidetic ability which usually vanishes as they grow older.³

But the essential thing in childhood is the rapid developmental change. This development is not an even and monotonous event but a self-structuring whole that ramifies but holds together and as it advances both expands and concentrates itself. Physically there are periods of consolidation and of extension and a typical change of form has been observed in the years between 6 and 7 and again between 12 and 15. Even in the child the whole

¹ e.g. J. E. Erdmann, *Psychologische Briefe*, 5th edn. (Leipzig, 1875). See Brief, 4, pp. 67-78.

² Preyer, *Die Seele des Kindes* (1895). Groos, *Das Seelenleben des Kindes*, 3rd edn. (Berlin, 1912). Gaupp, *Psychologie des Kindes* (Leipzig, 1908). Karl Bühler, *Die geistige Entwicklung des Kindes*, 4th edn. (1924). W. Stern, *Psychologie der frühen Kindheit*, 2nd edn. (1927).

³ E. R. Jaensch, *Über den Aufbau der Wahrnehmungswelt u. ihre Struktur im Jugendalter* (Leipzig, 1923).

is not merely an organic event of biological growth but a psycho-cultural elaboration and transformation of what has already been acquired together with a self-reference that disciplines. The distinction between working out something and being suddenly gifted with a new ability, between mental activity and its biological facilitation, does not really allow us to separate them in reality one from the other.

*Puberty.*¹ During the phase of sexual maturation where the development of the sexuality is but one factor among many the equilibrium reached at the end of childhood is disturbed. Uneven development of function and the course of experience, the direct impact of what is new and the wavering between extremes with a tendency to excess all lead the individual to fail to understand himself; his environment becomes problematic and he grows aware of himself and it. In schematic fashion a number of phases have been differentiated: for instance, Charlotte Bühler distinguishes the negative phase (restlessness, dissatisfaction, irritability, clumsy movements and resentment towards the environment) and the adolescent phase (acceptance of life, *joie de vivre*, hopes for the future, renewal of ties with the environment, heights of happiness,—transition to adulthood). Tumlriz distinguishes three phases: the age of defiance (negative attitude to everything), the years of maturity (affirmation of the self), young manhood and young womanhood (acceptance of the environment). A number of transitory phenomena of puberty have been described, for instance, revelling in moods, lying to protect the personality² and so on.

*Old age.*³ Observation of the somatic changes shows: dehydration, increase of waste products, rising blood pressure, muscle-weakness, decrease in vital lung-capacity, decrease in the power of wounds to heal and reduction in inner physiological time—that is within the same time-span more takes place in the child than in the old person. The scars of life increase in number. The metabolic exchange slows down; since ‘the faster the parts grow and die, the younger is the whole’.

The psychic life of old age contrasts with that of the child in its quietness; capabilities wane and are replaced by a large store of firm possessions. The inhibitions, the ordering of life and the self-mastery subdue the psychic existence and stabilise it. Along with this there is often a narrowing down of horizons, an impoverishment of the psychic stores, a limitation of interests, an egocentric isolation, a slide into the instinctive needs of daily life and an accentuation of the individual original *Anlage* (disposition), e.g. distrust, meanness, egotism, which had formerly been hidden under the élan of youth.

Biological age and capacity for performance. The capacities of the different

¹ Charlotte Bühler, *Das Seelenleben der Jugendlichen*, 5th edn. (1929). E. Spranger, *Psychologie des Jugendalters*, 12th edn. (1929). Hoffmann, *Die Reifezeit*, 2nd edn. (1926). D. Tumlriz, *Die Reifejahre* (1927).

² Fr. Baumgarten, ‘Die Lüge bei Kindern u. Jugendlichen’, *Z. angew. Psychol. Beih.*, vol. 15 (1917).

³ Max Bürger, ‘Stoffliche u. funktionelle Alterserscheinungen beim Menschen’, *Z. Neur.*, vol. 167.

age-epochs have been compared from the point of view of the psychology of performance. Evidence has been produced for the general statement that there is a diminution of performance which is understood in part to be a change in performance. It has been found¹ that at the age of 28 years the capacity for quick adaptation has already diminished; also that from the age of 30 years memory begins to decrease, and sensory acuity and bodily flexibility suffer a decline from 38 to 40. Performance-tests which refer to experiences of one's ordinary or professional life (reading a tram-timetable, making reports, carrying out orders) show that deterioration is very slow and begins about 50 years. It is realised that the difference between the period of biological culmination and the peak of performance is affected by the amount of mental activity involved. In sport alone the two are found to coincide; with manual workers the peak of performance is 10 years later than the biological peak and with non-manual workers it is 20 years later.

2. *Biological relationship between age-epoch and mental illness.*² Every illness is modified by the patient's age. Some illnesses are linked solely with certain age-epochs; for instance, paranoiacs are never youthful; paralyses are possible at any age; schizophrenia in childhood is progressively rarer the younger the child. The most destructive schizophrenias belong predominantly to the earlier decades of life. The age-epoch gives a specific stamp to every morbid state. The relationship between age and psychosis can be established statistically in the case of hospitalised patients if we distribute all the cases as well as those in the particular diagnostic groups according to the various ages and if we compare the distribution with that found in the general population as a whole. Most illnesses begin between 20 and 50 years of age; after 55 years the percentage of patients ill for the first time grows proportionately smaller in relation to the total population (Kraepelin). Certain groups of illnesses cluster in certain decades. There is usually no certain explanation why this should be so. Partly it is due not so much to biological causes as to the conditions and conduct of the individual's life to which he is committed on social grounds.

Thus among these external conditions could be counted the psychic shocks which young people suffer on losing the parental home, the necessity for self-maintenance and the struggle for existence when one has inadequate resources and is young in years. A special role is also played by the increased exertion of powers and the worries and excitements that go along with the struggle for existence in the twenties and thirties until one's own true existence is secured. These years, when powers are at their highest, also mean the greater prevalence of luetic infections and alcoholism. Conflicts in marriage and in the love-life provide sources of emotional shock and eventually morbid phenomena as well. By the end of the thirties and during the

¹ Charlotte Bühler, *Der menschliche Lebenslauf als psychologisches Problem* (Leipzig, 1933).
 'Über geistige Leistungen im hohen Alter': Performance in old age—Brinkmann, *Spätwerke grosser Meister*.

² Bostroem, 'Die verschiedenen Lebensabschnitte in ihrer Auswirkung auf das psychiatrische Krankheitsbild', *Arch. Psychiat. (D)*, vol. 107 (1937). H. Pette, 'Parallelreferat zu Bostroen' relating to the neurological picture, *Nervenarzt*, vol. 2 (1938), p. 339.

forties it is no longer possible to overlook entirely the significance of the disappointments and the successes of life which most of us encounter. In particular in women who are unhappily married age can become an effective source of disappointment and of various nervous disorders. On the other hand the quietude of old age and the security of a life lived will limit for many people those psychic factors from which disorders spring.

Every illness is modified by the patient's age.

*Childhood*¹. Some nervous disorders are only to be conceived as an exaggeration of normal psychic manifestations belonging to a particular age-level. Thus children tend to 'pathological lying' which really springs from the child's uninhibited fantasy; they also tend to hysterical mechanisms in particular, which are natural for them and therefore prognostically harmless for later life. Probably the childhood personality can undergo fundamental change by reason of physical illness, whereas in the adult such transformation only takes place where there are genuine process-psychoses.² In children mild infections can indeed produce psychic changes, deliria and convulsions, but these usually disappear with an equal facility and the patients recover completely.

Puberty and menopause. The two main epochs of the sexual life, puberty and the menopause, are of pathogenic importance. Normally they are accompanied by notable upheavals of the physical and psychic equilibrium. The vast majority of endogenous psychoses do not appear before puberty. During *puberty*³ we have observed vague, transient moods, marked psychic changes with a good prognosis and transient 'attacks' of disorder including epileptiform ones⁴ but we have also found the beginning of processes which will produce lasting personality-change with the features of 'the awkward age' (silliness, inclination to pranks, sentimentality and preoccupation with problems of the universe). Such events, which sometimes run their course without acute psychotic phenomena calling for hospitalisation, have been regarded as an arrest of development at the stage of puberty. Hecker however recognised such phenomena as symptoms of a progressive 'hebephrenic' process.⁵

The *menopause*, cessation of menses and involution of the genitalia in the female, is accompanied by physical and nervous complaints and an alteration in psychic life which in some women is quite strongly marked. The chief phenomena are as follows:

Palpitations, pressure on the chest, hot flushes in the head, flickering before the

¹ Cp. Scholz, *Die Charakterfehler des Kindes* (Leipzig, 1895). Bruns, *Die Hysterie im Kindesalter* (Halle, 1906). Pick, *Über einige bedeutsame Psychoneurosen des Kindesalters* (Halle, 1904). Emminghaus, *Die psychischen Störungen des Kindesalters* (Tübingen, 1887). Strohmayer, *Vorlesungen über Psychopathologie des Kindesalters* (1910). A. Homberger, *Vorlesungen über Psychopathologie des Kindesalters* (Berlin, 1926).

² Kirschbaum tries to show this in respect of the personality-change following encephalitis lethargica in children, *Z. Neur.*, vol. 73, p. 599.

³ Pappenheim and Gross, *Neurosen u. Psychosen des Pubertätsalters* (Berlin, 1914).

⁴ On epilepsy of puberty: Benn, *Allg. Z. Psychiatr.*, vol. 68, p. 330.

⁵ Hecker, 'Die Hebephrenie', *Virchows. Arch.*, vol. 52.

eyes, giddy attacks, abnormal sweating, trembling, innumerable uncomfortable sensations, states of unrest with much irritability, increased anxiety, feeling dead and heavy, insomnia, increased sexual drive and psychic disturbances linked with this ('the dangerous age'); altered mood and tendency to depression, etc.

It can hardly be disputed that the climacterium is in some way related to psychoses, but the exact manner of the connection is obscure. Melancholias in particular which appear in the fifties have been described as climacteric psychoses.¹ Nervous complaints occurring as transitory phenomena in men of the same age have been wrongly taken for climacteric complaints. These do not occur in males; either one is dealing with the phenomena of ageing or with neurotic disturbances in those who refuse to grow old (or in particular accept the decrease in potency).

*Old age.*² The exacerbation of the unfavourable characteristics of old age apparently leads gradually—though somewhere there must be a break into illness proper in the form of a 'process'—from the nagging tyranny of the old person to the severe defect-states and destruction of senile dementia.

The physical changes have a well-marked relationship to the particular age-epoch. Just as all organs suffer regressive changes so it is with the brain: atrophy of the cells, pigmentation, calcification, fatty changes, necrotic foci have all been found in countless brains of old people. But the relationship between the psychic deterioration in old age and the extent of these morphological changes in the brain remains somewhat obscure. The two do not always correspond in degree. The situation is similar to that of the relationship of physical signs of degeneration to psychopathic disposition. As signs of deterioration increase the probability of psychic abnormality increases also but it can never be an absolutely certain deduction. The more serious the cerebral damage the greater the probability of psychic dilapidation but one can also find very old people indeed who show hardly any psychic deterioration though the brain shows severe senile changes.

A distinction must be made between senile changes of brain substance and specific *arterio-sclerotic* changes. The latter show the usual psychic sequelae of organic brain diseases in general if there is any widespread secondary destruction of tissue involved.

Both senile deterioration and the arterio-sclerotic changes characteristic of old age may appear prematurely.³ Instead of a slow development they may take on the character of a severe disease-process which leads to a picture not unlike that of General Paralysis. We know nothing about the causes of this abnormal senility.

We should distinguish between illnesses due to old age and those occurring

¹ Matusch, *Allg. Z. Psychiatr.*, vol. 46, p. 349. Albrecht, 'Die funktionellen Psychosen des Rückbildungsalters', *Z. Neur.*, vol. 22 (1910), p. 306.

² Spielmeyer, *Die Psychosen des Rückbildungs-u. Greisenalters* (Vienna, 1912). 'Critical survey of the literature on Psychoses of Involution' by Kehrer: *Z. Neur.*, vol. 25 (1921), p. 1.

³ Max Meyer, 'Zur nosologischen Stellung des vorzeitigen Alterns (Frühverbrauch)', *Nervenarzt.*, vol. 3, p. 339.

in old age. The psychoses that can actually be attributed to ageing get fewer in number.¹ Perhaps senile dementia is the only disease of age; it rests above all on heredity. The other psychic illnesses of old age are 'to a big extent hereditary disorders of a particular stamp'. Among the symptoms there predominate anxiety, depression, hypochondriacal states and restlessness while catatonia, furors and compulsive phenomena are hardly ever seen. In regard to Paralysis there have been descriptions of a reduction in the incubation period, a shortening of the span of life, an increase in anxiety states and a uniform hypochondriacal picture. In cases of circular insanity the frequency of melancholia rises while that of mania falls.

(b) *Typical courses of illness*

Periodic variations in the total state (attacks, phases, periods) as well as irreversible processes which interrupt and transform everything manifest themselves all along the curve of the successive age-epochs.

A. *Attack, phase and period.* Life is interspersed with phases in which the psychic life undergoes change. If such phases are very marked they usually become the subject of psycho-pathological investigation. If they are brief (lasting from minutes to hours) we speak of 'attacks' but if they recur in the same form at regular intervals we speak of 'periods'. Attack, phase and period are conceived as endogenous in character; at any rate their cause is unknown.

We also speak of attacks and phases when these have been 'precipitated'; that is, when they seem due to some external cause which we can neither understand nor account for by observation as being of sufficient weight (e.g. fatigue). But from this situation there are transitions to reactions proper; for instance a transition from purely endogenous phases of depression via those that have been precipitated to depressions that are reactive to highly distressing experiences.

Our definition would be as follows: *Phases* are alterations of psychic life arising endogenously or precipitated by some stimulus of an insufficient kind. They can last from weeks to months and even years but then will disappear with restoration of the previous state. *Attacks* are such phases but of very brief duration. Phases become *periodic* when besides the endogenous origin there is a regular time-interval between the individual phases and a marked similarity between the latter.²

It is commonly observed that an individual may have numerous attacks and phases which however are all different from each other. If there is reason to suppose that the underlying cause remains the same—whether a disposition or a disease process—the manifestations of which are only modifications due to differing adventitious circumstances then we speak of *equivalents*. This concept was created by Samt³ in relation to epileptic attacks and phases and was

¹ F. Kehrer, 'Die krankhaften psychischen Störungen der Rückbildungsjahre', *Z. Neur.* vol. 167 (1939), p. 35.

² Mugdan, *Periodizität u. periodische Geistesstörungen* (Halle, 1911).

³ Samt, 'Epileptische Irreseinsformen', *Arch. Psychiatr. (D)*, vols. 5 and 6 (especially 6, pp. 203 ff.).

transferred to other kinds of phases and attacks; for instance, to abnormal moods and affective disorders. We may also regard as equivalents (particularly in epilepsy) purely somatic attacks (*petit mal*, migrainous states, etc.), which are supposed to replace, as it were, the epileptic seizure.

The *beginning* and ending of phases show varied forms. Sometimes they develop very slowly, sometimes a most severe and acute psychosis may begin suddenly at night (in particular, *amentia*); sometimes we can observe a relatively even course which could be represented as a curve; sometimes violent fluctuations which swing between wholesale confusion and good remission with complete clarity and apparent good health (*lucida intervalla*).

Shorter phases and attacks are also called altered states (*Ausnahmezustände*) to denote that certain changes of a transitory kind are occurring in a personality whose more persistent state is of a specifically different kind, whether normal or abnormal.

Attacks, phases and periods may have extremely varied contents. We will try to give a schematic survey of them.

I. *Attacks*. These can occur as an isolated and striking symptom where there is constitutional disorder of personality; while attacks of every kind are a common manifestation of very diverse disease-processes.

1. In the cases of constitutional disorder one can observe mood-changes which appear in the form of attacks (*dysphoric states*) with numerous phenomena such as alteration in the perceptual world, compulsive thinking, etc. The change is a sudden fall into an abnormal state and as such is very often experienced subjectively with a great deal of anxiety. Janet described these states as '*crise de psycholepsie*' or as '*chute mentale*'. Kurt Schneider describes the transient and rapid mood-change of the '*labile psychopath*', which is of brief duration, sudden onset and quick departure.

The alteration in feeling-state may give rise to aimless wandering (*fugue-state*), to heavy drinking (*periodic dipsomania*), squandering of money, sometimes perhaps to arson, stealing and other criminal acts, through which the adverse mood discharges itself. Once everything is over these individuals regard such urges which at the time were scarcely suppressible as something quite alien. During the actual change of mood the anxiety or the nihilistic feeling overpowers them. Nothing matters or else an ill-defined urge ('*a beat in the blood*') pervades the whole person. Deserting, roaming and excesses of all kinds are the result.¹

2. States that are like attacks are particularly numerous in the case of *epileptic* and *epileptoid*² syndromes.

¹ Heilbronner: *Jb. Psychiatr.*, vol. 23, p. 113. Gaupp, *Die Dipsomanie* (Jena, 1901). Aschaffenburg, *Über die Stimmungsschwankungen der Epileptiker* (Halle, 1906). Räcke, *Arch. Psychiat.* (D), vol. 43, p. 398.

² The term '*epileptoid*' refers to syndromes which are characterised by the above-described attacks, particularly by short, severe, mood change, but which do not belong to genuine epilepsy, which leads to alteration of personality and dementia. They cannot however be classified with any other known disease group. We are therefore dealing with an *ad hoc* category.

Somatically we observe: 'grand mal', the classic seizure (sudden, unprovoked onset, often with a cry, complete unconsciousness which lasts a few minutes and complete amnesia); 'petit mal' (brief twitching during momentary absences); absences (attacks of giddiness and momentary loss of consciousness without any change in bearing and without any fall); narcoleptic states¹ (inability to speak and carry out co-ordinated movements with momentary alteration of consciousness but with preservation of perception and comprehension); simple somnolent attacks; numerous sorts of bodily sensations.²

In the purely psychic field we find twilight states, elementary mood-changes, toxic-like states with experiences and contents similar to those of mescaline intoxication, some acute schizophrenias and the post-encephalitic attacks to be described.

3. Post-encephalitic ocular-gyric crises give us an illustration of attacks which occur in relation to known organic illnesses. Here is an example:³

The body grows heavy and there is a feeling of slackness; the eyes stare more and more fixedly; the patient feels his movements are slower as well as the movements of those around him; the impulse to movement ceases or else actions that have started cannot be stopped; he drops things; the environment appears two-dimensional, unreal and alien. People move stiffly like marionettes or objects appear at an angle ready to fall on him; he sees the contours of objects double and blurred or shimmering in rainbow colours; objects seem to come closer, grow larger and have something portentous about them. The walls of the room move closer together; he feels hemmed in and tries to break through; he runs aimlessly round in the room and feels he would like to ram his head through the wall. It is as if a wall of water towered over him. He gets aggressive against the environment and has attempted suicide in this state. During it he feels an emptiness of thought, dull and stupid, or a thousand thoughts may fly through his head. The patient may get the impression that it is not himself talking but someone else, who talks out of him. 'Am I the person whose name I have?' Shortly before the onset of the ocular-gyric crises there is a tingling up and down the spine. The patient suffers anxiety and fears he is going mad.

4. Finally there are a great number of attack-like states in the clinical pictures of *schizophrenia*;⁴ for instance, in the first place, there are attacks of 'being spellbound', of incapacity for carrying out any movement though consciousness is clear (cp. pp. 119 ff.). In the second place, there are brief attacks described by Kloos when thoughts break off with simultaneous changes in the bodily feelings:

A patient suddenly collapsed while he was speaking; after three seconds he got up and was able to respond at once: 'My mind suddenly went; the thoughts were switched off like an electric current; my head was quite empty.' At the same time he felt as if

¹ Narcoleptic attacks as apart from epilepsy have been studied by Friedmann, *Dtsch. Z. Nervenhk.*, vol. 30. *Z. Neur.*, vol. 9.

² Gowers, *Das Grenzgebiet der Epilepsie* (D), (Leipzig and Vienna, 1908).

³ Flach and Palisa, *Z. Neur.*, vol. 154, p. 599.

⁴ Stefan Rosenthal, 'Über Anfälle bei Dem. praecox.', *Z. Neur.*, vol. 59 (1920), p. 168. G. Kloos, 'Über kataleptische Zustände bei Schiz.', *Nervenarzt.*, vol. 9 (1936), p. 57.

his body had grown very light, practically weightless. He had therefore forgotten how to support his weight on his legs, had let them loosen up and so had fallen down. He was not unconscious but could remember every detail. Another patient drove his bicycle against a car: he said he had suddenly vanished as if struck by lightning and had no longer been able to think or act. At the same time he had all his faculties about him. These attacks only came to the patient during acute stages and usually at the beginning of them.

In the third place, there are attacks where there is a sudden change in the entire physical and psychic state; this lasts a day or two, and is often given a delusion-like interpretation by the patient as being due to poisoning. Patients feel near death, fall down, lie miserably in bed, feel violent pains, and have to toss and turn, tortured by feelings of helplessness and soaked in perspiration. Some patients will report that 'they have been drugged'. Fourthly, in chronic states, there are attacks which last for hours in which there is shouting, raving, crying and emotional outbursts; there are also 'passivity' phenomena, 'states of bellowing'. Fifthly, subjective feeling-states appear quite often in the form of an attack; for instance, there are feelings of bliss as if the patients were surrounded by saints or as if someone was standing behind the patient and was the cause of the indescribable feeling of happiness. Reversely there are states of anxiety, feelings of depravity and an uncomfortable restlessness. In contrast to states associated with personality-disorder we can often observe a spontaneous crescendo of feelings, an inability to hold on any longer and a peculiar alien quality. Patients in chronic states, who are usually quite sensible and orderly, get such attacks from time to time. Sixthly, there are short attacks in which there are rich fantasy experiences with complete derealisation though the patient is fully awake. These states emerge from normal, sensible states and usually take up no longer than a few minutes. We will illustrate with a few examples:

The patient, Dr. Mendel, had a kind of dream but he was not half asleep; he was *fully awake with his eyes closed* and quite aware of the position of his body. He suddenly had an attack of giddiness and a muddled feeling in his head; he experienced some 'change' and in this fully awake state he saw in imaginary space and very vividly how an attendant brought a glass of wine into the room and how the patient refused it. Another 'change' took place and he saw a skull against the background of his visual field. He gazed at it, smiled at it and felt strong. The skull exploded and a small after-image remained looking like an eye which then quickly vanished. He also had the feeling that his own head was a skull. He felt how the scalp disappeared and how the bones and teeth rattled. He observed all this without any fear, like an interesting phenomenon. He just wanted to see what would happen next. Then rather *suddenly* everything was over. He opened his eyes and felt as he had done before the attack. The entire state lasted at most 30 seconds and he was awake all the time.

One of Köppe's patients reported: 'I often see men, black by day and fiery at night. It all starts by itself. It starts to turn round and then I begin to see: men who walk along the walls and creep along like a funeral; I do not see the beds and windows at night; everything is black and the men are fiery just as the sky is black and the

stars are fiery. They move one behind the other, pull faces and nod to me and make mocking grimaces and sometimes they jump about and dance. They always seem to revolve round me from right to left. I also see snakes no thicker than a straw; they move in order and at night are fiery. They also come in the day and then I see both men and snakes as black; even when I am here in bed with the others they move around on the wall; *it goes on a few minutes* before I realise I am here among the other patients. When the attack comes my mind is half-gone; it comes *all of a sudden*. I suddenly feel a pulse beating in the neck and arm arteries; it gets to a peak, I hide under the bedclothes but even there I can see them. Then the bed and chairs begin to spin round'.

II. Phases. The total mental state fluctuates to a slight degree quite spontaneously or as a result of experiences and physical events. In the same way our inner mode of reaction fluctuates constantly in the face of impressions and events and so does our capacity to be influenced by physical agents such as poisons. Sometimes a row can drive us to despair and at another time it does not touch us; sometimes alcohol will cheer us up and stimulate us while on another occasion it makes us morose and sentimental. So far as these differences have no physical cause (alcohol, for example, has less effect during manual work than when at rest) they must be due to a fluctuation in the dispositions that form the direct basis of our conscious psychic life. These slight fluctuations are not a subject for psychiatric treatment but there are transitions from these to severe illnesses which occur in either one or several phases and which we have known well for a long time, particularly in the affective sphere. Inasmuch as they are phases the final prognosis is always a favourable one. We have observed illnesses which last as long as ten years (melancholia) but which finally recover. It is true that the affective disorders, the manic and depressive states, are the most striking of the phasic disorders but there is no reason why we should consider the affective changes which accompany almost all phases as the only essential aspect of them. There are phases where one can observe compulsive phenomena of every kind dominating the foreground¹ or there may be simple retardation without any marked depression or physical complaints without any striking psychic change or psychasthenic-neurotic states or feeling states which cannot be properly placed within the pleasure-displeasure polarity.

Although the term 'circular' is applied mainly to the manic-depressive disorders, phases and periods occur nevertheless in the majority of illnesses.

III. Periods. If we restrict the concept of periodicity very narrowly—in a mathematical sense—we shall not find a single psychopathological instance to which it applies. Individual phases are never exactly the same and the intervals are never precisely the same either. In borderline cases it is quite an arbitrary matter whether we still talk of periodicity or of irregular phases.

Periodicity is to a hardly noticeable degree the form in which all psychic life takes place. The continual brief fluctuations of attention which can only be

¹ Bonhoeffer, *Msch. Psychiatr.*, vol. 33 (1913), p. 354.

determined by experiment, the fluctuations of the capacity for performance shown on the daily work curve (e.g. peak of capacity in the morning and afternoon, etc.), and the periodic fluctuations in tone and productivity which every careful observer notices in himself, are all examples of the periodicity of normal psychic life with which we are certainly only partly acquainted. The periodicity of the female sex in connection with the functioning of the sexual organs is the best-known example.

Periodicity asserts itself, at least to a slight degree, in almost all abnormal psychic events. We will give only a few examples: 1. All psychic abnormalities associated with personality-disorders tend to periodicity: compulsive states, pseudologic phantastica, dysphoric states, etc. 2. Severe affective disorders, which often appear as irregular phases, can also occur periodically. We distinguish between 'folie à double forme' (mania, melancholia—interval—mania, melancholia—interval, etc.), and 'folie alternante' (mania, melancholia, mania, melancholia, etc.). 3. The periodicity of some symptoms can also be seen against a background of a developing disease-process. The periodic initial phases of the schizophrenic process sometimes lead to a wrong diagnosis. In the chronic end-states we can also observe periodic excitements, hallucinatory attacks, etc. Such periodicity can be differentiated not in the individual case but in principle from the sequence of thrusts made by the process, which allows remissions (or improvement) to take place between the several thrusts or even intermissions (apparent full recovery).

B. *Process*. When some *entirely new* factor arises from a change in the psychic life that is in contrast to the development of the individual's life so far, it may be a phase. However, where this is a *lasting* change in the psychic life we speak of a process. It is not proven but so far only a heuristic principle that transient phases and those processes which lead to lasting change should be differentiated from each other *in principle*. That it is a difference in principle derives support from the fact that in numerous cases psychic changes with *schizophrenic* features are also changes that are lasting. It may be that this is always the case. Among the processes themselves the single shift, transformation or distortion of the personality that brings a new state about must be differentiated from a steady progression. But the latter comes to a halt at some point and passes over into the 'end-state'.

For the present we hold on to the schema that differentiates between a process and a recoverable phase. Those acute events which wreak a lasting change and are accompanied by stormy phenomena, also all the later events which increase the change, are termed '*thrusts*' (Schube). In the interval between the various thrusts, where the lasting change represents as it were a new constitution and a new condition, *phases* and *reactions* occur as with normal individuals and these are to be distinguished from thrusts in principle even if it is impossible to do this in every individual case.

Processes encompass a very large group of mental illnesses composed of a great variety of essentially different forms. The processes due to *organic*

cerebral illness take to some extent a uniform course. To these belong the known cerebral processes and a number of illnesses which we cannot yet separate out from the dementia praecox group. The course which these processes take is dependent entirely and solely on cerebral processes. The psychic contents are very varied but carry a common characteristic, that is, the gross destruction of the psychic life. In these cerebral processes we find remissions, arrests, and in some cases perhaps recovery.

The remaining processes are still very numerous. They form a group which shares something different from all the other cerebral processes, i.e. an *alteration of the psychic life without any destruction* and with a large number of meaningful connections. We know nothing of the cause of such processes. In the case of the organic processes we find a confused mix-up of psychic phenomena which we cannot understand psychologically, whereas here the more one studies a case the more connections one finds. As distinct from organic processes which run an arbitrary and chancy course from the psychological point of view, it is possible here to carve out *typical psychological sequences*. In the slightest manifestations of a process-disorder, it seems as if at just one point and at a particular time in the patient's life, there is a kink in development, whereas normally life continues in a straight line as it were, and with the organic processes, there is a confused course without any structured development. Apart from theory and to create a term which will characterise the whole matter and do justice to the fact that we can only approach this from a psychological point of view, we have termed these processes 'psychic processes',¹ as distinct from organic processes, using this concept as a marginal concept and not a classificatory one. Instead of 'psychic process' we could say 'the total biological event' if we use the word 'biological' not in the sense of something concrete that we can know. These phrases however express the riddle but do not explain it.

We cannot describe these cases in a general way as we describe other clinical pictures. We can only group similar cases together and construct types. In the majority of cases we find a notable alteration in the personality and an alteration of the psychic life which corresponds in very many—but not in all—cases with Bleuler's type of schizophrenia. In some cases however we do not notice anything in our ordinary contact with the patient, sometimes not even after painstaking examination. But from the fact that the individual holds fast to a delusion-like content without attempting any critical assessment, from the importance which the delusion has for him and from the way the patient behaves in relation to a former acute phase we have to draw the conclusion that some general change has taken place in the personality and in the psychic life (as, for instance, in the above-quoted cases of delusions of jealousy).

¹ Cp. my work 'Eifersuchtswahn'—a contribution to the problem 'development of a personality' or 'process', *Z. Neur.*, vol. 1 (1910), p. 567. Formulation is inadequate, but the cases give a vivid picture of what is meant by contrasting different types of personality development with different types of psychic process.

In the organic cerebral processes the incurability is not in the first place at all general, and in the second place it does not in principle offer any distinguishing criterion from curable illnesses but with the psychic processes we can as a matter of principle and with more justification postulate the fact of a lasting change. Perhaps this is inevitable and rooted in the process, just as for instance in the course of life the old person cannot grow young. What once has grown in the natural course of life, or in abnormal growth and deviation, cannot be reversed. But at this point we lose ourselves in regions of psychiatry that are entirely virgin and unexplored.

§ 3. THE INDIVIDUAL LIFE IN TERMS OF ITS HISTORY

The individual always has a past behind him. All that has happened to the body, every illness, leaves its trace. All that has happened to the psyche, i.e. all that has become conscious, been done or thought, becomes a memory and a source for what follows. At any given time we are the result of our own lived history. And indeed at no time is an individual without a history; he is never a completely new beginning, neither objectively from the biological point of view which pursues his previous history right into its genetic connections, nor subjectively from the view-point of his own consciousness: from the first act of his own conscious self onwards, he has a past, just as we know we have a past on waking up from sleep. What was, is active in him physically and through memory he is carried along by his past and tied to it including that part of it which he has forgotten. What he becomes is determined by this past but also by the way in which he works upon it. The individual, then, is as much the start and source of his own history as he is its result. Carried along by his past he grasps at the possibilities of the future. The individual life as an objective matter is always something past and can be pictured. The individual life in its actuality is just as much the future which will illuminate, adapt and interpret all the past afresh.

(a) Basic categories for the life-history

In understanding the life-history we see first a number of elements in the individual's development which differ in meaning (the development as a whole is both biological process and a history of the psychic life; it is a movement of self-reflection and it has an existential foundation); secondly, we use a set of special categories (such as 'first experience', adaptation, crisis, and so on).

1. *Elements of the development as a whole.* First we differentiate the *biological processes of life* and secondly the *history of the psychic life*, still obscure to itself but a matter of fact; thirdly, the *self-reflective awareness* whereby the life-history illuminates itself, is set in motion and made productive; fourthly, the *existential basis* of decision and acceptance of the given for a more thorough appropriation of it. The first of these elements was the subject-matter of the preceding paragraphs. The second is the life-history as an observer can

understand it, the third, in so far as it understands itself, will fulfil itself accordingly and develop, the fourth as a marginal factor can only be contacted by psychological understanding; it cannot be known or justified or advanced by good intentions nor can it be contrived or effected. We can only philosophically call to mind the possibilities of Existence itself and lay claim to these through our own illumination of them. These four elements are in reality one and inseparable and are linked in a mutual bond in which diverse modes of Being come to life, in such a way however that they only occupy an understandable position in that midway sphere, which lies between the biological life and Existence itself and sets the bounds for what cannot be understood. Existence itself nevertheless is manifested in the biological life and this latter remains the very ground of the former. We are always inclined to understand in too simple and objective a way what an individual is, does and knows and this is true of our explanations also. In the face of this inclination we need to keep our minds open not only for the basic unsolved problem, in particular for the transformation of what is vital into what is existential; that is, how existential originality converts the vital element into something quite different; but also for the conversion of crises into a metamorphosis of the inner self; for the development of intellectual productivity from self-reflection and for the historical awareness of Existence itself for which memory prospects.

2. *Specific categories of development.* If we look at the structures of the life-history separately we can detect their significance in all the four elements we have just described. The connections which we have discussed as meaningful and causal reappear once more as structures of this sort and we select a few categories which have a specific biographical validity.

(aa) *Consciousness as a means of acquiring new automatisms.* Consciousness is always restricted and can only grasp a little at a time as it focuses on a single point but what happens consciously may through repetition and habituation pass over into the unconscious and then occur automatically in response to appropriate stimuli without any fresh conscious effort. Whatever happens in the somatic sphere when we learn to walk, ride a bicycle or typewrite, etc., happens analogously in the case of psychic events. Our immediate existence relies on an unconscious basis which results from an everyday inner guidance, permissiveness and execution. I am responsible for what I am now by reason of innumerable conscious actions during my life so far, in the sense that whatever actions may be the cause of my present condition they were once freely chosen.

Consciousness is always as it were the growing point of our life, where we expand, but in itself it is only at the rim of the vast realm of the unconscious. Whatever happens here is in itself simple and concerned with what is simple to grasp. What in the course of time becomes of it when elaborated as an unconscious structure is infinitely complex; it is the realm of our being and potentiality; as such it preserves all that has been acquired at the point where consciousness grows and it enhances all that is thereby made possible. To

this extent consciousness is as much a function of continuous beginning, of the arrival of something new, as it is also the mirror of past achievement and the stepping-stone for further progress. The course of life is a passing from one unconscious to another newly created one. The clarifying frontier of consciousness is thereby transformed as to its possibilities. The illuminating potential of every moment enlarges as it presents itself and so does the breadth and depth of experience.

(bb) *The creation of personal worlds and works.* As soon as the individual wakes he does not merely want to live out the day but wants to live for something. He wants to experience some meaning in his life. Therefore the world is not just a passively experienced environment to him but presents him with a challenge to create; he creates his own world from what is given, as well as something that will be there for others even without him. His life surpasses his biological existence. He creates works which have a continuing influence. His everyday work—serving the daily round—in the context of his calling, that is of continuous performance—deepens his actual effectiveness through cultural influences and alone brings the realisation of his essential nature. As he discharges his functions and obligations he becomes aware of his creative activity and his capacity to submit. He himself determines the way along which he knows himself to be determined. The basic condition of the individual, his attitude to life and his self-awareness are all dependent on how successfully he fits his own activity into the coherence of things. He fulfils himself when he finds himself in a world which he has himself helped to create. The one complex unity of his individual life is bound up with the one complex unity of such a world.

Life on its way derives its structure from the individual's performances, from his own world and works. The individual's life is determined to its roots by the possibilities of constructive activity in the world in which he grows. The width of his horizons, the solidity of his foundations and the shocks he endures as a whole are a consequence of the world into which the individual has been born. All these determine to what extent he will become aware of himself and what will be the main content of his experience. The age-epochs have a characteristic significance in this respect. Childhood lays the foundations: what failed here or withered can never be restored; what was destroyed can never be made good; contents acquired then can never be lost. Old age is supported by the truth of the long life experiences; where these were met with integrity the old individual can in spite of all the changes in his world become aware and impregnable and at the same time suffer a depth of pain which childhood does not know.

(cc) *Sudden change and adaptation.* By adaptation we mean the appropriateness of living forms for a well-defined and stable environment. Such adaptation can be won at the cost of vital sacrifices, as for instance in the case of degenerate forms of wingless insects which survive better on storm-beset islands than does the winged variety. Adaptation depends on selection; the processes

of adaptation are biological processes taking place over many generations. The adaptation of the individual to his physical environment is biologically defined as with all living things. Races living in different climates show differences in adaptation. But the capacity for adaptation in the cultural-psychic sense is practically unlimited. The individual overcomes his biological restrictions by planning and re-arranging his life.

The human world is not stable. Situations and opportunities are constantly shifting. One's social situation is complex and can be catastrophically transformed by events that break into one's life. Experiences and obligations alter the situation. The individual must adapt if he is to maintain his own existence and fulfil it. The capacity to adapt is individually very varied, from fitting into the circumstances without any loss of inner equilibrium to a complete transformation of the personality itself. Some natures appear to withstand all storms—like a sturdy rock; others seem to lack all firmness whatsoever. They are a mere echo of the immediate environment and of their situation. Life in rare circumstances can reach full completion by remaining fast in well-defined situations, callings and areas of obligation but with the majority of people there is the necessity for change. The individual life is shaped by the mode of adaptation to a wholly labile environment or by progress through a series of alternating environments. Entirely different personalities can emerge from the same hereditary dispositions according to the environment, traditions, education, experiences, achievements and obligations in each case. There is observable transformation of the personality with radical alteration in the life-situation—attainment of professional independence often changes the handwriting as expression of the personality.

(dd) *The first experience.* The historical character of life means the irreversability of what has once been experienced, done or learnt. What has happened cannot be reversed. Life is realised through the paths we take, particularly through repetition, whether this is habit or the enhancement of a meaning by our appropriation of repetitive experience and by its depth and reliability. Historically everything has a first time. The first experience as the first is unrepeatable; it possesses a unique revelatory power; it has a specific weight. With every first occasion possibility vanishes because the now well-defined reality excludes all other possibilities. We say 'once doesn't matter' and rightly emphasise the specific significance of the second time as a final confirmation. But literally the saying 'once doesn't matter' is false. All first experiences have decisive significance. 'An experience which evokes a certain affect for the first time creates the life-long capacity to experience this affect' (Bleuler). This automatic effect is the foundation of our own existential significance which matures through our choice of experience and of what we undertake.

The first experience as such cannot be understood in isolated fashion but only in the context of the life-history. Its influence depends more on its significance than on the momentary intensity of the affects. Its influence is

further determined by the kind of experiences the individual has had and in what phase of development this first experience occurs and finally whether it takes place during some abnormal endogenous phase or alteration of consciousness. Only first experiences which are existentially decisive will change the individual and with him his world. His whole mode of experiencing is altered, the past is seen in a new light and a new atmosphere pervades the future. Those experiences that go deep, come purely from without and act as something alien in the psyche are termed psychic traumata.

(ee) *Critical situations.* Crisis in the course of development means that moment in which the whole person suffers a reversal, and the individual emerges as a changed person armed with a new decision or sunk in defeat. The life-history does not run an even chronological course but structures its time qualitatively, drives the development of experience to a peak where a decision has to be made. It is only by fighting against development that an individual can make the futile attempt of keeping himself at the point of decision without making one. Where he does this the decision is made for him by the factual progression of life. Every crisis has its time. It cannot be anticipated nor can it be evaded. Like everything in life it has to mature. It need not appear in acute form as a catastrophe but may take place quietly and inconspicuously, yet nevertheless be decisive for the future.

(ff) *Intellectual development.* The shaping brought about by development is a mental feat in which the individual elaborates what he has experienced and what he has done. Every one of his 'present' moments has a past on which it rests, the effect of which shapes what follows next unconsciously or as a guiding memory. Every present is the result of innumerable deposits; these can be a paralysing deadweight or provide a means for further ascent, a mainspring for developmental momentum. The inner shaping is also a constant ordering of earlier initially uninhibited realities, the achievement of an inner pattern created by hierarchies of drives, memories, knowledge and symbolism.

A basic form of intellectual development lies in the polarising of opposites and proceeds through the opposites to a synthesis or choice, in short a dialectical evolution. The dialectical development enhances human nature; for the individual is limited by his finite goals in so far as he is confined to them alone. These irreversible fixations are culs-de-sac and in contrast to them he can find a way into the freedom of comprehensive realisations by steering a middle course between the opposites, experiencing them to the full but binding them together and preserving the tension.

While the mind can bracket all opposites together it is nevertheless existentially decisive for the individual at what point he becomes aware of those which he fails to embrace but between which he makes his choice; at what point limitation ceases to imprison him and becomes the historic depths of Existence itself and at what point the loss of possibilities becomes for him the condition of an upward step into true reality.

(b) *Some special problems*

We select a few of the countless problems which life-histories present:

1. *Importance of infancy and early childhood.* Psychoanalysis has investigated the 'pre-history' of patients, that is their life before there was any conscious memory in so far as this is a time which lays the foundations for later life and determines it.

In respect of *the embryo* such considerations are baseless and hence quite imaginary. We do not know any objective indications of an embryonic psychic life nor have we any memory of it. *Birth*, as a somatic catastrophe in which the new-born child suddenly breathes and lives, must establish his circulation and endure the painful stimuli of his new surroundings, is said to be an equally decisive psychic experience expressed by the child's cry with which he responds to his entry into the world. Somatically a great deal happens in this catastrophe and birth injuries may have lasting consequences. But no one knows of an experience which determines the entire life-attitude to the world and no one remembers anything like it.

But the *infancy* is different though no memory reaches back to it. It can be observed, and we can also note the expression, the demeanour and mood of infants. The significance of a loving human atmosphere can scarcely be overestimated. Children brought up in nursing care in the best of institutions are already, at 4 months, more backward mentally than those brought up by their own mother in a far less carefully planned way.¹ Children who for instance are foundlings and have been brought up in an affectionless way in institutions have unspeakably sad and blank facial expressions. The after-effects of these first months of life on the entire later life is hypothetical yet a possibility.

It is likely that an inescapable and well-defined influence is exercised by the *first years of life*, depending on social conditions and other obvious factors which govern the development. Children who, for example, are exploited from early on and who are drilled rather than educated and blinkered from the riches of their culture by the narrowness of their horizons later on never have those stimulating and constraining memories which usually attend on life. The whole unconscious design of a forward-pointing life which is drawn in childhood and youth can only take shape in conditions of relative freedom and security where the environment gives a genuine foretaste of great traditions.

A further question is that of the significance of *individual early experiences* and modes of behaviour. Freud attaches great importance to the impressions of earliest childhood (from the prehistorical period up to about 4 years of age). Early deviations are thought to lead to deviations from the natural life-course or to its failure or frustration. It is by no means clear how far this is correct and how far psychic dispositions can be attributed to what is acquired in the earliest period of life rather than to unalterable predisposition and genetic inheritance. This problem which Freud threw up of infantile memories opens

¹ H. Hetzer, *Mütterlichkeit* (Leipzig, Hirzel, 1937).

up a number of vistas but so far all attempts to solve it in the individual case have been too uncritical and are not very convincing. The significance of past experience, particularly childhood experience which is somehow accessible to memory, can easily be over-rated by the personality in retrospect. Out of the conflicts and difficulties of the present, long-forgotten and insignificant experiences are re-activated and heavily loaded with affect in so far as they are felt to be suggestive symbols for the present difficulty. By the feeling that the immediate difficulties are irretrievably determined by what is past, the situation may perhaps be eased. As causal factors this 'reinvestment' of long-forgotten experiences with affect and the mistaken over-estimation of them has been termed 'regression' by the Freudian school (in metaphorical terms, the psychic energy flows back to early psychic contents). This theoretical over-estimation by doctors and patients of the forgotten psychic traumata was given a meaningful interpretation by Jung.¹

2. *Relation of the psyche to its own age-epochs.* The animal goes through its biological age-epochs unawares; the human individual knows his age and adopts an attitude to it and he does this in very different ways. A typical evaluation gives preference to youth as life proper and dismisses age as decline but this has not always been so. For the Romans the full maturity and dignity of manhood began at 40 years of age. In modern industry anybody over 40 is already regarded as inferior. Fashionable movements catering for special age-groups such as the 'Revolution of Youth' or 'The century of the Child' influence judgment. The average attitude has been expressed in the phrase: 'everyone wants to grow old but nobody wants to be old', and this has been countered by the phrase: 'every age has its own value'. The individual has a conscience to match his age and all that goes with it (and he becomes unhappy or ill if he offends against it). Whoever fails to realise the true meaning of his age will only derive suffering from it. There is a radical difference between the person who merely suffers, wishes and undergoes and the person who takes over what is given to him, gives it realisation and shape. The source of this final decision in Existence itself remains psychologically inaccessible. But the phenomena which follow from it can be understood.

In the course of growing old the human being slides into the basic attitude that nothing really new is any more possible in this life. Filled with his own acquired reality, which for him is analogous with human life as a whole, he has to be content with this. If he has not clearly succeeded in his attempt at realisation, there is, for example, restlessness, which still desires something else, the real thing; or we get the refusal to grow old or the disappointment which expects nothing from the future but is just dissatisfied with everything and sees failure and guilt everywhere, dislikes the world, is misanthropic, bitter and care-worn. In growing old we find an increased fear of death, fear of reduced performance and the resulting loss of respect; jealousy of those who go ahead, sexual envy, hypochondriasis and so on.

¹ Jung, *Jb. psychoanaly. u. psychother. Forsch.*, vol. 5 (1913), p. 378.

But the measure of real achievement rests in the extent to which the whole life is present in memory. Human life reaches its peak through the depth of its memories. On the other hand life dissipates itself in short-lived memories and in restricting life's horizons to mere weeks and months without past and future. Where however realisation has been achieved, the crises of ageing become sources of a larger humanity. The psyche grows in strength, countering the biological course.¹ The woman 'grows more beautiful with the years' as her expressive powers increase while the 'glamour of youth', which in spite of all its splendour is only a biological factor, disappears. The man grows 'wise'; he attains his new and final fulfilment at his greatest age.

The life-history of every individual as it passes through the age-epochs is unique; it cannot be planned or programmed but has to be acquired from the possibilities of Existence itself. This fundamental eludes psychology, science and every attempt to survey it. But failure en route is manifested by innumerable psychological phenomena which when they appear as disturbances² have been called neuroses.

3. Development as an experience. Whether the individual is daring and engages himself or whether he is strenuously in opposition to his life as it unfolds is an element of basic importance to his history. Everything living, including man, must move forward constrained by the biological necessity of the age-epochs. But what is human in this process is the intellectual development of the psyche. We can formulate this generally in a number of different ways:

(aa) A human being must accept *contradictions*; he has to 'eat of the tree of knowledge', distinguish good and bad, true and false, and lose his innocence. All that forces him biologically to become a full-grown and mature sexual being provides him with a way to these realms of the mind.

(bb) The path of development leads from *infinite possibility* in youth to *final, restricted realisation* that excludes all possibility. Life has to be decisive if it is not to stay suspended in a void of endless possibility and thus negate itself in fact.

(cc) Development brings about a *release from what is merely unconscious* from the all-embracing and prevailing ground of our own Being and this is achieved by illumination, by elaborating and transcending and by rejection and mastery.

In a number of very different ways man opposes his development which is biologically founded and proceeds by means of the mind as it operates its existential decisions. The great conclusion of realisation may manifest itself as a quiet evolution and expansion of life or as a crisis which is suddenly kindled and which brings with it universal dissatisfaction as a spur to progress, with perhaps a stillness and content in the depths but yet a certain pain at the

¹ Kierkegaard, *Die Krisis u. eine Krisis im Leben einer Schauspielerin* (1847 (D), von Haecker, Innsbruck, 1922).

² Old age—cp. Plato, *Republic*, Bk. I (Cephalos' argument). Cicero, *De senectute*.

lost possibilities. The experience of pure vitality provides the élan of progressive success, success in performance, erotic success, social success, rhetorical success and the production of works; but vitality as such also brings the experience of vital regression, of forgoing and failure unless there is a metamorphosis of one's Being and the possibility of a new creativity from existential motives and not mere biological occasions.

There is something in humanity which fights against this development, something which may have fateful effects for life should it prevail. The human being fights against growing up, against growing old, against being old, because he longs for conservatism, for remaining undisturbed, remaining unchanged, for the everlasting 'nunc stans'. He does not want to lose his infinite possibilities and resists the realisation which restricts them. He does not want to challenge the contradictions but would preserve a quiet, unquestioning unity. He does not want to lose the cover of the unconscious and does not wish for any illumination. But as development is always taking place '*de facto*', a striving for the past sets in, a regressive urge for childhood feelings, bearing and content (regression, *retour à l'enfance*) and a longing for the lost unconscious. Man wants to get away from individuation, from undertakings and performance, from deciding and concluding; he wants to be like a plant or an animal or the inorganic world; he wants to surrender himself and disappear somewhere in submissive collusion.

(c) *The basic problem of psychopathology: is it personality development or process?*

The investigation of the basic biological events and the meaningful development of the life-history culminates in a differentiation of two kinds of individual life: *the unified development of a personality* (based on a normal biological course through the age-epochs and any contingent phases) and the *disruption* of a life which is *broken* in two and falls apart because at a given time a *process* has intervened in the biological happenings and irreversibly and incurably altered the psychic life by interrupting the course of biological events (cp. for process pp. 445 ff., 692 ff., and for development of personality see pp. 639 ff.).

The criteria for a process in the life-history are: The appearance of a new factor which can be localised within a brief span of time; the accompaniment of this by a number of known symptoms, the absence of any precipitating cause or of any experience sufficient to explain the onset. We speak, on the other hand, of the *development of a personality* in so far as we have been able to understand what has developed within the total framework of the life-history in all its categories, always presupposing a foundation of normal biological events. The deciding factors are experiences, precipitating stimuli and events which can be adequately understood together with the absence of any known symptom-complexes belonging to a process which can be allocated to any given point in time.

The whole which we call personality-development as opposed to a process has its source only in the specific Anlage or disposition which runs its course through the series of different age-levels without any conspicuous endogenous phases and without any kinks in development which introduce a new un-understandable element. Let us once more recapitulate the following matters: 1. the Anlage or disposition *grows*, evolves, and absorbs in a continuous sequence the changes brought by the respective age-epochs. The tracks on which our human existence runs are certain necessities engrained in the organism as a whole and they cannot be subsumed under a few definite and distinguishable forms, in the same way as disease-processes, but they shift and change in an enormous number of variations. 2. This Anlage or disposition is always *in constant interaction with the milieu*, and gains its specific shape through *its human destiny* in a way which, once we know all the individual details, is meaningful to us. 3. In particular, the Anlage or disposition *reacts* to experiences in a constant way according to its own nature and elaborates them in its own characteristic manner. We can understand the many viewpoints, opinions and feelings that arise in this way, as for instance, bitterness, pride, querulant behaviour and jealousy.

The end-product of such elements we term 'a personality-development'. In this way we recognise the paranoid developments in querulant and jealous people which in earlier times often used to be confused with very similar processes though essentially they were an entirely different matter. Reiss¹ has shown how in a hypomanic personality it was possible to understand his existence as a successful businessman and later as an unassuming, psychotic travelling-preacher in terms of a mere alteration of the façade, so to speak, while the personality remained untouched; all this being brought about by a change in environmental conditions and by a premature loss of potency.

Individual lives present us with *a great and varied multiplicity*. There are the precocious—and delayed—developments; negative infantilisms in the form of an arrest at an early stage of development, a failure to mature, a struggle against realisation or some kind of omission; positive infantilisms in the form of preservation of seed and potentiality, an unfailing productivity, the plasticity of an undetermined psyche; prodigies who later disappoint, those who are crippled in the struggle of life, those who level themselves down and adjust, those who depart from their original course (the question is what is the vital loss and what arises from the failure of existential decision or, alternatively, what belongs to the endogenous life-curve and what has been set in motion by a free, historical decision?); conversions which lay the basis for an entirely new kind of life; transformations of personality with changes in social situation and the general state. We have observed the catastrophic alteration in people when fate overtakes them as well as the developments that grow almost unnoticed from small beginnings into major

¹ E. Reiss, 'Über formale Persönlichkeitswandlung als Folge veränderter Milieubedingungen', *Z. Neur.*, vol. 70, p. 55.

consequences. We have to think of the personality—when we talk about its development as distinct from a process—in a comprehensive way as a unified totality of meaningful connections and of normal, ununderstandable elements of a common biological character.

Finally we would like to say that all these concepts are schematic and are living preconceptions of the moment rather than products of research. In the individual case we are often in great difficulties. For example, we meet individuals whose entire life-history presents us with a picture of a personality-development but in the individual features there is a hint of a mild process at work which gives an abnormal colouring to the development. Such cases are not at all rare and present no solution to the discussion as to whether there is in these cases a mere development of an '*Anlage*' or a process.

Typical positions have been taken up in such discussions which *miss the central point*, that is, the differentiation of the process from the personality-development. They all have in common that they expand the meaning of 'personality-development' beyond its limits and put into it as much as they can of the process.

1. *The tendency to 'understand' the process.* It is not possible to understand the genesis of delusion proper. We can understand the content of the delusion in terms of the '*Anlage*', the milieu and the individual's experiences, but the delusional character of the experience remains something specifically new which comes in addition at a given point in life. The paranoid mechanism cannot be understood. Yet it is not always easy to establish the point in time at which paranoia begins. We suspect perhaps a paranoid disposition or '*Anlage*' inborn in the original personality and showing itself previously as a paranoid habitus but now thriving on the basis of experiences and taking over the lead in life. Irrespective of the difficulties in the individual case, we still have to avoid extending understanding beyond the realm of the understandable. Something like a basic attitude in psychiatry is manifested here and hence there is a passion in the polemics. Connected with all the attempts to understand schizophrenia we find the tendency to deny the facts of the process in their specificity.

2. *The tendency to conceive the process as a neurosis.* If one reflects on the compulsive neuroses—or analogously on the sexual neuroses—one can often note in the life-history a progression in which initial, individual symptoms come to dominate the person's whole life and shackle the personality. A phenomenon in itself quite alien to the personality overpowers it. Here we are dealing in fact with a progressive event the nature of which is obscure to us and perhaps with an illness of biological origin. But what we have called a 'process' in contrast to 'personality-development' is not occurring here. For that the illness would not have to be florid but must come to life in the very core of the person's existence. Processes are not neuroses. But, so it is thought, the neuroses, which J. H. Schultz terms 'core neuroses' (in distinction from 'peripheral neuroses') are still illnesses of the personality itself, which flourish

in the personal conflicts; they progress and are in large measure understandable yet are also an ununderstandable occurrence in the whole, so far as they are something given in the 'Anlage'. The process it is thought should be interpreted in similar fashion to these 'core neuroses'. But here too there is still a radical difference which is difficult to grasp in the form of definitive concepts and individual criteria, although as an intuition of the whole it is immediately evident: neurosis is understandable in a fundamentally different sense from a process.

3. *The tendency to interpret the process as an Existential change.* The ununderstandable aspect of the process represents the limit of our understanding but this must be in the sense of a basic biological event and not in the sense of Existence itself which carries life on and gives it reality. The philosophical concept of Existence itself cannot be applied to concrete psychopathological investigations. If it is so applied it unavoidably loses its particular and profound meaning. The changes of human existence are not the changes of Existence itself. The transformation of the entire individual and his particular world by biological events which distort the course of his life and the transformation wrought by the unconditioned choices of Existence itself are two quite heterogeneous things. They do not lie on the same plane. The latter has no existence at all for the science of psychopathology. The intrusion of a process into the personality makes for madness, not for Existential freedom.

All these three tendencies have it in common that in a series of cases the basic biological events are denied as a problem and the basic impression of madness is not recognised. The problem of the process slides away into the realm of *meaningful connections* or of the *incomprehensibility of neurosis*, or of *philosophical Existence*. In every case the facts are overlooked in an endeavour to see the individual as understandable, as having a neurosis, as Existence itself, but each time everything that is specific for the process is let slip. For the sake of clarity in our empirical knowledge what matters is that we should not extend the concept of personality-development beyond the field of the understandable but should recognise what is not understandable in all its complex heterogeneity and grasp it methodically according to what its nature may be. One of these ununderstandable elements is the process itself.

The biological approach to cases is of great interest, especially when they do not allow, at any rate so far, any clear alternative between personality-development and process. There are the rare so-called true 'paranoics', the progressive compulsive disorders, the 'insanities' without any elementary symptoms (false perceptions, thought-disorder, primary delusions, passivity phenomena, thought withdrawal, etc.), yet perhaps with blocking and negativism (which one cannot always clearly distinguish from neurotic phenomena, the results of complexes). If in these cases one does not come across the break in the life-history, the beginning of some known syndrome, diagnoses usually do not agree even in the case of experienced specialists. What the one considers to be a neurosis or an anankastic development or psychasthenia, the

other takes for a schizophrenia. Personality-disorder or process, decidedly abnormal personality or schizophrenic transformation of a previously quite different being are two diagnoses in opposition yet opposed in such a way that not only do difficult cases occur but, because of such cases, the basic concepts are themselves in question and their limitations constantly felt.

Betzendahl¹ gives an impressive picture of a patient of his who drew her environment into her compulsive and delusional world without it being possible to reach any diagnosis from her mental state because the primary symptoms were absent. The maintaining of her childhood ways of resisting anything new, particularly the preservation of pious beliefs and credulous rituals, led her with the help of solicitors and doctors, who taught her first, to a battle for her rights and her health which took first place in her life. She subjected people without them or herself noticing it: 'Her husband was fooled by the return of his own arguments; the solicitors were impressed by her ready grasp of their formalities and the gynaecologists and general practitioners merely looked through the spectacles of their own speciality'. Only the psychiatrist with his study of the life-history was able to get the entire picture, yet still unable to say what kind of illness it might really be. The lay people always considered her healthy, took her part and got impassioned on her behalf. Betzendahl made a diagnosis of schizophrenia (a process).

Bürger-Prinz in his pathography of *Langbehn* favoured the idea of a personality-development although a few years earlier (in Bumke's *Handbuch*, Vol. 9) he had described him as a classic schizophrenic.

¹ W. Betzendahl, 'Über maskierte Verrücktheit u. ihre sozialen Folgen', *Allg. Z. Psychiatr.*, vol. 100, p. 141.

PART V

THE ABNORMAL PSYCHE IN SOCIETY AND HISTORY

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(SOCIAL AND HISTORICAL ASPECTS OF THE PSYCHOSES
AND PERSONALITY DISORDERS)

(a) *Heredity and tradition*

Somatic medicine only deals with the individual as a creature of *nature*. It examines and investigates his body as it would that of an animal. But psychopathology is constantly faced with the fact that the individual is a creature of *culture*. Although man *inherits* his bodily and psychic dispositions his actual psychic life is achieved only through *tradition* which reaches him through the human society that surrounds him. We would be quite ignorant, speechless and helpless if we grew up without tradition. Deaf and dumb people, who lack the one sense-organ which makes the reception of psychic influences possible, remain at the level of idiocy unless they are taught language by special methods. If properly taught they can become fully developed people. It is our learning, our acceptance and imitation, our education and our milieu that give us our psyche and turn us into man.

But it is by no means easy to define the borders between heredity and tradition in matters of psychic life. It is said that only functions and capacities are inherited, fulfilment and content derive from the environment. The means of tradition are comprehensive; it is not only language which it uses, but every single thing, as it were, has a language: tools and houses and ways of working, landscape, manners and modes, customs, gestures, attitudes, old things and usages. Jung's 'collective unconscious' might serve as an example of the difficulties in defining the borders; from this unconscious the world of myth and symbol is supposed to arise as something universally human, which will appear at any time in dream or psychosis and itself suffer historical change along with public notions and beliefs. Is this collective unconscious a historical or a biological phenomenon? It manifests itself historically because it is the carrier of something specifically human and its contents have historical meaning. But Bumke's apt objections¹ to all such statements are valid here: namely, that acquired properties are not inherited. This would make void all those statements about pre-historical or historical acquisition of such symbols, which rise again out of the unconscious without tradition. But if the collective unconscious is only the biological basis of human potentialities as they evolve historically, when looking for what is universally human in our comparison of the myths and symbols of all people, we would have to ignore the historical element, which it would be impossible to do. Something that is unhistorical yet universally human cannot be grasped in terms of content but only in a purely formal way. If we go beyond that our concepts get

¹ Bumke, *Die Psychoanalyse u. ihre Kinder*, 2nd edn. (1938), pp. 136 ff.

confused—as is the assertion that landscape and climate affect psychic characteristics and deeply determine the nature of the local inhabitants in all that they say and do; for example, they make an Indian psyche in every American. But if the collective unconscious is only a name for those practical cultural necessities whereby fire, for example, was discovered in several different places of the earth, similar tools were invented and similar pertinent thoughts came to men's minds, then we are back in the old controversy of the ethnologist as to the extent to which culture depends on elementary human ideas with a universal distribution and how much on historical wanderings from land to land.

Nevertheless we have here two different matters even though they cannot be as clearly demarcated in practice as in theory; these are the continuing effects of heredity and the continuing effects of history. Inheritance is transmitted in man, just as it is in animals, unconsciously and as a causal necessity. Hereditary properties can remain dormant if no appropriate stimuli in the environment arise, but they will come to light again later after many generations when the environment summons them to function. In hereditary connections nothing is 'forgotten'. What is founded in history on the other hand requires a tradition to hand it on and a continuous appropriation of it by a newly awakened consciousness. We are what we have become as human beings because of the actual historical basis that has been laid once for all, which is exactly what it is and no other and which is not something universally human. But what is given historically can be lost; it can be forgotten when the tradition perishes and later generations have no access to it through any remaining traces of its records and works. Functions become dormant through non-usage and may perhaps come alive again in psychoses and dream. But historical contents can be truly forgotten and can only be acquired through fresh contact with an actual tradition. At all times there are certain possibilities of human life which become buried but the ways in which they can be resuscitated differ radically according to whether they are matters for heredity or tradition. In matters that belong to tradition an absolute forgetting can undoubtedly occur and there can be an irrevocable loss of historical continuity.

(b) Community

The transmission of culture like the entire life of man is accomplished within a community. The individual reaches his fulfilment and finds his place, meaning and field of activity in the community in which he lives. The tensions between himself and the community are one of the understandable sources of his psychic disturbances. Every moment of the day the community is effectively present for every individual. Where the community has become consciously rationalised, organised and has taken a specific shape we speak of 'society'.

Human psychic life in so far as it is conditioned by community and society and in so far as it creates specific structures through social interaction becomes the subject-matter for *social psychology*. This discipline describes the development of psychic life in human beings from the primitive to the civilised state¹ or it proceeds to con-

¹ Vierkandt, *Naturvölker u. Kulturvölker* (Leipzig). Tönnies, *Gemeinschaft u. Gesellschaft* (1888, 2nd edn., 1912).

struct ideal types by demonstrating in every society those recurrent relationships that are necessary for genetic understanding (patterns of dominance and submission, social stratification, etc.).¹ Or else it gives us concrete descriptions of particular peoples.² This is only social psychology in so far as the discussion turns on individual experiences that exercise an influence on or are themselves influenced by other human groups. Scientific investigations as a matter of fact do not maintain the desirable separation of this psychological approach from that of sociology, which examines the structure of societies but not the experiences of their members in terms of content. Sociology and psychology lie on the same plane and in practice they tend to merge into each other.

(c) *The extension of psychopathology from a social anamnesis to exploration of historical material*

The social milieu in which the individual lives is an extraordinarily varied one and given similar predispositions there is necessarily a variation in psychic development due to the differences in the milieu. In the same way the manifestation of abnormal human disposition and the appearance of psychoses must vary according to the society and particular cultural group in which they arise. This means that the psychiatrist, as distinct from the somatic physician, must always acquire from his patients a thorough *social anamnesis*. Only when he knows where the patient comes from, what life has had in store for him, what situation he is in and to what influences he is subject can the psychiatrist get any insight into the particular case which so far as the original disposition goes may be identical perhaps with another case presenting an entirely different appearance. In order to understand these connections in the individual case thoroughly the psychiatrist needs to know about the different social circumstances from which his patients come; he needs some picture of the possible stratifications and social groupings. Where his own observation is lacking he will be helped by the numerous published *autobiographies*, particularly those coming from the working classes.³ Nowadays these so predominate that they are in the foreground of interest. But it is obvious that the psychiatrist must have a similar interest in other social groups as well, depending on the type of his patient.

This knowledge of social grouping is always a necessity for the psychiatrist if he is to understand the patients he meets in the clinic. But, beyond that, psychopathology has an increasing interest in abnormal psychic phenomena which can be studied only rarely in the clinics or not at all. It *enlarges its sources of experience* therefore by seeking a knowledge of abnormal psychic events that occur outside the clinics in ordinary life among different social

¹ Simmel, *Über soziale Differenzierung* (Leipzig, 1890). *Sociologie* (Leipzig, 1908).

² Fouillée, *Esquisse psychologique des peuples européens. Psychologie du peuple français*. Schmoller, *Grundriss der allgemeinen Volkswirtschaftslehre*, vol. 1 (Leipzig, 1900), pp. 148 ff.

³ Cf. *Life stories* (München, 1910 ff.) (Popp, Forel, Winter, Viersbeck-Bleuler). Levenstein, *Proletariers Jugendjahre; aus der Tiefe; Arbeiterbriefe; Die Lebenstragödie eines Tagelöhners; Arbeiter, Philosophen und Dichter* (Sämtlich, Berlin: Morgenverlag, 1909). *Die Arbeiterfrage* (München, 1912).

groups and are reflected in human *history*. This is the final field of investigation for psychopathology. A hundred years ago it was concerned almost exclusively with 'mad' people in the narrower sense and with gross defect. Nowadays the mental hospitals are filled to overflowing not only with patients such as these but with patients suffering from affective illnesses, personality-disorders and various abnormalities. There is no longer any borderline between the psychopathology of abnormal personality and the study of personality-traits. But the science of psychopathology no longer confines itself to the material found in institutions; it looks instead for material transmitted from the past and for psychic phenomena which the present offers outside hospital and it is constantly seeking experiences which could never be gained within its precincts. It wants to expand its knowledge hand in hand with psychology and to spread this knowledge over the entire field of *psychic reality in all its individual variations*.

As to *social phenomena in the present*, psychopathology has chiefly interested itself in the study of criminals, prostitutes, vagabonds and neglected youth.

Historical material has only been studied rarely. In view of the fundamental importance of this and because of the conflicting views of historians and psychiatrists, we will try to clarify the situation: All psychological and psychopathological enquiry tends to pull in two different directions. At first there was a confusion of methods as between meaningful and causal research; later many investigators—particularly the psychiatrists—tended to make exclusively causal (that is biological) explorations and take only these into account. They attached validity solely to cerebral processes, constitution, physiology and the experiments of objective psychology since these were purely physiological, and as far as possible excluded the psychic life; the terminology they favoured tried to catch the psychic phenomena in the categories of biology. Other investigators—particularly those interested in the humanities—thought little of such 'materialistic' unpsychological psychology and addressed themselves exclusively to understanding the actual experiences in all their detail. This battle in spite of the mutual misunderstandings has led to a clarification of the difference between the two undertakings already foreshadowed in principle. The time has now come when, in spite of a purist separation of principles and methods, it is possible for such sciences as do include both fields of enquiry (e.g. psychopathology) to work for their mutual advancement. The investigation of the meaningful aspects will always find both its limitation and its complementation in the causal findings while causal enquiry itself can penetrate into those fields where meaningful units provide elements for the posing of causal problems (as for instance the problem of the connection between certain personality-types, certain psychoses and certain types of creativity). If psychopathology is confined to one or other of these two lines of enquiry it is always in danger of becoming either an unreal fantasy or pure physiology denuded of the psyche.

The psychopathology of meaningful connection is in the first place empirically grounded in personal contacts with living people. The clinic provides it with an incomparable basis and, in contrast with this, normal psychology is relatively poor in its sources. But neither the psychology nor the psychopathology of meaningful connections can remain at this level of personal experience. It is characteristic for every

kind of meaningful psychology that it addresses itself to the materials of *history*, to gain *a perspective over the entire expanse of actual human life*. In the past this line of enquiry has sometimes been tried by psychopathologists with ill success which is not surprising if we consider the difficulties of handling historical material expertly and finding suitable data. But in spite of this there is a task here of great importance. Although psychopathology may not yet have gained any essential and positive knowledge from historical material it is nevertheless a salutary thing for psychiatry that we are at least aware of the problems and the limitations set by our understanding. If we are impressed by an ancient myth and our encounter with it convinces us that we are dealing with something remote yet somehow understandable and are similarly impressed by some psychopathic event or abnormal personality, it is at least possible for us to look deeper at times and perhaps proceed to a vivid and happy formulation. We are then preserved from a mistaken and over-simple understanding and classification of our patients and from barren labels which a misguided understanding would attach to the psychic state of the times.

(d) *The meaning of socio-historical facts*

The investigation of psychopathological phenomena in society and in history is of importance for a realistic perspective on our total human reality. We can see the *significance of abnormal psychic life for society*, for historical mass-phenomena, for culture and for historically important personalities, etc. But above all it is of importance for psychopathology itself: we can see the *significance of the social circumstances*, of the cultural group and of situations for the *type* and the occurrence of *abnormal psychic life*. We gain experience from individual biographies such as we can hardly get from medical practice and we learn from realities which in our own time no longer occur. We exercise our comprehension of man as man when we see him in his historical transformations and how history has conditioned him. The socio-historical horizon influences our concept of the individual case in practice and works in favour of the latter.

(e) *Methods*

The methods used in socio-historical enquiry are the same as those in psychopathology generally. But in dealing with historical material *critical methods* are a special precondition. *Comparative* methods are the main ones; comparing different peoples, cultures and populations, etc. *Statistics* have a special place here.

Statistics have two objectives. First, the known phenomena are counted and their frequency established. Such findings have a *descriptive* significance and are of practical value but in themselves are of limited interest. Secondly, by the comparison of different sets of figures *correlations* of several phenomena are sought; as, for instance, the frequency of theft with the high price of bread or the frequency of certain personality-types among the perpetrators of certain crimes and so on. In this way insight is sought into the factors that are significant for the phenomena, and *primary causes* are explored. The statistical

data and the correlations give initial regularities of a superficial character and these point towards the underlying causal connections. The latter, however, are not yet established by the statistics alone.

Statistics are very fashionable in our time but they are difficult to handle and must be applied only with the greatest caution and critical circumspection if one is seeking reliability. In any statistical investigation we need to ask: (1) *What* is being counted? (2) *Where* has the statistical *material* come from? (3) *With what* are the figures to be *compared*? (4) *How* is the eventual correlation to be *interpreted*? For example: (1) All the suicides are to be counted in a certain district; (2) in Bavaria, Saxony, etc.; (3) the suicide figures for the different months are compared and the majority are found to fall at the beginning of summer, the different districts are compared, and it is found, for example, that there are proportionately more suicides in Saxony than in Bavaria, etc., finally (4) there is an interpretation of the findings. It is supposed that the early summer stimulates the psychic life for a number of reasons, so that it manifests itself more intensely, freely and actively along the lines of the original disposition; it is also discovered that sexual intercourse, sexual offences, etc., are more frequent at this season of the year and this is considered to be a confirmation of the original supposition. The difference between Bavaria and Saxony is interpreted as a difference in racial disposition. These four problems of statistical investigation need some individual comment as follows:

1. *What is counted?* If exact results are to be obtained only that can be counted which can be *clearly defined* as a concept, so that every time such an experiment is repeated it is known exactly what is to be counted. We can only count what can be recognised with sufficient confidence and separated out in the individual case. Objective phenomena are the best suited for this purpose: acts (suicides, crimes); social data (marriages, profession, etc.); environmental circumstances (place of birth, parental income, illegitimacy, etc.); further data such as age, sex, and so on. While such statistics are directed to pure objective data and external events without regard to the particular individual, other statistics try to catch the individual as a whole along with his psychic properties and to start comparison (individual-statistics in contrast to mass-statistics). Here the difficulties of determining and defining what is to be counted increase enormously. The most thorough psychopathological preparation is needed, whether this concerns phenomenological definition, analysis of intelligence and personality-type or the individual connection that can be genetically understood. Only so can we clarify the objects that *are to be enumerated*. For instance, we might want to have some numerical idea about the relationship between personality-type and certain criminal categories.

2. *Where does the material come from?* It is only rarely that statistical investigation can be carried out on an entire population and then it is in respect to the crudest objective data (e.g. suicide). Usually we have to select what is a very small group, taking as our material the patients of a clinic or of a mental

hospital or people who are awaiting trial, etc. The comparison of such material with other corresponding material may have the value of a *simple probe* to show in a small way the same relationship as would be found on a large scale among the pathological, criminal and other groups of the total population. More usually it comes to be *material that is selected with a particular bias* which does not permit any general conclusions, hence the *critical demarcation of the material* is one of the most important grounds for any assessment of statistical work.

3. *With what is the material concerned?* One may, for instance, compare the suicide figures for Bavaria and Saxony; these are of course not the absolute figures but just the percentage in relation to the entire population. In such a simple case there is not likely to be any mistake. In complex cases, however, it is necessary to think carefully over what in fact is being compared.

4. *How is the material to be interpreted?* Our scientific interest only really begins with the interpretation of the figures. We attach all the more value to the figures the more they point convincingly to some definite interpretation. Yet interpretations always remain to a certain extent nothing but *guesses*. They can come about in two ways: (1) as a *causal* interpretation; the greater frequency of children of alcoholics among criminal youth than among youth in general is explained by the paternal alcoholism which has damaged the germ-cells and thus produced inferior offspring, or by heredity, or by a psychopathic Anlage which in the father had been the ground for the alcoholism; (2) as an interpretation of the *meaningful connections*: some have 'understood' the statistics of the alcoholic milieu as revealing a meaningful connection. It was what the child saw and his lack of education which caused him to deteriorate and slide into the psychic state which is quite understandably the breeding-ground for delinquency.

Causal and meaningful interpretations are subject to *quite different critical approaches*. We will explain with examples: It may be thought that the sad rainy days of autumn are an understandable cause for suicide and one might presume that most suicides will take place in the autumn. Statistics however show that the highest number of suicides take place in early summer but that does not make the first meaningful connection wrong. In individual cases we may use it as evidence for understanding the total personality; we may find that the sad days of autumn have been the last straw but it is wrong to assume the frequency of this connection. Generally speaking, meaningful connections (that is, the majority of environmental effects) cannot be demonstrated statistically but only by the individual case which has been understood. Statistics will only show the frequency of the occurrence. On the other hand the existence of causal connections in such socio-pathological investigations are not demonstrated by the individual case but only by large numbers and correlations which will stand up to a critical analysis. Whether inherited degeneration due to the germ-damage resulting from paternal alcoholism is a general occurrence or not remains an open question so long as it has not been shown to be

probable by large numbers of convincing correlations. One particular case can never decide this issue. But suppose we assume, for instance (actually there are no investigations of this sort) that 500 such alcoholic families have been counted and that half of the children were born before the onset of the paternal alcoholism and the other half after, and that the first group appear similar to the general population while the latter, born after the onset of alcoholism, are found to have characteristics and life-histories which, compared to the other half, are far more abnormal, inferior and delinquent, etc. In this rather unlikely case, the effect of germ-damage through alcoholism could be regarded as demonstrated.

The statistical examples quoted below will not be subjected to a similar critique as this would take us too far afield. The examples are no more than examples. For any detailed study of them we must as always refer the reader to the particular contributions themselves.¹

As regards history psychopathology has a two-fold task: (1) The psychiatrist is called on to give his expert opinion on a particular instance of an abnormal state or event; (2) on looking over the historical material in its entirety, he has to see whether he can acquire some knowledge from this which he cannot get in any other way. Hence the existing works on this subject have in part the character of an expert opinion in Court—existing knowledge is simply applied to gain a better understanding of a phenomenon that is interesting on other grounds.² In part however such works have picked out a new problem in psychopathology (e.g. the problem of degeneration, or the problem of the significance of psychosis for creativity).

§ I. THE SIGNIFICANCE OF THE SOCIAL SITUATION FOR THE ILLNESS

(a) *Causal effects of the civilised milieu*

Civilisation creates the physical conditions which, in the same way as natural determinants, affect the body and thus produce abnormal psychic states:

In the first place, through the availability of *stimulants and drugs*. There has been much discussion as to whether alcoholism and the alcoholic psychoses are on the increase. In our time a decrease in alcoholism seems a rather more likely finding. Jeske³ observed a considerable decrease in the number of patients with delirium tremens in Breslau, which was linked with the tax on spirits introduced in 1909, and with the boycott on Schnapps instigated by the social democrats. It is obvious that different peoples manifest different ill-

¹ 'Criminal statistics' are of interest: As an introduction Schnapper-Arndt, *Sozialstatistik (Volksausgabe)* (Leipzig, 1912). For more detailed study, v. Mayr, *Sozialstatistik*, vol. 3; *von Statistik u. Gesellschaftslehre*, part 1; *Moralstatistik* (Tübingen, 1909–12).

² See an investigation into European royal houses where there was schizophrenic loading: H. Luxenburger, 'Erbbiologische Geschichtsbetrachtung, psychiatrische Eugenik u. Kultur', *Z. Neur.*, vol. 118 (1925), p. 685.

³ Jeske, *Allg. Z. Psychiatr.*, vol. 68 (1911), p. 353.

nesses, depending on the type of stimulants in common use; thus with the European it is alcohol, with the Oriental it is hashish and with the Chinese it is opium.

The problem whether *over lengthy periods*—quite apart from the cultural factors playing a part or not—certain definable *forms of illness change* their mode of manifestation, can only be investigated of course where the diagnosis is universally accepted and carried out uniformly and according to well-defined criteria. This is the case with General Paralysis as an organic cerebral disease and a general somatic disorder. Joachim investigated this illness statistically in regard to any changes in its occurrence and course during the earlier decades of this century in Alsace-Lorraine.¹ He discovered a shift in male Paralysis as distributed among the various districts, a slight increase in Paralysis in the lower social strata and a slight increase in the duration of the illness; a larger number of demented as contrasted with agitated and depressive forms of the illness, and finally more frequent remissions. We have very few facts on which to decide which of the alternative suppositions is right—that an increase in General Paralysis is linked either with an increase in syphilis or with the increasing spread of civilisation. In spite of Mönkemöller's work² the causal connections are still entirely obscure. Syphilis alone cannot be the reason nor can civilisation by itself. Whether General Paralysis existed in ancient times is linked with the question whether syphilis existed then too or whether it was first imported from America. Kirchhoff³ followed up a few sources and considered that the occurrence of syphilis in ancient times was a probability.

Every social situation of course creates *specific physical conditions* which in their turn—just as with natural circumstances—affect the individual's health.⁴ It is also obvious that certain kinds of work are more dangerous than others and expose the individual to poisons (lead, carbon monoxide, sulphur, etc.).

The *increasing mechanisation of life* in the last half-century, at least in the big cities, has brought a radical removal from the natural environment and the creation of a thoroughly artificial one. Psychophysical conditions of life have been changed with as yet unpredictable effects. So much so that Jores can say of the human endocrinal disorders: 'the vegetative person is no longer in complete touch with the conditions of existence, which have altered out of all recognition'. 'The result is the nervous individual of our times with a particular disposition towards disturbances of the neuro-endocrine regulation. The ensuing illnesses are therefore predominantly, if not exclusively, illnesses of civilisation.'

It is as yet undecided whether constitution as manifested in body-build can undergo change under circumstances of life which remain the same for many

¹ Joachim, *Allg. Z. Psychiatr.*, vol. 69 (1912), p. 500.

² Mönkemöller, 'Zur Geschichte der progressiven Paralyse', *Z. Neur.*, vol. 5, p. 500.

³ Kirchhoff, *Allg. Z. Psychiatr.*, vol. 68 (1911), p. 125.

⁴ A comprehensive work has appeared on these relationships: *Krankheiten u. soziale Lage*; pub. by Mosse and Tugendreich (München, 1912). Also Grotjahn, *Soziale Pathologie* (Berlin, 1912). Also Grotjahn, *Soziale Pathologie* (Berlin, 1912).

generations through selection and through some form of life persisting from an earlier time. In the aristocratic circles of ancient Egypt, Japan and the Occident, it seems that the leptosome body-build had prevailed and was found the more acceptable (Weidenreich).

(b) *Typical situations for the individual*

These are innumerable and we can only characterise a few of them to give an illustration: The heavy pressure of hopeless social conditions; chronic physical distress; persistent burdening of the psyche by unending worry and the need to get a livelihood and the lack of any element of fight, élan, aim or plan will often lead to states of apathy, indifference and extreme psychic impoverishment. A special case is the typical recidivist who is indifferent and hopeless, who grumbles dully and in a dissatisfied manner refuses all approaches from those who would make any demand on him.

The *uprooting*¹ of people is a fate which has become increasingly common in our modern world.

The way in which the *family structure* moulds its members has been recognised by the psycho-analysts. Example, ideals and teaching have their own effect but beyond that the 'collective', the group-psyché, exerts a compelling power. The unconscious of the parents affects the children without their being aware of it. 'The family-psyché-body connections are like communicating wires.' For example, 'the life which the parents would have liked to have lived but which they were too timid or too weak to do is now passed on as a task for the children to perform'.²

The power of the drives changes according to the situation. In the orderly state of a secure life where sexual morality prevails the sexual drive may vastly increase; at starvation level hunger dwindles to the point of extinction and so with the sexual drive when danger to life is prolonged.

(c) *Times of security, revolution and war*

The unprecedented security in living which was a basic feature of life before 1914 has been used to interpret a number of abnormal phenomena. To exaggerate a little: in earlier times the individual was in the grip of fate, life was dangerous and people had to rely on themselves; now there is an anxious and self-seeking haste simply to acquire an economic advantage though life itself is secure and relies on the protection of public institutions. Formerly there was a widespread, natural working life which involved the individual's personality; now there is on the one hand the relentless pressure, of which we are grimly aware, of deadening physical labour and on the other there are prosperous, idle and purposeless people whose lives have little point or obligation, and who are generally dissatisfied with life. The emptiness of life leads to a pretence of living, to a sensational pseudo-existence and finally to the fostering of

¹ Kraepelin, 'Über Entwurzelung', *Z. Neur.*, vol. 68.

² Heyer, *Der Organismus der Seele*, pp. 88 ff.

the hysterical personality-type. Anxious dependence on moral norms and conventions takes the places of the values which an individual forges for himself from his own destiny, and leads to a repression of the drives and natural feelings while it encourages in persons so disposed the appearance of hysterical symptoms.

An entirely opposite picture is seen in the psychic phenomena which have been reported *in stirring times*, after the plague in the fourteenth century, during the French Revolution and after the Russian revolution. Since 1918 we have also had some of these phenomena in our midst. Such profound emotional upheavals concerning a populace as a whole appear to have quite different effects from emotional upsets in the individual. A vast indifference towards life became widespread (an increase in duelling, recklessness in dangerous situations and the sacrifice of life without ideals), an immense craving for enjoyment and an uninhibited self-indulgence.

It was said formerly that in times of war the number of psychoses and suicides decrease. At the beginning there is less talk of nervousness. 'When it is a matter of life and death that puts an end to nervousness' (His). Bonhoeffer observed among the admissions to the Charité during the war years a big decrease in alcoholic disorders and an increase in personality disorders amongst males.¹ As he observes, this increase shows that the mounting number of psychopathic reactions was related to a very small number of exceptions when we consider how many millions of men were exposed to the same harsh influences. The overwhelming majority of men did not fall ill in this way. The 'Anlage' must play the deciding role. In relation to the depressions Kehrer found that 'the unprecedented increase in distress, depression, grief and fright which affected those who had stayed at home during the war did not lead to any remarkable increase in the depressive states'.

During 1914–18 numerous observations were carried out on the army. There was once more confirmation of the statement that there are no specific war psychoses or neuroses. There was only the greater occurrence of acute clouding of consciousness and a greater variety of neuroses and this stimulated lively discussion. The effects of psychic attrition, fright and exhaustion were seen more drastically and in far larger numbers than ever before. Although the number of such disorders expressed as a percentage was small the actual figures were large. The main discussions related to the distinction of what was psychogenic from what was purely physical and behind all this was the tendency—according to one's philosophy—either to ascribe guilt and evil intent or else to call everything an illness for which no one could be blamed. It was obvious how the one party would be blind to all extra-conscious factors and causal necessities while the other, humane but sentimental, had scarcely any eye for the half or wholly unconscious forces escaping into illness. Others again quietly made objective analyses of the connections and tried all points of view.² The

¹ Bonhoeffer, *Arch. Psychiatr.* (D), vol. 60, p. 721.

² See Gaupp, *Z. Neur.*, vol. 34 (1916); Nonne and Oppenheim, *Dtsch. Z. Nervenhk.*, vol. 56 (1917). An objective presentation of the opposing views. Also *Handbuch der ärztlichen Erfahrungen im Weltkrieg*, vol. 4.

significance of the psychic factor in the neuroses can be seen from the fact that few or none were found to exist among the prisoners-of-war, apart from typical moody states described as 'grauer Vogel' and 'Stachelrahtkrankheit' (barbed-wire sickness).¹ Wittig has described the effects of war on the morally weaker elements in the younger generation.²

(d) Accident-neuroses

Accident-neuroses give us an example which enables us to show with the reasonable certainty of an experiment how social circumstances can produce certain morbid phenomena. It is said that these illnesses only appeared after the legislation on accidents which was introduced in the 'eighties and without this legislation they would cease to exist. It was just the wish for compensation that was responsible and in so-disposed people with the help of hysterical mechanisms it translated slight disabilities and serious damage alike into every kind of symptom. The simple aim, unknown to the sufferer himself, was to gain the compensation (compensation-hysteria). Once compensation had been settled the symptoms would disappear. The matter is not quite so simple as that. Under the title of 'accident-neuroses' all sorts of different complaints have been ranged where the only common factor is that they have occurred after accident, and head-injuries in particular. Among these there are a number of cases where one cannot maintain that a wish for compensation played any part as a causal factor; they occur exactly in the same way when any compensation is out of the question (no insurance and well-off patients). With the remaining cases the wish for compensation undoubtedly plays some part but it is only one factor among others. Accident-neuroses would exist without the Compensation Legislation. They would however be fewer and would not be discussed so much. The factor of compensation would not colour the picture; some cases would not fall ill at all and others would get better quicker. The study of accident-neuroses is particularly interesting for present-day practice. The extensive literature with the gaping differences in opinion teaches how in medicine purely somatic considerations war with psychological understanding and how prejudices 'which want to explain everything over-simply from one viewpoint alone' come in conflict with any discerning analysis.³

In the last decades the problem—which when the above lines were written was an unimportant one—has become constantly more pressing. v. Weizäcker expressed it as follows:⁴ 'Compensation neuroses or Court-neuroses are a social phenomenon of the first order, a scene from the birth of a new society; we are concerned with an illness more public than any other'.

¹ See works quoted on p. 389.

² K. Wittig, *Die ethisch minderwertigen Jugendlichen u. der Krieg* (Langensalza, 1918).

³ Cp. Wetzel, *Arch. Sozialwiss.*, vol. 37 (1913), p. 535. This has the most of the literature. P. Horn, *Über nervöse Erkrankungen nach Eisenbahnunfällen*, 2nd edn. (Bonn, 1918).

⁴ C. v. Weizäcker, *Soziale Krankheit u. soziale Gesundung* (Berlin, 1930). More recent discussions: Jossmann, *Nervenarzt.*, vol. 2, p. 461; Lottig, *Nervenarzt*, vol. 3 (1930), p. 321; Zutt, *Nervenarzt*, vol. 4.

(e) *The work situation*

The capacity and the willingness to work can be severely affected by illness. The work-curve measures the individual capacity for performance. Work-therapy is a way to pattern the morbid psychic phenomena as favourably as possible. The question of a person's suitability for work has nowadays become an important practical problem. (Vocational selection tests.¹) Investigations are made to try and find the suitability of certain abnormal groups for certain types of work. Just as psychology becomes applied psychology and puts itself at the disposal of technical aims (questions of special suitability for the job, the increase of performance-capacity, etc.), so psychopathology can become an applied science when, for example, it answers the question whether certain types of individuals—those from children's homes perhaps²—are suited for military service or how is one to estimate the capacity to work and earn in certain types of disorder.

(f) *The educational situation*

The obvious significance of situations and social relationships for psychic life and the therapeutic use of such possibilities keeps ever-green the old problem as to the importance and limitations of education. There is no doubt that the psychic quality of an age or of a population is widely determined by the current educational level. In the face of this fact that only lends itself to a very general formulation two extreme and equally false positions have contested with each other since time immemorial. 'Everything is due to education' or 'Everything is inborn'. 'Education can turn a man into anything' or 'Man can only be changed by hereditary influences in the course of the generations'. 'Give us education' says Lessing—"and we will alter the character of Europe in less than a century". In contrast to this is the view that whatever is inborn is unchangeable and education can only provide a veneer. However, there is obviously some right on both sides. Education can certainly only develop the possibilities contained in the *Anlage*; it cannot change the essential nature. But nobody knows what possibilities slumber in the human *Anlage*. Hence education can bring out what no one had hitherto suspected.

Thus the effect of any new type of education is unforeseeable. It will always have unexpected effects. The basic fact that man continually becomes what he is through cultural transmission and that the manifestation of supposedly similar predispositions changes remarkably in a few centuries through the operations of consciousness, also that whole nations can be seen to change their character, lays the greatest significance upon education. We cannot trace

¹ *Arbeits- u. Berufspychologie*, edited by F. Giese (Halle, 1928). Eliasberg, 'Über sozialen Zwang u. abhängige Arbeit', *Z. Volkerpsychol. u. Soziol.*, vol. 4 (1928), p. 182. Eliasberg and Jankaus, 'Beiträge zur Arbeitspathologie', *Msch. Psychiatr.*, vol. 74 (1930), p. 1. Eliasberg, *Z. Neur.*, vol. 102.

² Weyert, 'Untersuchung von ehemaligen Fürsorgezöglingen im Festungsgefängnis', *Allg. Z. Psychiatr.*, vol. 69 (1912), p. 180.

in advance the limits of education as a whole but at any given time we can only observe them 'in concreto'.

§ 2. INVESTIGATIONS INTO POPULATION, OCCUPATION, CLASS, URBAN, RURAL AND OTHER GROUPS

Populations as a whole. Demographic study determines the number of sick people and how many suffer from individual diseases within a given total population. In Germany there were found to be (Lenz, 1936): 2-3 per cent feeble-minded, 0.5 per cent imbecile, 0.25 per cent idiot, a total therefore of 3-4 per cent mentally defective births and among these 20-30 per cent were attributable to external noxia. Luxenburger finds among the total population 0.9 per cent schizophrenics (half of which are in institutions) and 0.4-0.5 per cent manic depressives. Thus as a mass-phenomenon mental deficiency plays the most important role, followed by schizophrenia.

Distribution into social strata. Families of manic-depressives are per centually more frequent in the upper strata; the feeble-minded and epileptics are more frequent in the lower strata; schizophrenics stand between the two, rather closer to the upper strata.¹ Athletic types of body-build are thought to be more frequent in the lower strata.

Statistical investigations of the distribution of intelligence are based mainly on school records and intelligence tests. The lower the social level the lower the average school performance (Brem); the highest levels are on the average reached by the children of academics and school-teachers.

Interpretation of the findings clings chiefly to the selection of hereditary qualities. According to Conrad there is a 'process of loosening-up'; epileptics sink and their hereditary traits accumulate in the lowest strata of the population. The epileptic has a tendency to social drift and is forced to choose his spouse usually from one type of defective individual or another. Therefore loading increases and collectively forms a socially not biologically conditioned group of disorders, not a 'constitutional grouping' but a 'connubial' one. Amongst the offspring of epileptics of the lower strata we find significantly more defective persons—feeble-minded, psychotics, cases of status dysraphicus, etc.—than we do in epileptics of the higher social strata.

As people who are gifted above the average tend to rise up the social gradients, the lower strata are being constantly impoverished of more highly gifted stock. But the upper strata procreate less, while the lower are more fertile. There is therefore a tendency—all else being equal—for the excellent hereditary traits to dwindle and the total level of the population to sink.

Occupation. The specific relation of abnormal psychic phenomena to occupation and earning a living has never been investigated in detail. Just as with

¹ H. Luxenburger, *Berufsgliederung u. soziale Schichtung in den Familien der erblich Geisteskranken*. *Eugenik* (1933), p. 34. *Psychiatrische Erblehre* (1939), p. 135. Conrad, 'Psychiatr.-soziologische Probleme im Erbkreis der Epilepsie', *Arch. Rassenbiol.*, vol. 31 (1937), p. 316.

normal personalities we can recognise the occupational type and immediately pick out the doctor, the business man, the officer and the teacher, and just as these professional personalities are revealed in their writing without need for any exact description or study, in the same way psychotic phenomena will take on a particular colouring in the case of the clergyman, the teacher and the officer, etc. We can also imagine fairly easily the psychic changes wrought by the excitement of big banking and stock-exchange activities (the extreme tension and the need for rapid decision with its attendant risks), the submerged position of the governess or the stress of proletarian existence, etc. There are also studies concerning the psychic disorders of the Army¹ and the Navy and of industrial workers.² Statistical enquiry by Römer shows that agriculture has the lowest number of disorders while the independent liberal professions show the highest.³

Civil status. Civil status has been related to the figures of different disorders (admission rates). There is a significantly higher percentage of single people than married who fall ill, while divorced and widowed people counted together are only slightly above the average. A considerable percentage of the divorced however do fall ill.⁴

*Urban and country life.*⁵ If we compare the relative frequency of individual forms of illness in cities and in rural areas (comparing the figures of admission) we notice two particular differences: the materially bad effects of big-city life produce an abnormal increase in alcoholic psychoses and General Paralysis (due to syphilis) while the more difficult living conditions and the accompanying psychic traumata result in a much greater frequency of personality disorders (hysteria, etc.). On the other hand the institutions in the country overflow with essentially endogenous illnesses, dementia praecox and manic-depressive disorders. Further, it is striking that in the big cities there is relatively much greater intake of epileptics and relatively more dementias (senile dementia, arterio-sclerosis, and idiocy).

Different stocks and peoples. The distribution of disorders by geographical area shows marked differences rather more with the manic-depressive disorders than with schizophrenia. According to Luxenburger, manic-depressive disorder is rarely observed in Switzerland, in the northern parts of Germany and in Scandinavia; on the other hand it is frequently seen in Bavaria and Franconia, in the Rhineland, in Italy and in parts of the U.S.A. Kretschmer found almost no manias among the Hessians in contrast to the Schwabians.

Religions. The statistical investigation of various faiths has given us the

¹ Stier, *Fahnenflucht u. unerlaubte Entfernung* (Halle, 1905). M. Rohde, *Allg. Z. Psychiatr.*, vol. 68 (1911), p. 337. Ed. Bock, 'Über Fahnenflucht', *Z. Neur.* vol. 47 (1919), p. 344.

² Laehr, 'Die Nervosität der heutigen Arbeiterschaft', *Allg. Z. Psychiatr.*, vol. 66, p. 1. Heilig, 'Fabrikarbeit u. Nervenleiden', *Wschr. soz. Med.*, no. 31 ff. (1918). Hellpach, 'Berufsspsychosen', *Psychiatr. neur. Wschr.* (1906). *Technischer Fortschritt u. Seelische Gesundheit* (Halle, 1907).

³ Cp. L. Stern, *Kulturkreis u. Form der geistigen Erkrankung* (Halle, 1913). Pilcz, 'Über Nerven- u. Geisteskrankheiten bei katholischen Geistlichen u. Nonnen', *Jb. Psychiatr.*, vol. 34, p. 367.

⁴ Römer, *Allg. Z. Psychiatr.*, vol. 70, p. 888.

⁵ Gaupp, *Münch. med. Wschr.*, vol. 2 (1906), p. 1250.

fact that the largest number of disorders are to be found among the fringe supporters of various sects.¹

§ 3. ASOCIAL AND ANTISOCIAL CONDUCT

To have a social attitude is thought quite rightly to be a basic feature of human nature; its particular kind is thought to be a personality-trait inherent in the individual's nature. Whether the person is extraverted, sociable and candid or introvert, autistic and reserved is thought to be an all-important polarity.

Jung speaks of extraverts and introverts. *Kretschmer* talks of cyclothymic and schizothymic personalities. On the cyclothymic side he saw yet another polarity between naïve self-confidence with delight in large-scale enterprises and on the other side a modest indecision; on the schizothymic side, idealistic thinking ranging from efforts at reform and attempts to systematise and organise, on to obstinate and contrary behaviour, reserved suspiciousness and plain misanthropy, seemed to him to form a polarity on the one hand with brutal and antisocial behaviour on the other.

The social behaviour of mental patients and the psychically abnormal is not at all uniform nor can it be reduced to any simple formula. Even where the form of the disorder is the same, individuals behave quite differently. A very distracted person affected by a disease-process may still maintain lively social relationships while someone suffering from a personality-disorder may shut himself off from all human society and conclude his vegetative existence in complete isolation. But the majority of individuals whom we regard as psychically abnormal are also abnormal in their social behaviour. It has even been tried to make this latter a criterion for illness. The vast majority of psychically abnormal people are asocial but relatively few of them are anti-social.

(a) Asocial conduct.

We will select two typical forms from the great variety of asocial conduct to be found.

1. It is to a certain extent characteristic for the large group of those who are *mentally ill in the narrower sense* and whom we nowadays class together as schizophrenic that they should exclude themselves from human society in some form or another. They erect a new world inside themselves in which they predominantly live even though to the superficial observer they may seem to be quite in touch with the real world. They have no urge to share this realm of feelings, experiences and delusional ideas which is solely their own. They are self-sufficient, they become increasingly alienated from other people and they have no better relationships with other personalities that are suffering from the same form of illness. It has been maintained quite justly that these patients are more removed from us than any individual in a primitive culture. At the same time the patient does not seem aware of this asocial attitude

¹ Römer, *Allg. Z. Psychiatr.*, vol. 70, p. 888.

and inhabits his own private world as if it were the real one. The individuals who—in typical cases—shut themselves off from others without seeming to notice it or suffering in any way from it have always formed a group of socially dead people. Where the disturbance is less in degree they tend to vegetate as casual tramps if they are from the lower social strata or as eccentrics and cranks if they are well off.

2. A quite different type of asociality which in the early stages of a process may combine with the foregoing develops as an uncomfortable and subjectively-sensed inability to mix with others and adapt readily to situations. Every contact becomes a torture so that the individual withdraws, preferring to be entirely by himself. This is the cause of considerable suffering because the social drive is retained; the individual longs for intercourse, community and love. His social failure, however, is conspicuous to others too. He gets across people by his clumsy ways; he is alternatively shy and excessive or crass, unmannerly and tactless. He senses the reaction of others and shuts himself away all the more.¹ This form of asociality has many understandable connections; it depends on all sorts of 'complexes' and in favourable circumstances it may disappear. On the other hand it may lead to complete isolation in a room which is never left, as in a dementing process. Such behaviour may occur in all kinds of personalities, in really crude and undifferentiated characters as well as in sensitive people of strong feeling; it may be combined with many other psychic weaknesses and may appear as a transient phase or as an aspect of a lasting constitution. It may develop spontaneously or be a clear reaction to unfavourable circumstances; in a word, it occurs as the expression of a whole variety of forms of illness.

(b) *Antisocial conduct*

We encounter antisocial patients among *criminals*. The majority of cases belong to the field of abnormal constitution rather than to that of disease processes. Antisocial elements appear in schizophrenic patients—particularly in the initial stages—as well as in patients suffering from General Paralysis. Antisocial patients in manic-depressive illnesses are very rare.

Investigation into crime has had three phases of development which have now come to denote as many reasonably parallel directions of enquiry. At first individual *criminals* were investigated who seemed to be rare cases that were abnormal and deviated from the average.² On occasions, there was a classic

¹ Cp. Janet's descriptions (*Les obsessions et la psychasthénie*)

² Pitaval, *Causes célèbres* (Paris), pp. 1734 ff., in 20 vols. Ernst Paul, a selection of cases in Inselverlag (1910). Journals such as: *Hitzigs Annalen* (1828 ff.), *Der neue Pitaval* (1842 ff.), *Gross' Archiv. Für Kriminalanthropologie* (1899 ff.), *Pitaval* (1906 ff.) has many cases. *Friedrichs Blätter f. gerichtl. Medizin* (1850 ff.), *Monatsschr. f. Kriminalpsychol. u. Strafrechtsref.* (1905 ff.). Feuerbach, *Aktenmässige Darstellung merkwürdiger Verbrechen*, 2 vols. (Giessen, 1828–9). Hagen, Chorinski (Erlangen, 1872). Female poisoners: *Gesche Margarethe Gottfried*, ed. L. Voget (Bremen, 1831). Scholz, *Die Gesche Gottfried* (Berlin, 1913). *Types of Criminals*, ed. by Gruhle and Wetzel (Berlin, 1913 ff.). Wetzel, *Über Massenmörder* (Berlin, 1920). Andreas Bjerre, *Zur Psychologie des Mordes* (Heidelberg, 1925) (*Acta et Commentationes Universitatis Dorpatensis*, vol. 6/2).

demonstration of the interconnection of psychic events which generally repeat themselves in obscurer and less well developed forms. Connections were then discerned of a psychologically meaningful character but of rare occurrence and usually wrongly understood, that is too intellectually. (The psychology of women poisoners, for example, and homesick girls who committed crimes.) Finally, enquiry was directed on to the disease-process and how it came to exert an influence on the individual case. In many of the descriptions the naïvety of the author's psychological understanding leaves the reader unsatisfied. In particular, mistakes are made by attributing the crime to a particular drive or distress and by making the well-worn intellectualistic interpretation, that ascribes to conscious thought much too much of the psychic life and of the unnoticed instinctual connections embedded in symbolic acts and complexes.¹ Yet in many of these individual descriptions we find that exceptionally valuable and irreplaceable material has been recorded. The psychology of meaningful connections has been well and rewardingly applied to the criminal in a host of individual presentations and attempts have been made to shape all this into some general plan of approach. Kraus' much over-criticised book gives us an illustration of this.²

The *second* phase turned away from understanding the individual case and became characterised by *statistical* methods. An attempt was made to investigate the causes and determinants of crime by establishing a large series of correlations. This was a particular application of social statistics and usually the investigation was based on figures from the massive official statistics and confined themselves to the relations of crime in general and special types of crime with season of year, age and price of bread, etc.³ It was found, for instance, that theft and fraud increase in winter while all crimes in which psychic excitements and irritability play a part are more frequent in summer (sexual crime, assault, slander); frequency of theft runs parallel to some extent with high cost of living and so on. To assess and interpret such correlations is usually no easy matter. The tendency to give an over-simplified explanation is countered by the criticism which points out the great multiplicity of factors and will not suffer such a parallelism to be interpreted simply in terms of causal relationships. A regular relationship can just as well be established in terms of a dependence of both on a whole range of unknown factors.

The difficulty of interpretation lies in the fact that one is only counting actions and knows nothing about the person who acts. In order to get closer to the real and deeper connections attempts were made in the *third phase* to

¹ Cp. Radbruch, 'Feuerbach als Kriminalpsychologe', *Mscr. Kriminalpsychol.*, vol. 4 (1910). Wetzel, 'Die allgemeine Bedeutung des Einzelfalls für die Kriminalpsychologie', *Arch. Kriminalatrop.*, vol. 55 (1913), p. 101.

² Krauss, *Die Psychologie des Verbrechens* (Tübingen, 1884).

³ Aschaffenburg, *Das Verbrechen u. seine Bekämpfung*, 2nd edn. Lombroso's *Werke* have had great historical influence. The methods though correct enough are not at all specific, and are falsified by the point of view (inborn criminality, degeneration). Lombroso, *Die Ursache u. Bekämpfung des Verbrechens* (D) (Berlin, 1902). Fr. Exner, *Kriminalbiologie in ihren Grundzügen* (Hamburg, 1939).

turn once again to the perpetrator himself, the individual as a whole. But this time there was no search for isolated, rare and classically defined cases as in the first phase but the inmates of institutions and other such material were *taken as a whole* for investigation in order to get to know the *average criminal*, the ordinary criminal, who matters most when it comes to handling crime.¹ Work of this sort had necessarily to work with relatively small numbers and therefore had the advantage of being more exact as to the countable data and being able to investigate many more relationships, since enquiry into *individuals as a whole* became the basis for the statistics (individual statistics as contrasted with the mass statistics of the second phase). Gruhle tried in this way to investigate and enumerate hitherto well-recognised, objective characteristics and also to bring into statistical reach the personality-type, the predisposition and such matters of psychological understanding as whether milieu or Anlage were the true basis for the asocial behaviour (Personality statistics).²

The psychiatrist enters the debate by reporting facts which are relevant to questions of policy,³ questions of punishment and of institutional treatment.⁴ The goals here are set up by society and the prevailing opinion; psychology, when applied to these problems, has to say whether they are attainable and how.

As a scientist the psychiatrist is also called upon to give a frank report on the factual findings when it seems there is no possible 'solution' of the unwanted difficulties of real life. The final situation then is a tragic one, containing no picture of possible adjustment. Wetzel⁵ seems to point this out in an unusually clear fashion in respect of a certain abnormal personality, a 'querulant': There was a ten-year-long struggle for justice during which the authorities were plagued intolerably and sometimes themselves handled the plaintiff unjustly. The intentions of this abnormal personality were far from criminal

¹ After isolated publications by Bonhoeffer, Wilmanns and others, it was intended that the 'Heidelberg papers' should cover the whole field of criminal psychology and (edited by Wilmanns) publish a running series of such investigations.

² Re vagabonds: Bonhoeffer, 'Ein Beitrag zur Kenntnis des gross-städtischen Bettel—und Vagabundentums', *Z. ges. Strafrechtswiss.*, vol. 21. Wilmanns, *Zur Psychopathologie des Landstreichers* (Leipzig, 1906). Tramer, *Z. Neur.*, vol. 35, p. 1. Wilmanns, 'Das Vagabundentum in Deutschland', *Z. Neur.*, vol. 168 (1940), p. 65. Über Prostituierte: K. Schneider, *Studien über Persönlichkeit u. Schicksal eingeschriebener Prostituierter* (Berlin, Julius Springer, 1921). Young delinquents: Stelzner, *Die psychopathischen Konstitutionen u. ihre soziologische Bedeutung* (Berlin, 1911). Gruhle, *Die Ursachen der jugendlichen Verwahrlosung u. Kriminalität* (Berlin, 1912). Stelzner, 'Die Frühsymptome der Schizophrenie in ihren Beziehungen zur Kriminalität u. Prostitution der Jugendlichen', *Allg. Z. Psychiatr.*, vol. 71 (1913), p. 60. Isserlin, *Z. Neur.*, vol. 12 (1913), p. 465. E. Barth, *Z. Neur.*, vol. 30 (1915), p. 145. A. Gregor and Else Voigtländer, *Die Uerwahrlosung* (Berlin, 1918). 'Geschlecht u. Verwahrlosung', *Z. Neur.*, vol. 66, p. 97.

³ Example re diminished responsibility: cp. Wilmanns, *Mschr. Kriminalpsychol.*, vol. 8, p. 136. Wetzel, *Mschr. Kriminalpsychol.*, vol. 10, p. 689.

⁴ Wilmanns, 'Zur Reform des Arbeitshauses', *Mschr. Kriminalpsychol.*, vol. 10, p. 689.

⁵ There is an admirable psychological analysis with a keen intuition for situation and the forces at work. 'Das Interesse des Staates in Kampf mit dem Recht des Einzelnen', *Mschr. Kriminalpsychol.*, vol. 12 (1922), p. 346.

and the affair ended in his suicide. The last thing he did was to send the notice of his own death to the newspapers: 'v. Hausen wanted all his life to serve his homeland. But an intolerable fate extinguished him in failure.'

§ 4. PSYCHOPATHOLOGY OF MIND (GEIST)

Mind itself cannot fall ill and to this extent the title of this section is contradictory. But Mind is borne along by human existence. The illnesses of this existence have consequences for the realisation of Mind which can thus become inhibited, distorted and disturbed but may also be furthered and enabled in a number of unique ways.

Furthermore, Mind interprets the abnormal psychic phenomena and in so doing transforms them. I may know that my natural 'passiones animae' are subjecting me to distress or I may blame myself and interpret my actions and feelings as wicked or I may believe I am exposed to the influences of gods and devils and am possessed by them or that others have a magic influence over me and that I am bewitched. These are all extremely different points of view. In the same way there are basic differences in the conduct which individuals follow when they try to master their psychic disturbances; this may be variously interpreted as doing penance, attempting a philosophical self-education, engaging in rituals, taking to prayer or seeking initiation into mysteries.

The world of Mind in its connectedness and its unity lies outside the confines of psychology. Psychopathology can only investigate certain isolated aspects of Mind as realised in phenomena from a number of points of view. We group these as follows: (a) We note *empirical investigations* concerning particular concrete material (pathographies, and enquiries into the effects of meditative practices); (b) we discuss some of the *general questions* to which these give rise; (c) we take a look at the relation of *psychopathy and religion*, which is constantly in the foreground of people's interest.

(a) *Empirical investigations*

1. *Pathographies.* This is the term given to biographies which aim at presenting those aspects of psychic life of interest to the psychopathologist and clarifying the significance of these phenomena and the particular events for the creativity of the individuals concerned. There are a vast number of pathographies and among them the work of Möbius and Lange is outstanding.¹ Yet even these authors go too far by interpreting the creative performance on too slender a basis; that is, they usually devalue it. Even if one can detect probably catatonic features in a poem, that does not necessarily imply that the poem is a bad one nor that it cannot be understood. If the psychopathologist passes judgments of this sort, they are subjective and dilettante judgments and

¹ J. P. Möbius, *Über Rousseau, Goethe, Nietzsche*. Lange, Wilhelm, Hölderlin (Stuttgart, 1909).

of no particular interest to anybody, though it can be annoying to some. Pathography is a delicate matter. A thorough psychopathological understanding and a capacity for historical judgment are preconditions for scientific study, and in the same way respect for the individual and a certain reserve that does not necessarily conceal anything are prerequisites for a pathography that will be acceptable and read. Where there is insufficient material, pathography becomes ridiculous (e.g. pathographies concerning Jesus or Mohammed).¹

Whatever we learn through pathographies of concrete biographical material in the case of outstanding people, particularly those mentioned here, becomes *relevant in retrospect for psychopathology itself*. In this material we may see what can never be observed in the average patient or institutional inmate and what we see will help us and add depth to our knowledge. Every psychopathologist is recommended to acquire a concrete knowledge of significant lives through reading good pathographies.

2. Meditative practices. In all the great cultures of China, India and the Occident mystics, philosophers and saints have developed a psychic practice of rich dimensions and exceptional variety. But it has certain basic features common to psychic mechanisms. There is a *conscious technique of inner activity*, a practised inversion and a transformation of consciousness which J. H. Schultz investigated by modern empirical methods.² This basic situation, which empirically has been found to be universal, must be distinguished from the attitude of faith that sets such mechanisms in motion and alone gives them their effective significance in personal and historical terms. It should also be distinguished from the metaphysical conceptions which frame the performances and which in their turn determine retrospectively the contents of the experience.³ Modern psychiatric practice uses in part the same methods, but in an unbelieving world these are directly intended to show a 'belief' in science and interpreted thereafter on the basis of psychological theory.

(b) General Problems

1. The problem regarding the significance of illness for creativity. We need to investigate empirically which types of disease have not merely a destructive

¹ Wilhelm-Lange-Eichbaum, *Genie, Irresein u. Ruhm* (München, 1928) (2nd edn., 1935). This gives the whole literature, and sets out a vast material very clearly and makes it available, shows a reliable judgment in the psychiatric and empirical aspects, but the general viewpoint is rather surprising and the interpretation of creative performance in terms of delusion is questionable. Cp. Gerhard Kloos, *Z. Neur.*, vol. 137 (1931), p. 362. Hans Bürger-Prinz, *Julius Langbehn der Rembrandtdeutsche* (Leipzig, 1940). A. Heidenhain, *Über den Menschenhass* (Joh. Swift) (Stuttgart, 1934). Luniatschek, 'Verlain', *Arch. Psychiatr.* (D), vol. 108, p. 301. My own works: *Strindberg und van Gogh*, an attempt at a pathographical analysis with comparative reference to Swedenborg and Hölderlin (Bern, 1922) (2nd edn., Berlin, 1926). My pathography of Nietzsche—Nietzsche (Berlin, 1936).

² Cp. pp. 316, 697.

³ R. Rösel, *Die psychologischen Grundlagen der Yogapraxis* (Beiträge zur Philosophie u. Psychologie, ed. by H. Osterreich, 2) (Stuttgart, 1928). *Die Eranos Jahrbücher* (Zürich, 1933 ff). C. J. Jung and R. Wilhelm, *Das Geheimnis der goldenen Blüte*. Fr. Heiler, *Die buddhistische Versenkung* (München, 1918). *Die Exercitia spirituia des Loyola*.

but a positive significance. Pathographies regarding outstanding personalities always pose the question whether the creativeness was *in spite of* the illness or came about among other things *because of* the illness (e.g. creativeness during hypomanic phases, aesthetic content arising from depressive states or metaphysical experiences in schizophrenic episodes). So too in events of historic moment, the problem arises, was the morbid event only destructive or was it an ally in positive creation?¹

2. *The connection between the form of illness and the cosmic content.* History offers typical cosmologies which perhaps have specific mental disorders as allied factors in their coming into existence and in their concrete manifestation and the affinity between them can be observed today. It is true that such cosmologies are wholly possible without any such morbid factor. But it may be that sick people have played a part in the fact that they arose. We lack material to demonstrate this in any case but we get the impression that the world of the Gnostics had some relationship to the experiences of those who suffer from compulsive disorders. The world-wide descriptions of the journeys of the soul through the worlds of heaven and hell are very reminiscent of schizophrenic experiences. Today it is true these schizophrenic states are without significance. Those so affected are regarded as silly or troublesome nuisances who have to be looked after or kept in hospital. Nobody gains influence through his morbid experiences. Perhaps in earlier times things were different. Mythological and superstitious notions sometimes suggest to us that they could only have come into being through acquaintance with this type of experience peculiar to dementia praecox. Moreover, the whole world of ideas which revolve around witchcraft leads us in part to think of such a situation. But we lack any real investigations into these problems.

3. *Cultural assessment of sick individuals.* There is no doubt but that *sick people have played a part in history*; they have been respected as shamans and used accordingly; they have been reverenced as saints and met with awe as people possessed of God; as exceptional people they have served to point the way and been highly prized. The person belonging to the dementia-praecox group may in virtue of his psychotic experiences play a part in founding a religious sect and this has recently been observed in country districts (Mal'jovanni in Russia). In no way did such individuals pass as 'sick'; rather what we would call 'sick' was interpreted as spiritual gifts. The same people could also be despised as fools, excluded from society as dangerously 'possessed', annihilated or could escape observation altogether.

It has been a different situation with *poetry and art*. Here the sick person is often presented as sick and at the same time as a symbol of a profound human mystery. Philocretes, Ajax and Herakles all ended their tragic existence in madness; Lear and Ophelia go mad, Hamlet plays at madness. Don Quixote is almost a typical schizophrenic. In particular, there is a repeated presentation of the 'Doppelgänger' experience (E. T. A. Hoffman, E. A. Poe, Dostoevski).

¹ This is an essential point in my *Strindberg und van Gogh*, loc. cit.

In contrast, with Goethe madness plays scarcely any part and, when it appears, it is treated unrealistically (Gretchen in prison) if we compare it with the realistic presentations of Shakespeare and Cervantes.

Velazquez painted idiots. 'Fools' were maintained at the Royal Courts and enjoyed the 'freedom of fools' in their talk. Dürer's engravings are melancholia itself; Hans Baldung Grien drew the saturnine individual as typical of melancholic distress.

Many more examples could be quoted and they cannot be subject to a single, common and exhaustive interpretation. But it is certain that some hidden correlation often stood in the background between the fact of illness and the profoundest of human possibilities, between human folly and wisdom.¹

(c) *Psychopathy and religion*

We can go through the types of illness and notice what kinds of religious experiences have been observed in them. In this way contemporary phenomena can be demonstrated.² Or we may see from history what outstanding religious individuals have shown abnormal traits and how mental illness and hysteria have played a part,³ particularly how individual religious phenomena can be grasped in psychological terms.⁴ Or we may ask how the priest or minister behaves towards people in practice when their religious behaviour is rooted in and coloured by illness and how religion may help the sick.⁵ Finally, we may go beyond the empirical field and ask how there could be any meaning in the coincidence of religion and madness; could we interpret it that where the individual himself is in extremity, the extremity of his existing vital state provides a basis for meaningful experience. We may point to the empirical social fact that all effective movements of faith and all creeds have, for the most part unconsciously and rarely consciously, been characterised precisely by the absurdity of the content of their faith (*credo quia absurdum*, as Tertullian and Kierkegaard emphasised). In Luther's time reason was rejected and the tendency grew to promote the absurd, whereas Catholicism, since Thomas Aquinas, has discarded absurdity and denied that the content of its faith was absurd; it was rather that a distinction must be made between that which was beyond understanding (the content of revelation) and that which was contrary to reason (namely the absurd).

¹ Superficially informative: W. Weygandt, 'Don Quixote des Cervantes', *Z. Neur.*, vol. 154 (1936), p. 159. 'Abnormal psychic states in Japanese Art', *Z. Neur.*, vol. 150 (1934), p. 500.

² Kurt Schneider, *Zur Einführung in die Religionspsychopathologie* (Tübingen, 1928).

³ K. W. Ideler, *Versuch einer Theorie des religiösen Wahnsinns*, vol. 2 (Halle, 1848). Observations from his clinic in *Der religiöse Wahnsinn* (Halle, 1847). J. H. Leuba, *Die Psychologie der religiösen Mystik* (München, 1927).

⁴ Mosiman, *Das Zungenreden* (Tübingen, 1911). W. Jacobi, *Die Stigmatisierten*.

⁵ E.g. *Religion u. Seelenleiden, Vorträge des katholischen Akademiker* (publ. 1926–32., ed. by Wilhelm Bergmann, Düsseldorf and Augsburg, 1926 to 1932). Ernst Jahn, *Tiefenseelsorge* (protestantisch) (Göttingen, 1940). Bovet, *Die Ganzheit der Person in der ärztlichen Praxis* (by a Christian psychiatrist) (Zürich and Leipzig, 1940).

§ 5. HISTORICAL ASPECTS

In the nineteenth century better world-communications brought a more intimate knowledge of all peoples and historical interest tried to grasp the present in terms of the past and the past as such in its most distant recesses. At the same time an attempt was made to *present illness from an historical and geographical aspect.*¹ The picture as a whole involved climate, race, local genius, topography and historical events. This gave rise later to specialist geopsychological studies, also to race-psychology and certain historical investigations (e.g. whether the appearance of syphilis in the fifteenth century was something completely new and whether it was transmitted from America); individual historical aspects were studied and certain general considerations regarding the biological history of mankind.

An analysis of the social and historical conditions of human life shows how psychic phenomena change with the changing conditions. A history of illness may be conceived in terms of history in the social and cultural sense. From it we can learn how the picture of illness shifts though scientifically the illnesses may be identical; the neuroses in particular have a contemporary style—they flourish in certain situations and are almost invisible in others. Descriptions of individual cases and biographies from earlier times provide plenty of interest regarding these possible changes. Even without any such methodical comparison the psychiatrist may study these concrete illustrations in which he will feel rather than know the historical differences. They give us a vivid picture of how a particular kind of illness manifests itself in well-differentiated and gifted people as well as in personalities faced with unfamiliar and alien circumstances. Unfortunately very little of such material is available.²

In psychopathological studies this historical interest goes along with our interest in the general regulation of human events. In the first place different epochs, primitive and advanced cultures, are compared so as to get to know a common phenomenon in its various manifestations and changes (e.g. hysteria), and then to grasp what is specific to certain states (e.g. archaic states) and finally to explore the basic directions taken by the course of history as a whole (e.g. the problem of degeneration).

(a) *The determination of morbid psychic content by the culture and the historical situation*

It is obvious that psychotic content derives from the cultural equipment of the human group to which the patient belongs. In previous times delusions

¹ A. Mühry, *Die geographischen Verhältnisse der Krankheiten oder Grundzüge der Nosographie* (Leipzig and Heidelberg, 1856). Hirsch, *Handbuch der historisch-geographischen Pathologie* (1883 ff.).

² From very early times: Christian Heinrich Spiess, *Biographien der Wahnsinnigen* (Leipzig, 1795). *Magazin zur Erfahrungsseelenkunde*, ed. K. Ph. Moritz (Berlin, 1783-93). Case-records in the works of Esquirol, Ideler, Jacobi, etc. M. Berndts, *Eigene Lebensbeschreibung samt seiner aufrichtigen Entdeckung der grössten, obwohl grossentells noch unbekannten Leibes- u. Gemütspralage*

were more commonly concerned with changes into beasts (lycanthropy), with demonic frenzy (delusions of possession), etc. Nowadays they are more commonly concerned with the telephone or wireless, hypnosis and telepathy. In older times the devil poked people in the ribs; nowadays patients are maltreated by electrical apparatus. The delusional experiences of a philosopher are distinguished by a wealth and depth of meaning while those of a simple person are more in the way of fantastic distortions of superstitious fancies.

The ideas and beliefs which in this modern technical civilisation we take for probable symptoms of mental illness cannot be taken as such under rural conditions where the old beliefs persist and where they are rather the subject of folk-lore.¹

The cultural milieu, the prevailing views and values, are important in that they foster certain psychic abnormalities and prevent others from developing. Certain personality-types 'fit' the times and each other. We can observe how nervous or hysterical personalities find each other. Some human groups are almost characterised by the accumulation of abnormal and mentally ill people, among them, e.g., the Foreign Legion, colonies of nature lovers, vegetarians, associations of health fanatics, spiritualists, occultists, and theosophists. In Greece the circles that practised the Dionysiac cult called presumably upon those with hysterical gifts which always play a part when an orgiastic element gains significance in many people's eyes. The amount of unfounded self-accusation which we observe in patients and which Kraepelin failed to find among the Javanese was explained by him in terms of European culture where feelings of personal responsibility play a much larger role.

At certain times in situations that foster male communities and give them a philosophical importance, homosexuality plays an important part, while at other times it is regarded with indifference, is despised or treated as criminal.²

In the Middle Ages hysterical phenomena had no small historical significance but this is continually diminishing in the modern world. Inversely, so far as we know schizophrenias were never of importance in the Middle Ages, while in the last few centuries it was precisely these that took striking effect (Swedenborg, Hölderlin, Strindberg, van Gogh).³

The years round 1918 have sharpened our eye for the significance of personality-disorder in times of upheaval, and during times of revolution large numbers of abnormal personalities gain a transient significance. It is true they have neither made the revolution nor contributed constructively to it but such a situation affords them a momentary opportunity to manifest themselves.⁴ In

(Leipzig, 1738). Cp. also Mönkemöller, 'Das Zucht-u. Tollhaus zu Celle', *Allg. Z. Psychiatr.*, p. 68 (1911), p. 155. Morgenthaler, *Bernisches Irrenwesen von den Anfängen bis zur Eröffnung des Tollhauses* (1749) (Berne, 1915).

¹ Beringer, 'Über Formen des Aberglaubens im Schwarzwald', *Arch. Psychiatr.* (D), vol. 108, p. 228.

² Hans Blüher, *Die Rolle der Erotik in der männlichen Gesellschaft*, vol. 2 (Jena, 1917).

³ My own work, *Strindberg und van Gogh*, 2nd edn. (Berlin, 1926).

⁴ Kahn: 'Psychopathen als revolutionäre Führer', *Z. Neur.*, vol. 52 (1919), p. 90.

peaceful times, says Kretschmer, we assess them in the Courts with a medical report; in turbulent times they become our rulers.¹

(b) *The history of hysteria*

Hysteria has a history. The most dramatic phenomena such as seizures, alterations of consciousness (somnambulism), theatrical realisations, have reached historical high peaks. The actual form changes with the situation and with general opinion. The florid phenomena of the last century which were observed and described in great detail under the leadership of Charcot and his school—and which were unconsciously fostered thereby—are rarely seen today. There was at that time also a recognition of the part hysteria had played in history. History reveals the basic phenomenon as the use of a mechanism which is in itself a constant (and in a minority of people appears as illness or hysterical giftedness) and which is pressed into the service of vastly differing cultural movements, aims and ideas. Hence, in respect of the totality of hysterical phenomena at any given historical date there is much more to observe than mere hysteria; among the morbid phenomena of historical significance hysteria plays only the leading role; secondary roles have also been played at times by schizophrenia and other morbid phenomena. Historical data that come into consideration concern everything that passes for superstition and magic, miracle or enchantment: possession, psychic epidemics, witchcraft, orgiastic cults and spiritualism.

1. *Possession.* Among all peoples of all times we find the idea that spirits (demons and angels, devil and gods) may enter a person and possess him. Physical illnesses are then explained by devils and even more so the mental illnesses, particularly those where the individual suddenly seems to change into another person and where his voice and posture, his facial expression and content of speech seems to signify another personality and where these changes just as suddenly disappear. But we speak of 'possession' in the narrowest and truest sense where the patient himself has the experience of being two persons at the same time and two heterogeneous modes of feeling occur along with the presence of the two selves (p. 125). Further, the experience of alien hallucinatory personalities who speak to the patient in voice and gesture, certain compulsive phenomena and alien sensations of every kind, are also taken as 'possession'. Clearly 'possession' is only a primitive theory and the reality that underlies the idea is of the most varied character. In particular, states of possession with altered consciousness (somnambulistic possession) are very different from

¹ Above all the work of Charcot-Schülers. Paul Richer, *Études cliniques sur la grande hystérie ou hystéro-épilepsie*, 2nd edn. (Paris, 1885) (excellent diagrams of contemporary historical phenomena and two appendices: 'L'hystérie dans l'histoire' and 'L'hystérie dans l'art'). Charcot and Richer, *Les Démoniaques dans l'art* (Paris, 1887). Further: Leubuscher, *Der Wahnsinn in den letzten vier Jahrhunderten* (Halle, 1848) (Übersetzung des Calmeil). Soeur Jeanne, *Memoiren einer Bessessenen* (D) (Stuttgart, 1911). Andrée, *Ethnographische Parallelen u. Vergleiche. 'Bessessene u. Geisteskranke'* (N.F., 1889). Otto Stoll, *Suggestion u. Hypnotismus in der Völkerpsychologie*, 2nd edn. (1904).

those where consciousness is clear, usually the former are hysterical while the latter are schizophrenic.¹

2. *Psychic epidemics.* We have long been acquainted with the phenomena of the psychic epidemics of the Middle Ages and have wondered at them.² There seems no completely corresponding phenomenon nowadays. We can only compare them with phenomena occurring among primitive peoples all over the globe who are liable to psychic epidemics because of their marked suggestibility. In the Children's Crusades, thousands of children gathered together (up to 30,000 it is said) and marched on to reach the Holy Land, pushing on their way with a passion which nothing could stop, running away from home and parents, only to perish miserably and soon. Particularly after the Great Pestilence in the fourteenth century, but also at other times, Dancing Manias broke out at various points throughout Europe and vast numbers of people fell victim to these in quick succession. They were states of excitement with seizures, orgiastic dances with hallucinatory experiences of a scenic character, and they were followed by partial or complete amnesia. Sometimes the dancing was accompanied by a kind of furious drumming on the body which had to be suppressed by tying the victims up. Lastly, in the sixteenth and seventeenth centuries there were widespread epidemics in the convents in which nuns were possessed by the devil, numbers of them at a time, and which ran a most dramatic course with all the turmoil of exorcising the devil and his return. When the Bishop ordered house-arrest and isolation of the nuns the epidemic immediately died down, while it tended to grow rapidly when it was fought by priestly exorcism of the devil in public.³ All these epidemics can be identified as hysterical manifestations from the individual symptoms as described; the contents can be derived from the particular milieu and the prevailing attitudes. Why did such epidemics take place at these particular epochs in the past and not at all times? Why do they no longer happen today? One has to reply that such epidemics do exist today⁴ though in much smaller measure; they no longer spread so widely but are suppressed at source because they are not met half-way by expectant attitudes in the mass of people nor by the devotion of faith or credulous fear. Thus there are still small circles of spiritualists where hysterical phenomena can spread but the wider public today only laugh at such 'superstitions' and tend to take up attitudes of rationalistic superiority. We may assume that a particular era with its characteristic experiences and religious views which generate particular drives and aims has set these otherwise dormant mechanisms in motion; they thus become the instrument of certain cultural groups; otherwise they are reckoned as nothing but morbid and sporadically appearing phenomena.

¹ T. K. Oesterreich, *Die Besessenheit* (Langensalza, 1921).

² J. F. Heckcr, *Die grossen Volkskrankheiten des Mittelalters* (Berlin, 1865), pp. 57 ff., 124 ff. Aug. Hirsch, *Handbuch der historisch-geographischen Pathologie*, vol. 3; *Hysterie u. Chorea* (Stuttgart, 1886). J. Schumacher, *Die seelischen Volkskrankheiten im deutschen Mittelalter u. ihre Darstellungen in der bildenden Kunst* (Berlin, 1937) (Neue deutsche Forschungen).

³ Cp. the works of Leubuscher, Ideler, loc. cit.

⁴ See the references on p. 408.

3. *Witchcraft.*¹ Since the end of the Middle Ages Europe stood for three centuries under the nightmare rule of the witch-hunt. Under the influence of ecclesiastical policy directed against heresy (among Catholics and Protestants) in a world of fear and stimulated by sadism the ancient ideas gained a power which nowadays it is hard for us to appreciate. The carrying out of procedures based on manifest unrealities was only possible through the realities of hysteria and suggestion. There were always individuals who saw through the delusion (no contemporary opinion can ever force itself on everyone). But when something has become a mass-phenomenon men of clear and independent vision are powerless. The ever-ready mechanisms of suggestibility and hysteria, of the drive to torture and be tortured, to suffer pain and annihilation for their own sake, will flood all resistance in certain overwhelming situations where the power of faith or of politics prevails.

4. *Orgiastic cults.* The orgiastic cults which have been observed and deliberately practised at different periods in all quarters of the globe are undoubtedly related in their psychological mechanisms. The ecstatic states of medicine men, shamans,² the fury of dervishes, the orgies of wild tribes, also the Dionysiac ceremonials in Greece³ and all similar manifestations are psychological events that in some way belong to each other. They probably include a number of different types. But we cannot speak more exactly than that. For the present we must be satisfied with getting some idea of the individual concrete events.

The example of orgiastic states is a clear illustration of the general saying that mere psychological investigation of a phenomenon cannot decide its historical influence nor the value which we can ascribe to it. The ecstatic event that psychologically appears to be one and the same may from one standpoint seem to us a profound revelation of human devotion and from another an impersonal, inhibiting and frankly morbid process, just as in other fields the same psychological event may mean in one case the groundwork of a valuable cultural achievement and in another case that of 'an over-valued idea'—perhaps that of having discovered the 'perpetuum mobile'. We may compare here Nietzsche's remarkable exposition of dionysian frenzy in the *Birth of Tragedy*.

5. *Spiritualism.*⁴ In the unbelieving modern world and with the rejection of superstition in religious circles, possession and witchcraft have ceased to be matters for exorcism and legal process but the psychic facts remain preserved in another form. In accordance with the scientific character of the age they have

¹ W. G. Soldau, *Geschichte der Hexenprozesse* (Stuttgart and Tübingen, 1843). Snell, *Hexenprozesse u. Geistesstörung* (München, 1891). *Der Hexenhammer*, von Sprenger and Institoris (D), trans. J. W. R. Schmidt (Vienna and Leipzig, 1938). Fr. v. Spee, *Cautio criminalis oder rechtliches Bedenken wegen der Hexenprozesse* (1632) (Deutsch von J. F. Ritter) (Weimar, 1939).

² K. Zucker, 'Psychologie des Schamanisierens', *Z. Neur.*, vol. 150 (1934, p. 693. Nioradze., *Der Schamanismus* (Stuttgart, 1925).

³ Erwin Rohde, *Psyche*, vol. 2, pp. 4-27, 41-3, 47, etc. K. Oesterreich, *Die Besessenheit* (1921), pp. 231-374.

⁴ Alfred Lehmann, *Aberglaube und Zauberei* (Stuttgart, 1908, 2nd edn.). Theodor Flournoy, *Die Seherin von Genf* (Leipzig, 1915). A. Hellwig, *Okkultismus und Verbrechen* (Berlin, 1929).

become the subject of medicine and at times been fostered as a world of hysteria; at the same time they have become a subject for pseudo-sciences—occultism, parapsychology, spiritualism—which hope to explore the reality of the supernatural as if it were something natural. In this way the ancient manifestations have undergone a double transformation; they are scientifically explored as psychological facts amidst the constant confusion of spontaneous physio-psychological events with artefacts introduced by the situation and the presence of an observer. At the same time they have become the medium for the exploration of a supernatural world of spirits, demons, hidden and remote influences, clairvoyances and so on, well suited to the spirit of the age.

(c) *Mass-psychology*

Psychic epidemics with their physical phenomena gave a drastic illustration of the spread of psychic attitudes through unconscious infection. This latter is happening constantly with the mass-phenomena of beliefs, attitudes, activities and 'public opinion'. This represents a whole realm of data of exceptional historical importance, which has been fully described and illustrated in an excellent work of Le Bon.¹ We are here on the border of morbid events, brought about by disinhibition and by the extinction of the critical faculties in a general levelling of psychic effort in which the individual becomes the material for impersonal forces and capable of the extremes of criminal or heroic behaviour, of shared illusions and hallucinations and of incredible blindness. The Mass no longer thinks or wills but lives in pictures and passions. These powers of the Mass are the opposite of what is meant by community. In the Mass the individual disappears and afterwards does not understand how he could have possibly taken part in the events as he did. In community a people takes on shape and form, becomes self-aware and develops constructively in a historical continuity. The power of the Mass, if used as a means, may get out of hand and overpower the very individual who called it forth, if he does not, like a hypnotiser, completely control the means of suggestion and exercise great presence of mind. The Mass is a collective psyche of the common feelings and drives of persons who have ceased to be individuals. The experience is 'all of us' without any 'I'. The action in common is of inevitable momentary power; the Mass is credulous, uncritical and lacks all responsibility but it is open to influence and can evaporate quickly. It tends to 'mass-psychosis', vast excitements and acts of violence (panic, pillage, murder). Caught up in the mass the individual feels, behaves and acts as he would never do within his own personal and social tradition. He becomes a will-less automaton with a feeling of increased power. 'The sceptic becomes a zealot, the honest person a criminal and the coward a hero.'

(d) *Archaic psychic states*

In the relatively few millennia of our history there have been great changes

¹ Gustav le Bon, *Psychologie des foules* (D); *Psychologie der Massen*, 2nd edn. (Leipzig, 1911).

in general conditions, in faith, environment, custom, knowledge and capacity. But in spite of all this our basic human disposition does not seem to have altered demonstrably throughout all the years. There is a much greater difference between ourselves and primitive peoples who are outside the three great cultures of China, India and the Occident and whose remnants have been studied ethnographically during their final decline. It was thought that these would reveal a human existence which would have some antecedent relationship to our own history. This in its entirety doubtless rests on prehistoric foundations and has developed from prehistoric achievements that still hold their sway, but what these amounted to we find difficult to grasp.

For example, the taboo on incest (of sexual intercourse between parents, children and siblings) does not exist in animals but only in humans and with them it is universal (with one or two exceptions which seem to occur as a conscious breach in a common taboo: e.g. in ruling families). What is the source of this? It seems linked with the very foundations of human life in the same way as are community, speech and thought, moral laws and usages. No empirical observation can penetrate into these original springs of human life.

Man's early history indeed already presupposes such foundations. But for a long time a psychic state must have prevailed which was very remote from that which has persisted through our few thousand years of history. An analogous state was thought to have been found among primitive peoples on whom ethnologists and sociologists duly turned their attention.¹ These have tried to visualise what differentiates the primitive world from our own and have conceived two types of thought and consciousness. We tend to think in clear consciousness, in exact definitions and to differentiate everything—object and subject, reality and fantasy, things in themselves, etc.—keeping our thought continually related to empirical reality. There is however a different, non-logical, pre-logical ‘thinking’ which is pictorial, concrete, significant and symbolic; it substitutes one thing for another and allows the pictures to coalesce so that phenomena of the most heterogeneous origin flow endlessly into one while the empirical particular is disrupted into heterogeneous relationships and meanings; this protean change of form, therefore, becomes the true reality and space and time disappear as realities or rather they are not yet born any more than the categories of reality and logical thought.

If we now compare the content of psychotic experiences, the modes of thought, the peculiar choice of objects and all the fantastic confusion as it seems at first glance, the symbolism, the magic influences and imagery, some astonishing parallels are revealed with primitive myths, primitive ideas and modes of thought. Both have a relationship to dreams. Nietzsche wrote: ‘The dream constantly changes things in an arbitrary confusion, making use of the most fleeting similarities; but with this same arbitrariness and confusion people

¹ Levy-Brühl, *Les fonctions mentales dans les sociétés inférieures* (D) (1910). Jerusalem, *Das Denken der Naturvölker*. K. Th. Preuss, *Die geistige Kultur der Naturvölker* is an excellent work in the *Sammlung Aus Natur- und Geisteswelt* (Leipzig, Teubner, 1914).

create their poetic myths . . . in dream we are all like primitive people—in sleep and dream we travel once more the paths of an earlier existence'.

Emminghaus¹ in his time concerned himself briefly with 'ethnic equivalents of psychic disturbances' and quoted a comprehensive bibliography derived from ethnology, archaeology and psychopathology. The Freudian school, and Jung in particular,² compared myth with psychosis. Later Reiss and Storch³ undertook this comparison in connection with schizophrenia alone. As far as content is concerned there are undoubtedly similarities of a striking kind in the way content and mythical imagery seem related. One would like to understand the psychic illness in terms of primitive psychic life and, in turn, the primitive psychic life in terms of the patients whom we observe today. Such an aim is served by the theory that illness, just like dream, consists in a disinhibition whereby primitive elements may once more emerge from the deeper layers of the unconscious. But the great hopes placed on such an approach were not fulfilled. The kind of thinking found in a primitive state of consciousness is something essentially different from psychotic disorder. It results from a collective development and serves the actual community, whereas schizophrenic thinking isolates the individual and separates him from the community. The pictorial thinking of the primitive takes place within a cultural community which so far as rational thinking goes is still but little developed; that of the schizophrenic takes place in spite of a preserved capacity for rational thought, in terms of the civilisation to which he belongs. Comparison which finds an analogy between primitive people and schizophrenics would only be fruitful if we could use it to demonstrate what is specific not only to the two conditions but also to whatever it is that characterises every act of pictorial thinking and its content. One would then not only recognise the heterogeneity of the conscious state of the schizophrenic, the primitive and the dreamer—which in any case is quite clear to us—but would also get to know the distinctiveness of the psychic contents and acts. But nothing has been achieved in this respect. Here enumeration of similarities is initially quite impressive but it soon becomes rather boring, particularly as in the given case one always feels at the same time the dissimilarities as well.

Therefore we have to ask: (1) Were schizophrenic experiences a source of primitive notions and ideas? This question cannot be answered. (2) How does primitive thought stand in comparison with that of schizophrenics? It is obviously 'healthy' thought and does not have the characteristics of a schizophrenic primary experience or of a schizophrenic psychic event. (3) What is meant by the 're-emergence' of buried archaic images long lost to civilisation, of buried myths, symbols, possibilities and powers? It is a vague, unverifiable theory, the presumption of a connection which so far cannot be explored any

¹ Emminghaus, *Allgemeine Psychopathologie* (1878), pp. 43–60.

² Jung, Cp. die Zeitschrift, 'Imago' (1912 ff.). Jung: 'Wandlungen u. Symbole der Libido', *Jb. f. psychoanal. u. psychother. Forsch.*, vol. 4 (1912), p. 162. Freud, *Totem u. Tabu* (1913).

³ Reiss, *Z. Neur.*, vol. 25, p. 432. Storch, *Zbl. Neur.*, vol. 25, p. 273. *Z. Neur.*, vol. 78, p. 500.

further; a magnificent and unfounded assertion which can only repeat itself on fresh material without carrying our knowledge a step onwards.

If we look at primitive thought in the way in which ethnologists present it, then we have a schema of approach which can help us in our description of schizophrenic thinking. When striking parallels are found in this way between the thinking of primitives¹ and the performance and experience of people with acquired mental defect following head-injury, this hardly allows us to make any real connection between primitive life and illness other than the use of similar categories for purposes of description.

(e) *Psychopathological elements in different cultures*

As far as we know today we find the same psychopathological phenomena in all the three great cultures of East Asia, India and the Occident. Content changes with the prevailing opinions. The phenomena are identical even in the individual neurotic deviations.²

(f) *The modern world and the problem of degeneration*

It is more than a century ago that men had visions of decline which foretold an end to western culture, the collapse of Europe and of the Europeans or the end of humanity as a whole.³ Within this context psychopathology has to see: (1) what changes there are in the modern world in respect to the manifestations of illness; and (2) whether there is such a thing as 'degeneration' and can its growth in the modern world be established.

There are *statistical findings* on the *increase* of patients in *mental institutions*, of *suicide* and of *criminality*.

1. The statistics of civilised European states show that since 1850 to the present day the *number of patients in mental institutions* expressed as a percentage of the total population has increased two to threefold.⁴ This does not imply that the relative number of mental illnesses has increased also. By no means all mental patients neither in the past nor in the present are admitted into institutions. The increase in hospital patients may only be due to the fact that we now institutionalise more of the psychoses which in themselves retain the same percentage in proportion to the population. It is not possible to give a conclusive answer but the majority of psychiatrists would consider the latter interpretation a probable one. Römer⁵ found that during the years 1904–10 in Baden there was a marked increase in first admissions. The reasons for more frequent hospitalisation are as follows: (a) Mental disability and abnormal personality have a much more reduced possibility for existence under the conditions of an advanced technical civilisation than under those of a less technical one where the

¹ Eliasberg and Feuchtwanger, *Z. Neur.*, vol. 75, p. 586.

² J. H. Otto, 'Über Neurosen bei Chinesen', *Zbl. Psychother.*, vol. 3 (1930), p. 5.

³ Cp. a number of quotations in my 'Geistige Situation der Zeit' (Berlin, 1931), pp. 11–14. *Die Untergangsvisionen von Gobineau, Spengler, Klages.* American contributions such as that of Stoddard, *Kulturumsturz, Die Drohung des Untermenschen* (1925).

⁴ Vocke, *Psychiatr. neur. Wschr.*, vol. 2 (1907). Hacke, *Das Anwachsen der Geisteskranken in Deutschland* (München, 1904). Grunau, *Über Frenuenz, etc.* (Halle, 1905) (quoted by Bumke).

⁵ Römer, *Allg. Z. Psychiatr.*, vol. 70, p. 809.

mode of life is easier. This corresponds with the fact that even now relatively more mental patients are admitted in large cities than in the country districts, and an increase in actual admissions correlates with density of population. Where life is more difficult and greater demands are made on the individual, relatives get rid of their mentally disabled people more quickly than in the country, where a simple-minded person can be supported with greater ease and can be looked after and even perform quite useful work. It is due to these same circumstances, the greater demands of life and the spread of primary education, that there is now so much public discussion about mentally defective and subnormal children while formerly it seems that the frequency of mental defect was hardly noticeable. Besides these main reasons there may be others such as improvement in the mental hospitals, increased confidence in them and an increased acceptance of the concept of mental illness among a wider range of people. There is finally the decrease in the fear of psychiatrists who are approached much earlier by the modern person, particularly in cities, than they were in former days when such an approach would have seemed a kind of death sentence.

2. *Suicide* as such is not a sign of psychic abnormality but the majority of suicides belong to the personality-types that interest psychopathology, or are suffering from concrete illnesses. Thus suicidal states are to some extent a measure for abnormal psychic states. Since 1820 the number of suicides has increased in relation to the total population by more than 50 per cent. The frequency curve shows fluctuations as well. It increases with the price of food in times of economic crisis, etc., and decreases during war. The figures can probably be interpreted as follows: Individuals, whose disposition (*Anlage*) remains unaltered, encounter under these changed conditions such fatal experiences that they fall prey to desperate emotions and these give rise to reactive, depressive and other psychoses; they find themselves more frequently in situations where the future seems empty, hopeless and unendurable. The cultural change allows for a more common manifestation of forms of reaction which owe their origin to the individual *Anlage*.

In regard to the way in which frequency of suicide is dependent on the cultural conditions, it is interesting to study the incidence of suicide among Jews under varying conditions of life and compare this with the figures for the neighbouring population of Catholics and Protestants.¹

Out of 1,000,000 persons the suicides were:

Year	Catholics	Protestants	Jews
In Prussia:			
1849–1855	49·6	159·9	56·4
1869–1872	69	187	96
1907	104	254	356
In Bavaria:			
1844–1856	49·1	135·4	105·9
1870–1879	73·5	194·6	115·3
1880–1889	95·3	221·7	185·8
1890–1899	92·7	210·2	212·4

Suicide is a somewhat rare phenomenon among the East-European Jews who remain in their homeland and among West-European Jews before the emancipation. The

¹ Fishberg, *Die Rassenmerkmale der Juden* (München, 1913), p. 165.

figures show the strong influence of the environment (for instance, an explanation of the figures in the table may be made in terms of a religion that puts a check on suicide).

3. The same interpretations can be applied to the rising curve of *criminality*. An increase in social need which makes manifest the specific criminal *Anlage* and a more stringent application of the law seem to suffice as explanations.

Statistics can only deal with the crudest signs of altered psychic life. We will therefore turn to the comparison of different epochs in terms of more *qualitative* differences or where comparison is based on impressions of change in frequency. Here we can only sketch a few examples to show the aim of such investigations rather than set out results which as yet can hardly be said to exist.

There has been much discussion about the changes in the *whole way of life* which accompanied the development of the technical civilisation of the nineteenth century: everywhere an increase in tempo, haste and hurry, a continual restless anxiety full of responsibility (yet lacking any metaphysical ground), a lack of contemplation and in its place a wearying drive for enjoyment which in its turn brings violent stimulus without any inward psychic effects and a greatly increased demand on the capacity for performance and on endurance, etc. People involved in such a life tend to suffer more than before from chronic fatigue and neurasthenic symptoms which accompany it. Even though the original disposition of the individual may be unchanged it now becomes manifestly neurasthenic though in former quieter times this aspect lay dormant.

At the turn of the century neurosis¹ was repeatedly hailed as the typical illness of our times, appearing far more frequently than before. The American, Beard, first described it summarily as neurasthenia. We can say nothing in figures as to the frequency of neurasthenic phenomena in earlier times or in the present. The older medical literature shows that individual symptoms were known under different names in those times as well. The general impression nowadays regarding neurosis is as follows: hysterias have greatly decreased and many hysterical phenomena (attacks and contractures) have almost disappeared; the compulsive neuroses on the other hand have greatly increased.

The theory of degeneration. While presupposing an unchanging disposition we have tried to indicate the significance of the changing social circumstances as regards the different psychic abnormalities at different times and in different cultures. The question remains: does the psychic disposition of the same stock not undergo any change in the course of the generations—with or without the influence of culture? For the psychopathologist in particular the specific question is important: in the course of the generations does the inherited disposition towards psychic abnormality increase or decrease? Does a stock ‘degenerate’ under the influence of cultural developments?² It cannot be called

¹ G. M. Beard, *A practical treatise on Nervous Exhaustion (Neurasthenia)* (N.Y. 1880). Erb, *Die wachsende Nervosität unserer Zeit. His, Medizin und Überkultur*.

² Bumke, *Über nervöse Entartung*, Kap. 6 (Berlin, 1912).

degeneration if neurotic dispositions that have always been present are brought to full development under the influence of a certain environment. Degeneration is present only when this enhanced development is transmitted to the offspring independently from any milieu. If however the offspring, transplanted to other conditions of life, once more become like the previous generations this would speak against degeneration. Bumke showed that we have no conclusive grounds for supposing any increase in degeneration through the effects of particular cultural circumstances. We are always dealing with influences on living individuals which affect only them but are not inherited.

The most outstanding example which is always put forward to support the existence of degeneration through cultural influences is the *fate of families of superior culture*.¹ There are two sharply opposing views on this. On the one side the view is held that no inherited degeneration appears but it is a case of the influence of the milieu which affects the new generation from childhood onwards: coddling, avoidance of physical effort, idleness, irregular life, deliberate limitation of offspring, etc., are all thought sufficient to explain the result. On the other side the view is held that we are dealing with inherited changes; just as some beasts in captivity fail to produce offspring so it is with these particular families. Novels which set out to show an increasing innate nervous constitution developing from one generation to another have a basis in fact, but at present we cannot resolve the question conclusively.

Another example for the degeneration of the individual through cultural influences might be the rare case, in which one may observe the quick *decline of a stock where it is exposed to completely alien conditions of life*. Such was the case of the negroes in America after the liberation of the slaves. Before the liberation there were supposed to be 169–175 mentally ill in every million persons; a few years after the liberation there were 367 and twenty years later 886.² Any plausible interpretation seems impossible in view of the little known material and the impossibility of testing it critically.

The problem of degeneration as an hereditary increase of pathological phenomena is related to the problem of the causes of *change in primitive peoples due to contact with civilisation*. We learn of the effects of alcohol, of softening, of dissatisfaction with life, of suicide, abortion, etc. Different races seem to have reacted in quite different ways. Extinction is not the same as degeneration.

So far as the theory of degeneration has a grain of reality at all it will have to be found in genetic research. An inevitable and total process which could be called degeneration cannot be discerned. It remains an imaginative theory which points to further research.

¹ S. Schott, *Alte Mannheimer Familien* (Leipzig, 1910).

² Bumke, loc. cit., pp. 84 ff. (Leipzig, 1910).

PART VI
THE HUMAN BEING AS A WHOLE

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To the empirical statements of the first five parts we now add a sixth and final part. It does not increase our knowledge but in it we reflect upon some fundamental philosophic questions. Such reflection seems important enough not to be omitted. It is no longer part of the field of psychopathological science as such but has a general relevance.

§ I. PSYCHOPATHOLOGY IN RETROSPECT

(a) *Objections to my system of psychopathology*

There are possible objections which in fact would be a recognition even though they give negative expression to what has for us a positive meaning.

1. 'This psychopathology does not give any clear or concrete picture of the whole; everything is dismembered or else stands rigidly parallel. The multiplicity of the material and of the different approaches is confusing. No picture of the sick individual emerges.' But this particular kind of basic structure is due to the fact that we have not succumbed to any one approach as exclusively valid. We do not accept any group of facts as genuine reality. We have opposed the tendency of all dogmatic theories of Being to build a structural whole and have pursued a systematic scrutiny of methods. The meaningful question for us is whether the differentiations are sufficiently clear and in what way they could be improved.

2. 'There is repeated theoretical discussion, instead of concrete presentation.' 'An investigation which would better have remained empirical is loaded with superfluous and unproductive material.' But it is just empirical clarity itself which is served by these discussions. They teach us how to differentiate so that what has been differentiated can be clearly recognised in its mutual relationships. What is empirical only becomes clear when in my grasp of it I am fully aware of the logical and methodological implications.

3. 'There is so much talk of matters to be meaningfully understood; such psychological understanding is not science, it evades any testing since it is concerned with unempirical discussions of psychological possibilities. There is also constant reference to what cannot be understood and finally to what cannot be known as if it were there the most essential matters lay.' But it is just our awareness of methods which permits us to be aware of *every* method, determine its particular importance for science and its actual use in research and finally characterise those methods which belong to philosophy since no empirical findings spring directly from their use. For us the meaningful question is

whether we have succeeded in avoiding confusion and whether we have kept alert to the multidimensional character of scientific efforts and to the human individual as a whole. The fact that at the margins of our knowledge there stands an awareness of Being which is accessible only to philosophic illumination is not the crowning fact of a purely dogmatic and ultimate knowledge but the silent matrix of a basic approach which is thoroughly systematic in its methods. This matrix is illumined indirectly while we follow through a free and impartial enquiry. In getting to know, we verify that which lies at the margins of our knowledge and is itself inaccessible to knowledge yet only through knowledge is it rendered tangible.

The possible objections we have enumerated stem from certain accepted standards to which our book is opposed.

(b) *The obligation to integrate our knowledge of man with the picture given by psychopathology*

Science demands a systematic and holistic approach. It does not like to leave scattered elements as they are. Psychopathological findings are endless; investigators use countless terminologies—even to the point of being unintelligible to each other—and therefore there is an increasingly urgent demand for us to show what it is we really know as a whole.

This demand cannot be met by *relevant summaries* of specialist knowledge. These do not rest on any common basis of meaning and they presuppose no common framework of basic knowledge.

Nor can the demand be satisfied by designing as it were some *construct of a human being* and showing how everything we know has its place somewhere within this construct or is a part of it. There is no such construct of a human life. The human being is essentially incomplete and in himself he is inaccessible to knowledge.

Integration is possible only if we *structure our knowledge* of the individual as this develops from the basic modes in which we see and think, the categories of thought and sight; that is, from our methods. In this methodological design science reaches as far as the object as such is accessible to it. But for such a limit to be reached one must be at home on the other side of it. Because we can get to know mankind only through ourselves—that is through our human contact, our contact with the world, with philosophy, science and history—or perhaps because when we explore other humans we need a living basis in ourselves, we must be ever-present as ourselves and use this living basis in the service of our knowledge. It will determine the extent, the wealth and depth of our knowledge. It is a mistake to want to organise our knowledge of human beings technically into a whole which anyone might lay hold of, just as if this knowledge could be reduced to a single plane. What we have to organise is *the way we gain such knowledge* so that we may grasp humanity in all its dimensions and on every possible plane. Such structuring will endeavour as far as it can to select simple broad basic features and certain master-ideas, which

will organise the known particular in a comparable way and make it accessible to observation.

Following on from this the picture of a scientific psychopathology takes inevitable shape. Our knowledge is piecemeal when it ends in enumeration and scattered elements; it is still piecemeal when we reach the multiplicity of complex unities. But we cannot stand this wavering multiplicity. We try to reduce the myriads to order; first by mere grouping, then through a causal knowledge (which alone enables us to make effective changes, bring things to light, hold things in check and predict) and then through an insight into meaning. As we proceed by diverse ways into the limitless field of the actual human being we come across certain facts which objectify a human reality; we relate these facts as found to each other and discover that in spite of radical differences in meaning they are still joined together somewhere in a common ground since they can be related to each other. We see how the facts interlock and correlate in an endless fashion. What is from one point of view a single element is from another a complex datum. Absolute elements exist no more than a single whole. What appears to be simple may owe its origin to complicated determinants, and a complex development in the end may prove to be quite simple when it has been investigated.

The question how this knowledge is to be structured, ordered and elaborated calls for an integration of all that we know. We repeat that this is only possible in a methodological sense and not as an ontological theory of human life. Such integration is not like a map but like a plan for exploring the country. But unlike the geographical country, man as a whole is not there for us to know. His existence is differentiated from that of any object, no matter how big, by the fact that alone in all nature his Being is free; our ultimate effort is therefore a systematic ordering of methods, never a completed design. The chapters in this book are not conceived as building up in their entirety any such integrated picture of the individual as a whole. In the end no empirically recognisable basic form of human life emerges. Rather in the end the human being himself remains an open question and so too our knowledge of him.

Therefore we think it is a mistake in psychopathology to try and set up any principle of the whole or set one up scientifically as a point of orientation for research instead of taking up an attitude of faith and recognising the infinite extent of what is knowable. When for example L. Binswanger wants to investigate individuals from a particular theoretical point of view, when he discards the 'conglomerate concept' of man as a body-psyche-mind unity which he says is a synthesis of several methods (scientific, psychological and cultural) and demands some 'pre-arranged idea' which for him is the 'basic ontological idea of existentiality' he makes a philosophical and scientific mistake. Such a formulation confuses in the first place the method of philosophical illumination with that of knowledge and robs the former of its power to conjure the human mind and lend it wings; secondly it constitutes a basis for psychopathology which is utterly inadequate. The same mistake is made, for example, by Prinzhorn when he says: 'The doctor should be familiar not with methods but with

the main theoretical trends regarding life, constitution, heredity and personality and these should determine him in all his contact with others'. Prinzhorn thus converts specific modes of knowledge into philosophical absolutes and wants to make them a principle for knowledge and practice as a whole.

(c) *The complex unities in retrospect and the problem of a unified whole*

In the previous parts and chapters of this book the object of our enquiry always lay polarised between the particular facts and a whole to which the facts belonged. There has been no single fact which would not be changed by some other isolated fact and by the whole and no whole which would not consist of single facts. The whole formed the background and in reality guided and delimited every particular and determined for us our concrete grasp of the particular. These various wholes proved not to be all of one kind but were complex unities specific for each area of investigation. We recapitulate:

I. The *momentary whole* in which experienced phenomena occurred was the *state of consciousness*. *Performance as a whole* depended on the integrating unity of the organism; in the form of thought it was '*consciousness in general*'; it was also called *basic function*, and the '*present form in which the psychic life took its course*'; as the total capacity for performance it was called *intelligence*. *Somatic analysis* presupposes the whole of the *body-psyche unity* (in its neurological, hormonal and morphological unitary structures). For the *psychology of expression* the whole is the utterance of a Being, characterised by its own *level of development*. The individual's *milieu* and his *culture* exist as complex unities of which the individual's acting, behaving and creating are but a part.

II. The whole of the meaningful connections was *the personality*.

III. The whole of the causal connections was comprised in the several *theories*.

IV. The complex clinical unities were the ideas: of the *disease-entity*, of the *Eidos* (Constitution, etc.); of the *Bios* (the individual life—as the whole of the person's life in time).

V. The communal and historical whole of the individual appeared as the state of his society, the objective culture, the historical epoch, the communal spirit as displayed in peoples, states and in the masses.

Looking over this series of basic wholes we are first struck by their *multiplicity*; no one whole is *the whole*; each complex unity is but one among others and relative. Secondly we see the universal tendency *to turn* each complex unity *into an absolute*, to find in it the psyche as such or at any rate the focal point, the dominating factor. Every conversion into an absolute contains some truth which is thereby only destroyed. The momentary whole tends to be taken for the ultimate whole: the psyche is consciousness and nothing else; the performance as a whole is the only objectivity, the only object for science; the body-psyche unity is reality itself; milieu and culture are absolutes to partake in which is psychic reality; personality is the essence of the psyche, its

meaningfulness is its Being; theories grasp the true reality; causal connections are the substance of things, the body is everything, the psyche only an epiphenomenon of cerebral processes; the individual is only a transit-station for hereditary connections; clinical reality consists only in disease-entities, constitutions and the life-history as a unit; the individual is a function of society and history.

All such conversions into absolutes are false. The mere number of them, when we set them out and look at them, shows us vividly that no complex unity of psychic life is ever the whole itself. To get to know the individual is comparable to a sea-voyage over limitless seas to discover a continent; every landing on a shore or island will teach certain facts but the possibility of further knowledge vanishes if one maintains that here one is at the centre of things; one's theories are then like so many sandbanks on which we stay fast without really winning land. In this respect our presentation has always made it clear where the particular methods have reached the limit of that particular complex unity. The various complex unities always remain particular perspectives on a human life or single aspects of its manifestation. But what is this human being as a whole, this single whole? Do all the many complex unities come together to build it? Or is this whole human being only a word without an object?

We have to reply that the whole human being does not in fact become an object to us and that philosophical reflection will throw light on why it cannot. We will give a few comments on this in due course. No outline of a human being as a whole ever quite succeeds; very soon and invariably the particularity of the outline declares itself in so far as it is true, and shows in yet another form the fragmentation of the individual who nevertheless seems to be a unity. All complex unities are types of complex unities in their fragmentation. It is useless to try and conceive man as a whole so that all the previously grasped complex unities could be theoretically clarified as elements or members. Every time we grasp at the whole it recedes and we are left with only a particular schema of the whole, one mode of complex unity among others. Hence it is not only wrong to turn a complex unity into an absolute but also wrong to make it an absolute which we believe will comprehend the actual human whole together with all the complex unities which we have so far managed to grasp.

As a result we think it a mistake to ask that the human being as a whole should be made into a special sphere for research and teaching. What is knowable exhausts itself in the particular and in specific complex unities. An anthropology cannot add any new knowledge. There cannot be any specific 'theory of man which the doctor can use' nor any medical anthropology. It is the same as with philosophical anthropology; it is not a kind of theory which objectifies but an unending process whereby we illuminate ourselves and make use of those particulars known about man which have been our concern in this book.

The unity of the whole individual so far as knowledge goes simply lies in

the search for relationships between everything that is known about him; that is, it consists in the idea of the totality of the knowable relationships.

(d) *The concrete enigmata in retrospect*

In almost every chapter we have encountered enigmatic problems, that is, not just preliminary problems to which answers might be found but problems that were *fundamentally inscrutable for our methods*. The enigmatic is *measured in terms of a particular mode of comprehension*; this may fail to explain a certain fact that belongs perhaps to another mode of comprehension which in its turn is faced with its own enigmata. Everything enigmatic therefore is a reminder to us to accept *the failure of a particular mode of comprehension* and at the same time to search for some other mode whereby the facts are no longer enigmatic to us but become a ground for insight. Everything enigmatic always lies *at the margins of a particular mode of knowing*.

All knowledge has this enigmatic character. Knowing is always the revelation not of a temporary but of a specific ignorance. Thus in the inorganic sciences: the actual distribution of matter in space, e.g. sulphur deposits in Sicily, cannot be explained from the general laws and findings of chemistry. Similarly in the biological sciences we cannot explain the form as a whole (the morphology), the inwardness of an experience and the general purposefulness in terms of the physical and chemical connections and vice-versa. A whole exists and yet it cannot be explained in terms of knowing the particulars. Further our comprehension of the purposeful connections of biological function as directed towards the existence and procreation of the species presents us with a riddle: the purposeless formation of forms which, as with plants, is far more lavish than is needed for adaptation to the place where they grow (Göbel). The primary phenomenon of expression in animals (where something inward becomes outwardly understandable) cannot be explained in terms of biological (physiological and morphological) connections nor again can we explain the haphazard nature of numberless expressive phenomena in terms of a biological purpose.

We are interested in the concrete enigma presented by the human being as we know him. In the main he re-echoes the insoluble problems presented by everything that lives but now everything that lives has become a basis for the living man. Here are some illustrations:

1. Curtius and Siebeck speak of the insoluble problem of *constitution*: 'constitution is a comprehensive concept which contains both a medical judgment and a judgment on the whole of the personality and its situation. The constitution cannot be reconstructed from selected fragments taken from the patient's relationship to his environment. The study of constitution, therefore, cannot proceed by the usual method of analytic and causal enquiry. We have to remain in suspense . . . the constitutional approach must never cut short the search for particular causes and conceivable connections but it should teach us to assign all the individual relationships we find to their right place. It thus teaches us the limits of bacteriological diagnostics though it should never misjudge their significance'. The enigma of constitution only enlarges when it is extended to include the personality as a whole and not only the somatic events.

2. The limits of *genetic research* present us with fresh enigmata. Everything is hereditary in so far as hereditary disposition together with environment provides the decisive causal factor for the whole psychic life of the individual. Yet as a concrete explanation this meets with limitations:—1. We do not know how the genes of the developing individual are able to bring about those phenomena of which they are the hereditary basis (in spite of our knowledge of certain hormone effects). But even if we found the link between genetics and the developmental history, between the genes and the organisers, we should only have grasped mechanical and lifeless connections within the preconditions of life; we should not have grasped that individual life itself. We cannot even conceive how the genes in their totality should cause psychic phenomena that are linked with education and cultural tradition, with the life of the mind and of history. No one doubts of course that cultural reality even in its furthest ramifications has a biological ground but the cultural world as such cannot ever be explained in terms of this ground even if its relation to psyche and mind were clarified. 2 The unity of the entire gene-equipment, which we can no longer grasp as a gene, is a precondition for the unity of the individual. In the hereditary connections we grasp as it were the substance of the biological event but we do not comprehend the unity it forms. 3. There are dispositions (*Anlagen*) which are not inherited nor heritable although they are congenital. The individual possesses something in addition which is not to be found in the hereditary connections. 4. As we look at the human person endowed with mind and freedom we see the traces of an irreplaceable selfhood or at least of a unique individual. At some decisive point every individual is as it were, in theological language ‘created’ from a source of his own and not merely a processing of a modified hereditary substance. Even if a cultured mind can still be considered an objective reality linked with certain natural facts (e.g. a highly gifted family) we cannot take it as the result of such facts. Man as an individual mirrors the whole—at least so German philosophy since Nikolaus Cusanus has taught—and in him the world is presented in miniature; there is no substitute for him, he is unique. Far from being the sum of his hereditary factors (which would be quite correct for his material preconditions and determinants) the individual is ‘directly created of God’.

3. If we conceive psychic life in terms of its *performances* and the individual as the sum of his performance-capacities we find ourselves restricted by the fact that the context of performance is affected by something which disturbs the regularity of the performance and renders it less calculable. Apart from a few performance-tests that are purely physiological (belonging to the psychology of perception, fatiguability and memory) almost all performances take on the shape of culturally conditioned events. But if we want to understand these performances in their cultural aspect we immediately encounter the limitations of the biological factors which support, restrict and disturb the realisation of what we can imagine as a purely cultural event. If in the practice of our psychology we come upon some natural event we still get at these natural events by means of the mental and psychic realities, which are then taken not for themselves but as indices for some other kind of event. Mind and spirit are present in every psychological reality that we can conceive. Hence the concrete enigma: what are they and how do they take effect? Answers to this only emphasise the enigma and do not solve it. Thus, for example, we may say: Mind and spirit somehow transcend nature and make use of the body to achieve their realisation and utterance in the world as well as their own evolution. They are something separate (Aristotle) from the body—psyche whole but they do not exist apart; they only exist

in their bodily utterance. They acquire the nervous system as it were for their instrument. Or (according to Klages) they are the Devil himself, destructive of life.

4. We have discussed the *limitation of understanding* by biological events and by Existence itself. All understanding of the reality of an individual contains the concrete enigma that the meaningful factor, apparently unlimited and self-contained, is on the contrary continually being determined and continually pointing to something else, either as its determinant or its source.

5. The *unity of an individual life* (the Bios) is bound up with the countless *chances* that befall it in the course of time. We understand the individual in terms of his readiness to grasp and use the opportunities and chances as they arise. Yet there is a limit set by the chance that calls for an entirely different interpretation, chance as fate or providence, which is unverifiable in terms of any general validity, a language of God rich in meanings (as for instance Kierkegaard's self-understanding). The unity of the individual life is thought to be grounded in a whole to which the chances of life belong as members.

6. Where body and psyche are conceived as separate, every movement of the arm becomes a concrete enigma. When I want to pick up my pen, how do I manage to make arm and finger perform the appropriate movements? Something purely *psychic* announces itself in my *motor activity*—the only place in the world where 'magic' is real: the direct concretisation of the Mind. The insoluble problem of expression—the externalisation of what is inward—and the enigma of speech only deepen the more closely we scrutinise these phenomena. In themselves they are quite comprehensible but at their margins we find both the inward factor which achieves communication but does not reach expression, and the inward factor which does not communicate yet achieves a unique reality, that can neither be objectified nor repeated, and therefore does not exist for science but is real none the less.

Looking at these *insoluble problems as a whole* we find they can be reduced to a few *abstract principles*: that is, to the various ways in which they are limited by something else which we respectively term *endlessness*, *individuality* and *that which encompasses all things*.

1. The enigma lies at the margins of an investigation because of the investigation itself: that is, at the point where the object of the enquiry becomes subject to an *endless* host of combinations.

2. The enigma is set by the limits of *individuality* as such. What is individual cannot be explained in terms of the other; it is its own explanation. It is not to be grasped as a whole for it is ineffable. Dissected though it may be into something biological in genetics and into something psychological in human society and culture, and thus as it were at the cross-roads of heredity and environment, individuality is never just the point of transit but always a mystery, somehow itself, unique, existing for itself in an historic concreteness as present riches; a single incomparable wave in the infinity of waves that mirror the whole.

3. The enigma lies in the limit presented by *that which encompasses all things* and which never becomes an object itself yet all visible objects have their place within it and emerge from it.

These three limits carry each a different meaning and restrict our enquiries at the point where problems have become manifestly insoluble. But it is not only in the study of man that they are to be found. It is in man, however, that they all occur together and are specifically imbued with something which we call '*Freedom*'. We recognise in ourselves something which we do not know and never otherwise experience in the world save in communication with others. It is not there for knowledge but can make itself felt indirectly as we study the individual with his unaccountability, irregularity and various disturbances and as we try in our study to get an adequate and objective grasp of the person himself. But the freedom which the self experiences calls for illumination by philosophy. The only comment which we would make here is as follows:

1. So far as the empirical event is recognisably bound by rules and so far as the facts can be demonstrated empirically, there is no freedom. Denial of freedom is empirically meaningful but limited to the field of objective empirical knowledge. It is fruitless to try and demonstrate freedom from convincing experience and any such attempt makes freedom suspect. Freedom is not an object for scientific enquiry. The alternative is not whether I show it as empirically there or not but whether I will or will not accept responsibility for the phrase 'there is no freedom' and the consequences of this.

2. The individual not only lives and experiences but knows he does so. In his attitudes to himself he can somehow go beyond himself. Once I know myself I am no longer simply myself but my knowledge changes what I know myself to be. All my empirical existence becomes illumined in relation to my freedom: the way in which it contains freedom within itself, can be transformed by the assumption of freedom and how it can operate to serve or restrict this freedom.

3. Freedom is present formally in everything available for understanding. In so far as I understand I accept the implication of freedom. Radical denial of freedom would in consequence abrogate my understanding.

4. Experience of limits and acceptance of freedom are common occurrences but at the same time they often become a starting-point for error: freedom is converted into another object for scientific investigation, into an actual factor in events. Ideler, for example, formulated this brilliantly: 'Moral freedom is a concept that has arisen from reason, antecedent to experience and from an inner necessity. It lies outside the realm of empirical investigation.' But he gave this philosophic utterance a wrong application when he tried to grasp the appearance and development of mental illnesses in terms of a struggle between free self-determination and passion. He made freedom an objective factor in natural events. Thus he went against the principle which for a moment he had clearly seen as true. He restricted freedom and inverted it with all the resulting confusions of a psychiatrist adrift in his conception of mankind. It is wrong to put Nature and Freedom (Life and Mind) side by side as if they were factors on the same plane and as if they interacted. Rather it is that the one form of

approach—whether that of the Natural Sciences or that of Understanding and its accompanying Illumination—comes up against its respective limits, not however to absorb new factors of explanation but to become aware of its own limitations in the face of Being as a whole. Thus causality comes up against freedom and, vice versa, understanding comes up against the meaningless (the ununderstandable) in the form of the causal connections of biology or in the form of Existence itself.

§ 2. THE PROBLEM OF THE NATURE OF MAN

The retrospective survey of our psychopathology has been bringing us to the problem of human nature itself. Biology, anthropology, theology and philosophy have all given answers to this question. The theme is vast and I confine myself to a few comments which I have taken from my other writings. These latter give a full exposition and justify the following brief outline.¹

(a) *The basic philosophic position*

A series of brief statements will set out the apparently necessary pre-suppositions if we are to make any meaningful presentation of human nature:

1. We may say: *At any given time the human being exists as a whole*. Physically he moves through the world as an individual. He is an object, this body in space. But this is the most superficial line of approach. If I *treat* a man as this physical whole I deny the man himself. As a body he becomes a piece of matter occupying space, something useful perhaps, a machine-part, etc. But if I *see* a man as this particular body even the biological consideration of the bodily whole leads me further afield into a wealth of concrete facts which are never the whole. It is no different with man than with every other living creature or every plant or indeed with the world as a whole. Once comprehended for the purposes of knowledge all these objects are instantly torn apart. The whole is an idea only and there are many ideas.

2. We should have the whole as a unit, if we could but give a *meaning to this unit*. But it carries manifold meanings: e.g. *as a simple object*, it is the object which at any time I have before me as I think (the formal unit of the thinkable). *As the single individual*, it is a unit that is infinite. If I want to know it, it breaks down into a number of modes of individual being. In becoming known it loses its unity in favour of the many units that constitute it. *As the unity of Existence itself*, it is a philosophical idea which in transcendental thought makes use of the One to illumine the absolute aspect of Existence itself. We grasp at units in the process of knowledge but never the ultimate unit of all, whether of the individual or of Existence itself.

3. The act of knowing puts us in possession of all Being only *as this falls apart into subject and object*. That is, we possess it as an object for our aware-

¹ For clarifying our thought on human nature, the most important writers are Plato, Augustine, Pascal, Kant, Kierkegaard, Nietzsche.

ness, not as it is in itself but as it seems to be for 'consciousness in general' in this divided condition. Therefore in empirical reality we have Being only as we encounter it in the categories of our awareness, as a phenomenon presenting itself in the many fundamental modes of experience, explicability and meaningfulness.

4. Because we get to know phenomena, not Being in itself, we come up against *limits* which we make tangible through the use of marginal concepts (such as 'Being in itself'). Marginal concepts are not empty notions but can be filled by a present actuality. Their concern is not the single object but that which carries and contains myself and all objectivity.

5. We cannot, it is true, get to know the modes of that which encompasses all things but we can illuminate them. That which encompasses all things is Being in itself (World and Transcendence) or that which we are as we ourselves encompass things. To turn that which encompasses into an object and to treat it as something we can know is a basic error of our thinking. It is rather that we can touch it with our thought and represent it than that we can make it an object for our knowledge. To represent it in this way does not increase our objective knowledge but teaches us to see the meaning and application of this knowledge within the appropriate limits. Everything objective to us issues and meets us from this source and shows us Being in perspectives and aspects of a more necessary and universal kind and hence more knowable. But that which encompasses appears as such ever richer and more complex in the phenomenon of our advancing knowledge yet in itself it always remains unobjective and eludes us constantly.

6. That which encompasses and which we have to illumine is of a manifold kind (Being as such and that Being which we are). To make ourselves aware of our encompassing nature (that is of ourselves as human beings, as consciousness in general, as culture, as reason and Existence itself) is basic for the philosophic study of what human life may be.

7. Awareness of that which encompasses *forces* our knowledge of phenomena *into the depths*. What we can know is always active in phenomena either as foreground or background. For the philosophic consciousness everything knowable possesses as it were a common language, a sort of metaphysical code. Whoever listens to this advances his will to know. 'This is so', 'This has happened', 'That is it' are expressions of these fascinated listeners.

8. As with all the sciences we have to find the limits of psychopathology as well, and see the concrete problem with which we are presented so that while we note the *wide expanse free for scientific enquiry* and its specific methods, we keep *within the limits of science* when we evaluate the findings and make use of them. It is just through science encountering its limits in this way that we can trace out in a unique and irreplaceable fashion that which encompasses and at the same time avoid wrongly applying to it some scientific model.

What is of decisive importance for theory and practice in relation to Man is that there should be a basic philosophic attitude and no philosophical dogma.

(b) The image of man

Our methods of investigating a human being do not give us any unitary picture of the individual but only a number of pictures each with its own specific and compelling force. Empirical enquiry, understanding the possibilities and philosophic illumination are all different in meaning. It is a mistake when investigating the individual to act as if all our knowledge of him lay at one level, as if we had him before us as an object, a single thing which we could know as a whole in its causes and effects.

If it is asked whether the multiplicity of our knowledge of man is a temporary matter and whether in principle it might not sometime be gathered together into a vast comprehensive unity we have to reply: actual investigation has taught us that the multiplicity of methods has been all the more underlined as we have experienced the diversity of meaning in our findings. It has further shown that though enquiry always tries to find relationships between what it has had to separate, and frequently does find them, yet the principle of the unitary whole has never been revealed. All that crop up are ideas of relative unities. Philosophically this is quite comprehensible. So far as the human being is empirically explorable as an object for knowledge he is unfree. But in so far as we ourselves experience, act and investigate we are free in our own self-certainty and hence more than we can ever discover. The patient, too, so far as he becomes an object for study is unfree but as himself he lives with a sense of freedom. To put it otherwise: if there were an empirical finality of human existence and it could be classed wholly as a form of Being which we could explore, there would be no freedom. Faced with our constant analysis of the individual into parts, components, members, factors, etc., we may ask why only these and no other. The answer is that there may be many others and there are certainly other analyses. The multiplicity of our methods and points of approach, the fragmentation of the human being as an object for our investigation and the general openness of the situation remain basic truths in our knowledge of man as a whole. The attempt to grasp the individual finally and entirely as a whole is bound to fail. Everything that we can grasp is finite and isolated and not the man himself.

Man has been spoken of in many metaphors. Human consciousness is a stage where phenomena come and go and many different scenes can be played. The experiencing psyche is structured into perception, imagery, thought, feeling, drive and will (or into more or less such divisions). Life is like a reflex arc; it responds to external stimuli by means of a complex inner structure which selects, transforms and finally acts back on the environment. The whole is an apparatus of performance—Life takes place in a world and the two form a mutual whole—Basic human nature is an objectifying of the Self through expression, acts, milieu and creativity.—Man is structured as a unity of understandable or causal connections.—His existence is a biological existence (anthropology), a cultural pattern (history), an historical concretisa-

tion of the unique (the illumination of Existence itself).—Man is the body-psyché whole (dualism), he is body-soul and spirit (trialism), he is a body-psyché unity (monism).—He is the varying basic possibilities of Mankind displayed in a multiplicity of constitutions and personalities.

(c) *Philosophical construct of ourselves as that which encompasses*

The question as to what Man really is brings us so far as psychopathology is concerned to a number of complex unities. But every complex unity which the process of enquiry has disclosed to us, when measured against the individual as that which encompasses it, has become yet another phenomenon and so it is with personality as an understandable personality-type. Objective patterns of human life which we have in front of us and with which we can operate scientifically do not constitute that which encompasses them but have their place and are enclosed within it.

In psychopathology there is nowadays a tendency to dissolve the various entities and complex unitites. The first step was to call in question the disease-entity. The entities of constitution and the individual life-history are similarly questionable. But what can take the place of the earlier valid ideas of complex unity? It is not useful simply to add new elements, component parts, radicals, atoms or psychic 'genes'. One cannot achieve the whole in terms of a structure made up of such elements. There is always a further reality which has once more to be encompassed. In throwing light upon that which encompasses we become inwardly aware of what we are and could be; this is never a matter of knowledge. If we put it into words we are likely to be tempted to make it into a theory of the components of human existence. Guarding against this temptation we may use the number of different spheres in which we find ourselves to descry the faint subjective traces of the encompassing Being which we are.¹

Kant grasped that the World is not object but idea and that which we know is always *in* the World but never *the* World. This World and Transcendence encompass us in a reality that is independent of us. So encompassed, the individual encounters Being in its reality, independent of him, though he does not know it in itself but only as it appears and speaks to him in the subject-object division of general consciousness. But when our own Being is that which encompasses, this bears a different meaning:

i. We are *human existence* (*Dasein*): that is, we are life in a world as with everything alive. That which encompasses all living things becomes objectified in the products of that life yet—whether these are bodily form, physiological function or the universal hereditary connections of life or on the other hand specifically human tools, deeds and constructs—life itself is never exhausted in these products but remains that which encompasses whence everything

¹ For a discussion see my paper, *Vernunft u. Existenz*. (Gröningen, 1935). *Existenz-philosophie* (Berlin, 1938). A detailed development is to be found in a part of my as yet unprinted *Philosophical Logic*.

emerges. When the individual human existence admits it as such within the following modes, fosters these and bends them to its own service, it reaches its fullest manifestation.

2. We are *consciousness in general*, that is, we partake in the generally valid, which through the division of Being into subject and object allows all objectivity to be known formally to the subject. Only what enters into this general consciousness becomes Being for us. We ourselves are that which encompasses, within which everything that is, can be thought, known, recognised, touched upon or listened to in objective form.

3. We are *Mind*, that is we are always being led by ideas to a complex unity of meaningful connections within ourselves and within all that we have produced, achieved and thought.

These three modes of all that encompasses, which we ourselves are, interlock but do not coincide; they rub up against each other. They are our modes of pure immanence. As we encompass our world, now objectifying, now subjectifying, we appear empirically as an adequate object for biological and psychological investigation. But we are not exhausted by this. Our life derives from a source which lies far beyond our human existence as it grows empirically objective and far beyond our general consciousness and culture; a source which is *Reason* proper and the *potentiality of Existence itself*. This source of our nature which eludes empirical investigation, and which can be clarified only by a philosophical self-illumination, manifests itself in (1) the *insufficiency* which man experiences in himself, ill-matched as he always is with his human existence, his knowledge and his cultural world; (2) in the *undetermined element* to which he submits, either as his real self or as he is said to be, in terms that appear to him understandable and valid; (3) in the unrelenting *urge for unity* since man is not satisfied with just one of the encompassing modes for its own sake nor with them all together but strives after a basic unity, the unity which alone is Being and Eternity; (4) in his consciousness of a *comprehensive memory*, as if he had been from the beginning of creation, as if he 'shared in the wisdom of creation' (Schelling) or as if he could recall visions from before the beginning of the world (Plato); (5) in his awareness of *immortality* which is not continued existence in another form but a timeless refuge in eternity, appearing to him as the path of continuous effectiveness in time.

(d) *The eternal incompleteness of Man*

Even philosophical illumination fails to achieve any unambiguous design of human life. Rather in the transcending self-awareness of his encompassing self the individual reveals himself to be of diverse origins. Hence he continues to strive towards the unity which he neither is nor has. In this lies the *unfinished and fragmented* nature of man. The fragmentation demands completeness from some other source which in contrast to all the other comprehensive sources of human life would provide foundation and final completion. Temporal success in this can come only through deceptions which yet point the way

since temporal fulfilment of such a demand is possible only where there is a faith which neither sees nor possesses but trusts, in association with a traditional faith handed down by persons that are admired and loved.

Through the various modes of encompassing experience—each with unlimited possibilities—and through their multiplicity we come to understand the *unrestricted openness of the human individual* that at the same time is a mark of his permanent incompleteness. It is not the concrete pattern of his nature but this infinite potentiality, these inevitable conflicts and inner contradictions that reveal his essence to us.

1. *The individual as an open possibility.* Man is the ‘undefined animal’ (Nietzsche) which means: animals complete their lives along predestined tracks, one generation like another and well equipped for the specialisation of their particular form of life. But man is not compelled to follow a determinate course of ‘having to live thus’; he is plastic and capable of infinite transformation. While the animals live secure in their existence and are led reliably by their prevailing instincts, man carries uncertainty within him. He is not predestined to any absolutely final form of life and therefore is beset with chance and risk; he makes mistakes, his instincts are few, he is as it were ‘sick’, at the mercy of a free choice which has to be made by him.

It is as if from the beginnings of time while all the animals through specialisation in peak performances arrived in blind alleys and became fixed there, as it were, man preserved the total potentiality for himself. Hence we may say of him that fundamentally he is everything (‘the psyche is as it were all things’, said Aristotle). The profoundest elements from which he sprang can still be operative in him. If he remains incomplete because of his continuous plasticity, it is an incompleteness pregnant with the future. He is always basically able, he knows not why and can imaginatively anticipate events and brighten his way with genuine, fantastic and utopian goals.

Because the human potential is all-embracing a man’s nature cannot be defined. We cannot bring him under a single denominator as he does not conform to any one specialisation. We cannot subsume him under a general class as there is no other species like him.

Wherever he becomes defined, he is no longer the whole man. In any defined situation man is as it were an experimenter who can withdraw. This is because further possibility lurks in the depths of his nature, not so much in the individual who has identified himself with his realised contents but certainly in the individual in his essence as a procreated creature.

2. *Man in conflict with himself.* That man is not a well-defined creature that unwaveringly fulfils its predestined course is shown by the way in which he is locked in battle with himself. He is not simply the necessary coming-together of opposites as in everything living nor merely the necessary and in itself understandable dialectic of the Mind but a radical struggle derived from his origins. The different forms of this struggle can be seen as a series of steps from what all living things have in common to what is specifically human:

(aa) As *Life* man is in tension between 'Anlage' and Environment, between matter and form, between the inner and outer world.

(bb) As a *Social Being* man is in tension between the individual and the collective will and the latter stands in tension between the human will and that of society.

(cc) As a *Thinking Being* man is in tension between subject and object, self and thing and finds himself in unavoidable antinomies where his reason founders.

(dd) As *Mind* man stands within the constructive movement of the opposites. Contradiction is the goad which sets him in creative motion; contradiction in every kind of experience, undertaking and thought. As a phenomenon of Mind he is subjected to negativity but he is not destroyed by it; it is only a form of productivity through the mystery and synthesis of his own Becoming.

(ee) As *Life*, *Thought* and *Mind* man *makes plans*, consciously contrives order and disciplines himself. His *Will* allows him to make what he wants of his environment and of himself. It is in constant conflict with contradiction and is destructive when as pure Will and nothing else it mechanises and quenches the living source from which it springs. Remaining in the service of a comprehensive content, it becomes a manifestation of man creating himself through conflict—a greatness of Will.

(ff) The synthesis of every possibility exists neither in the World nor for the Individual. Instead every genuine realisation is somewhere tied to a *decisive choice*. In proportion to the seriousness of the choice, which necessarily excludes because it chooses and by this very choice makes man something unconditioned, all other conflict becomes mere foreground, a play of life with its wealth of movement. Only when the individual makes a choice and the decision passes into his very Being and prevails there is he truly and existentially Man.

(gg) The self-illumination of decisive choice can only be expressed in the antitheses of thought through the medium of universal consciousness and the Mind. But the path of decision is not simply that of taking one of two equal and possible alternatives but choice in the sense of 'really having made a choice'; antitheses are only media for interpretation. The path of decision is in no way a mere balancing of possibilities, a reconciliation in some comprehensive whole but it is a gaining of ground in a struggle with something else. The path of decision is that of a historical concreteness which takes its ground and goal before and after any of those opposites into which, while interpreting itself, it separates Being for the moment.

The antitheses of existential meaning are those of Faith and Disbelief, Surrender and Defiance, the Law of the day and the Passion for the night,¹ the Will to live and the Urge to die.

In any decisive choice there is always the absolute opposite of good and

¹ Fuller discussion in my *Philosophy*, vol. 3.

evil, true and false. In the present time-order these opposites evade our question (since they are an expression of the absolute) yet we grasp at them not as the absolute finality of Being itself but simply as the finality for the individual in his temporal existence, since at the point where there is nothing more in the temporal phenomenon which can bring him to a free choice, he can trace beyond himself, and inwardly attain to, this symbol and guarantee of eternal Being in Time.

3. *The finiteness of Man and its self-illumination.* Nowhere is the individual entirely on his own. He is *dependent on something else*. As he exists he depends on his environment and origin. In his knowledge he depends on his observation which he must have (since mere thought is unproductive). In the realisation of his human nature he is tied to a certain limited time, limited strength, and to resistances. He must grasp at what is finite if he is to become real and therefore he has to grow specialised and can never be everything. He has to resign from life when he has won for himself the presuppositions on which he could really make a start. Yet in his selfhood he does not create himself; he has to be given to himself from a source he does not know. He does not contrive his deepest freedom but it is just this which gives him knowledge of Transcendence, his means for freedom in the world. Man can create himself only by grasping at something else. He can know himself only by knowing and thinking about something else and he can trust himself only by trusting one thing else, Transcendence. Hence what an individual knows and believes determines what kind of man he is.

Man is not only finite but *knows of his finiteness*. He is not satisfied with himself as a finite creature. The clearer his knowledge and the deeper his experience, the more he gets to know finality and with this the radical deficiency in every mode of his being and doing. All other finite things as well—the embodiment of which we call the world—are not as such enough for him. Everything that is the world leaves him dissatisfied, no matter how deep his involvement and how absorbed may be his participation.

The fact that man senses this finiteness everywhere and cannot be satisfied with any of it points to a hidden possibility in his nature. He must have another root of his Being than that of his finiteness. If he had no pre-knowledge of the unknowable he would lack urge to enquire. But *he seeks after Being itself, after the Infinite and the Other*. Only this can give him satisfaction.

In so far as something infinite declares itself in the finite phenomenon, the world as it is may indeed give him this satisfaction. He knows the deep satisfaction of experiencing the world, of having intercourse with nature, reading her hieroglyphics, penetrating the cosmos with knowledge and finding out how things are as they are. The Being of the world excludes our human self, although in so far as we know it, this Being always appears conditioned by its being for our consciousness' sake.

As man *transcends objects* in the certainty of Being, the statement in some form or other that God exists becomes valid to him. The history of religion

may be the history of ideas whereby man sought to characterise the godhead and may teach us to recognise nothing else but these ideas. Man himself, however, knows that he has not created God through his ideas and that the first statement holds: God is. This was enough for man whenever he foundered (as with Jeremiah). The finitude of man finds rest in this faith in the Being of God.

Self-awareness on the other hand would be lost in the false dialectical conclusion that says: Man creates the god that creates him. This stays within the circle of immanence supported by the false statement: man is all.

4. *The infinite in the finite and the foundering of the finite human being.* Man's awareness of his finiteness drives him on to break through everything finite. But every step he takes is conditioned by its finiteness. Only in so far as he intends and grasps at something finite does he become real. But as he finds everything finite to be false he cannot abide there but has to travel on through it. He can it is true withdraw himself from every finite particular—that is the formal testimony of his own infinity. But his decisions always confine him to something finite (to the finiteness which is set aglow through his decision and so grows more than finite)—that is the testimony of his finiteness through which alone he is able to realise his true Existence in Time.

Thus his situation is twofold: in his fundamentals he has infinite potentiality which finds voice in him and guards him from losing himself in his own finiteness but it requires from him also an incarnation in the finite, accomplished by his decision to hold fast to an absolute identification of himself in Time.

Man can never become one with his world, his actions, his thoughts and his finiteness without at the same time going beyond this finiteness. But the fact that he is bound to it has as its consequences that *all finiteness as such must founder in regard to him*. For example:

(aa) *The contents of religious and philosophic faith.* Man understands his link with Being only by making use of ideas and thoughts but whatever he takes as the content of these ideas and thoughts is not Being as such. What man believes must reveal itself to him as he pursues such thoughts and ideas, as without them he sinks into nihilism. But all these thoughts and ideas have to be broken down once more because as such they will deceive him.

Thus no *religious faith* exists without some concrete support and some assertive dogmas. He who does not accept these as true and real is not a believer. It is not enough to take everything simply as a symbol or an interpretation, if compared with the mere empirical reality of Being-in-the-world such symbols and interpretations are not a more effective reality, not Reality proper. But as soon as the reality of concrete dogma has grown fixed and rigid as if it were the empirical reality, living faith vanishes before a substitute deceptive knowledge. To make the contents of faith into something finite is as unavoidable, as it is necessary that this finiteness should be lifted up into something that transcends and shatters the contents in their finiteness.

In the same way *philosophic faith* expresses itself in a number of statements.

Any actual philosophy becomes the reduction of a human being's infinite potentiality into the finality of taking up a position (or standpoint). Hence since the time of Plato living philosophy has expressed itself in a number of final positions which it simultaneously sees through as such and traverses with a movement that goes beyond them all.

(bb) *Age and death.* As a finite living creature man is subject to the phases of growth, maturity and ageing and also to death. But this sequence of age in man can at the same time contain the progress of his freedom manifesting itself in Time. If so, besides the closing of the circle at death in a weariness of life, there is also an active happening there which, bound though it is to the biological process, does not itself end there but may appear still progressing even at the most advanced age. The very old, though biologically deteriorating, can be 'youthful' in nature, starting something, taking a new departure, full of hope and attentive. The life of finite man is then grounded in finiteness and becomes as it were a 'refining out' (a distillation) of the soul. The creative inner awareness of youth and its easy forgetfulness is followed by the preserving memory of middle age and the potential refining of old age. All the ages of life are simply a means for this inner awareness; they build on each other and do not simply replace each other and they are held together by a unitary factor which transcends them all. There is a growing inner awareness of Being, achieved by the historical realisation of a psyche, which is in danger from its first step into reality, which deviates and recovers itself and becomes more clearly defined, profound and decisive through the years. Such is the life which as one age-epoch yields to the other is never concluded but actually breaks through the sequence of the years for him who is aware and grasps them firmly.

Man in his *finiteness* stands *within the infinite*. There can be no lasting coincidence of the two in Time. Only the moment provides a place where both meet in order to break the finite phenomenon apart once more. Hence all human activity and thought is at the service of something incomprehensible within which it operates and by which it is absorbed and overborne whether we like to call it fate or providence.

It is philosophical folly to want to see through this Other and find some way whereby the individual could as it were get control of it, first by knowing it and then by planning and action.

The indefiniteness and incompleteness that stigmatise the Being of the world and of oneself can be regarded by man philosophically but he cannot transform into something finite what remains as an infinity for him, since he stands within the infinite, takes finiteness upon himself, and in this existing situation he founders.

(e) *Here is a brief summary of the discussion*

I. Basic principles of the Human Being:

1. The human being is not merely a kind of animal nor is he any kind of purely spiritual creature of which we have no knowledge and which earlier

times conceived to be angelic. Man is rather something *unique*; he partakes in the series of *living things* and in the series of *angel*, belonging to both and differing from both. He holds a special place which has been continually affirmed by theology and philosophy and denied only in the positivist period. The phenomena of his existence extend to animal level, the fundamentals of his nature extend to godhead, in the Transcendence whereby he knows he is given to himself in freedom.

2. The human being is that which encompasses, which we all are: he is human existence in the world (*Dasein*), general consciousness, Mind—Reason and Existence itself. And he is the *way towards the unification of these modes* of encompassing.

3. The human being is an *open possibility*, incomplete and incompletable. Hence he is always *more and other than what he has brought to realisation in himself*.

4. The human being realises himself in certain definite phenomena, thoughts, acts and symbols and he repeatedly turns against every one of these well-defined phenomena and *against what he himself has firmly established*. When he no longer breaks out of these fixed forms he levels down into the average and loses the path of human life.

5. The ascent of man is impeded by three kinds of inner *resistance*:

(1) His own *inner substance*—the feelings, states, drives, the given element in him which tends to overpower him. (2) A continual *process of covering up and distorting everything that is*, everything that he feels, thinks and wishes. (3) An *emptiness of self-unfulfilment*. The individual struggles with these resistances: he makes himself material for his own inward labour, he forms, disciplines, trains and habituates himself. Against the process of covering up and distorting he sets up a process of illumination, an inner brightness and clarity. He tries to avoid the emptiness by his own inner activity, that is, he provides a groundwork for himself in decisions which he can hold on to repeatedly when sands run low.

II. Basic principles of the Knowledge of Man—its meaning and possibilities:

1. What the individual is *manifests itself at three levels*. (a) He is shown to be an empirical reality in the various ways in which he becomes *objectively explorable* as a creature of this world. (b) He *illuminates himself* from his own sources in making use of the different encompassing modes of his Being. (c) As he searches in the world and founders there he *unifies* and becomes conscious of his true origins and destination. It is only at the first level that he is accessible for scientific investigation.

2. For purposes of empirical research the *individual becomes a theoretical construct* of factors, parts, elements, components, functions and forces from which he is constituted. Should a *philosophic illumination* of this human being be possible over and beyond this then it can form a background for all the particulars of our knowledge of the empirical man but it cannot be a knowledge

in itself. To treat *illuminating ideas* as *objective knowledge* is a fundamental distortion of philosophy into a pseudo-science.

3. While in all the world there is no Being as such which we can know, the *human being is certain of himself*. In contrast to the inorganic cosmos, the knowledge of which remains as much in suspense as that of man's psychology (although methodologically it is better systematised than the latter), the human being is aware of himself beyond all the scientific knowledge that he can gain about himself. While knowledge *encounters limitations everywhere* which mark the margins of our comprehension, *knowledge of ourselves* encounters *limitations* where something becomes accessible to us from another source as *an unknown reality*.

4. In investigating the individual human being we are not only spectators of something other than ourselves but are human beings also. We are the very object of our enquiry. We not only come to know this fact or that but we gain a specific knowledge due to our being human ourselves. *Human life in itself* can be *tangibly felt as present* in the knower and the known when we find ourselves at the margins of what we can scientifically explore.

The margin between scientific knowledge and philosophic illumination runs there where the object is no longer thought of as a psychological reality but has become a medium for a transcendence into the non-objective; for example, the margin between the psychology of meaningful connections and the illumination of Existence itself.

5. *The individual as a whole never becomes an object which can be known.* Human life cannot be systematised. Whatever the complex unity in which we think we have caught the individual, he himself has always escaped us.

All knowledge of the individual has its own particular aspect; it always demonstrates *one* reality but not *the* reality of the man. It is knowledge in suspense and not final.

6. The individual is always *more than he knows or can know himself to be* or than anyone else knows him to be.

7. No man can be wholly comprehended and it is not possible to make a final and total judgment upon him. In practice judgments of this sort are unavoidable because decisions must be taken when dealing with persons and in this situation, in relationships of authority and responsibility, they are valid enough but insufficient in so far as they are based on knowledge alone. We can never strike the balance of a man and sum him up as we simply know him to be. It is prejudicial to review a man as an object and think scientific enquiry can treat him as a whole. Hence 'we want to keep our awareness of the inexhaustibility and the enigmatic character of every individual mental patient even in the apparently most commonplace case'.¹

¹ Z. Neur., vol. 1 (1910), p. 568.

§ 3. PSYCHIATRY AND PHILOSOPHY

(a) *What Scientific knowledge is*

Psychopathology is a pure science only in so far as it remains a science. It is however obvious that from time past psychopathology has found room for discussions, assertions, demands and therapeutic measures which are really devoid of any scientific character though couched in scientific terms. Faced with this situation the psychiatrist may ask himself: what is science?

Science is knowledge that is generally valid and compelling. It is based on methods that are designed deliberately and which can be tested by anyone and it is always related to individual objects. Where there are findings it carefully sifts the facts, not to go with the fashion but with a view to a universal and lasting application. What is known scientifically can be demonstrated and proven in such a way that any reasonable person at all capable of understanding the matter cannot evade the compelling truth of it. These obvious facts about science have been clouded by misunderstanding:

1. In the name of science we have been wrongly satisfied with mere *conceptualisation*, with mere logical method, mere clarity of thinking. These are necessary conditions for science but even when there they do not yet constitute science in its full and factual sense because they lack the objectivity which comes from actual experience. When simple thinking is confused with an objective knowledge science becomes lost in empty speculation and the resultant endless possibilities.

2. Science is wrongly identified with *Natural Science*. Some psychiatrists particularly emphasise the natural-scientific character of their methods, especially when in fact this is missing. In the case of physiognomic insights, meaningful connections and personality-types, natural science is confined to nature in the form of the somatic phenomena which can be causally grasped. Now natural science is indeed the groundwork of psychopathology and an essential element in it but the humanities are equally so and, with this, psychopathology does not become in any way less scientific but scientific in another way.

Science assumes an extraordinary number of different forms. Object and scientific meaning change according to the method used. We make a mistake if we play the one against the other and expect from the one what only the other can provide. The scientific attitude is ready to adopt any method and asks only for those universal scientific criteria: general validity, convincing insights (which can be proved), clarity of method and the possibility for a meaningful discussion.

(b) *Modes of scientific knowledge in psychopathology*

In the various parts and chapters of this book we have found ourselves on a number of different scientific planes. The scientific questions which were raised by the describable phenomena were answered in the four chapters of the First Part. Through differentiation of these objective facts we tried to see their

heterogeneous character. We next separated genetic understanding (Part II) from causal explanation (Part III) and in so doing illustrated clearly the gulf that lies between the psychology of meaningful connection and the natural sciences. Our concept of complex unities (Part IV) enabled us to reach a clarification of the ideas which are helpful in giving specific objective phenomena new contexts.

The life of the human individual as a whole, if it is to be known scientifically, demands that all these methods be used and yet they cannot comprehend it entirely. But it would narrow psychopathology down too much if the scientific approach were confined to any one particular kind of testability. We should not try to reduce science to an isolated plane of similar knowable facts. Any one specific method provides the possibility for some knowledge of a scientific character.

(c) *Philosophy in psychopathology*

But where is the place for the many non-scientific discussions of traditional and contemporary psychopathology? Should we simply drop them as not belonging? Not so. They are the expression of something inevitable, namely, that philosophy is operative in every living science and that without philosophy science is sterile and untrue and at best can only be correct.

Many a psychiatrist has said that he did not want to burden himself with a philosophy and that this science had nothing to do with philosophy. Nothing can be said against that, inasmuch as the correctness of scientific insights in general and in psychiatry is not proved by philosophy. But the exclusion of philosophy would nevertheless be disastrous for psychiatry: firstly, if we are not clearly conscious of our philosophy we shall mix it up with our scientific thinking quite unawares and bring about a scientific and philosophic confusion. Secondly, since in psychopathology in particular the scientific knowledge is not all of one kind, we have to distinguish the different modes of knowing and clarify our methods, the meaning and validity of our statements and the criteria of tests—and all this calls for philosophic logic. Thirdly, any ordering of knowledge into a comprehensive whole and any clarity over Being as a whole from which the objects of research emerge can only be attained under the guidance of philosophy. Fourthly, it is only by being clear about the relationship between psychological understanding (as a means of empirical research) and philosophic illumination of Existence (as a means of appeal to freedom and transcendence) that a purely scientific psychopathology can come about which fills the entire canvas of its possibilities but does not transgress beyond its limitations. Fifthly, the life of a human being as a destiny is a medium for metaphysical interpretation; it allows us to detect the traces of Existence itself and read the coded messages of transcendence. But every attempt at utterance in this field, always an untestable one (which philosophically may be of the deepest significance for man), is of a completely different order from science and clouds the scientific aspects of psychopathology. Sixthly, practice applied

to people and hence in psychotherapy also calls for more than scientific knowledge. The inner attitude of the doctor depends on the kind and degree of his own self-illumination, on the strength and clarity of his wish to communicate and on the presence of a faith which takes the load, mutually binds and is itself full of substance.

Philosophy therefore creates the space for all the operations of our knowledge. Within this space knowledge finds its measure and its limitations as well as a ground on which it can maintain itself, grow practical and gain in content and significance.

The psychopathologist, if he is to keep this space free and gain ground for his activities, must set his face against every attempt to create an absolute and to claim that particular methods of research are the only valid, single objectivities, the only true Being as such. He must also take sides on behalf of meaningful understanding in the face of biologism, mechanism, and technics without denying them their validity within their own appropriate area. He has then to set his face against any attempt to turn scientific knowledge as a whole into an absolute so that consciousness may be kept free and with it the effectiveness of life at its source, which gives all practice its meaning. In this he stands on the side of differentiation as against a general confusion and of synthesis as against isolation. He is against the confusion of science with philosophy and of the physician's role with that of a saviour. But he is also against an isolation that plays off one thing against another instead of keeping them properly apart.

To sum up: If anyone thinks he can exclude philosophy and leave it aside as useless he will eventually be defeated by it in some obscure form or other. From this springs the mass of bad philosophy in psychopathological studies. Only he who knows and is in possession of his facts can keep science pure and at the same time in touch with individual human life which finds its expression in philosophy.

(d) The basic philosophical positions

Together with the basic enigmata which knowledge discovers empirically (§ 1), the insoluble problems presented by practice (§ 5) provide the starting point for philosophic reflection. To have an open mind for these problems is just as much a demand for veracity as a source for philosophy, while the unquestioning presupposition that everything is in order, can be known and calculated or could anyhow be adjusted in principle given good will and increasing knowledge, is not only an unphilosophical expression but shows the lack of a scientific critique.

Psychopathology itself cannot show how philosophy should proceed. I would like to indicate once more just a few basic positions. Indeed they are not accessible to any scientific approach in the empirical and mathematical sense but belong properly to the field of philosophy which keeps to questions of form and in this respect achieves universal self-evidence. We shall not develop these fundamentals but simply give the various positions as such:

1. *Being itself*, no matter how it is objectified, cannot be adequately grasped but is always something *unobjective and encompassing* from which the objects emerge for our consciousness in the subject-object division.

2. Science is limited to *objectivity*. *Philosophy* accomplishes itself in objective ideas which do not mean objects as such but their transcendence and in this way they bring that which encompasses to life.

3. *That which encompasses* is either what we ourselves are (as Human Beings—Dasein, Consciousness as such (general consciousness)—Mind, Reason and Existence itself) or it is Being as a whole (the World and God).

4. The *sciences* through knowledge provide a *springboard* for thought which transcends. It is only where scientific knowledge is at its fullest that we first have the experience of *really not knowing* and in this not knowing we transcend the situation with the help of specific, philosophic methods. But the sciences also tend to *obscure Being itself* by the knowable facts and keep us tied to preliminaries without end. They tend to make absolutes of our limited insights and convert them into a supposed knowledge of Being itself. They tend to make us forget the essential and restrict our free view of phenomena, narrow down our experiences, images and ideas to rational definitions and paralyse our psychic activity with rigid concepts that follow from too much learning and knowing. But it is a mistake to complain that we know too much, that knowledge is a tyrant, that there is nothing more to know and that knowledge paralyses life. There is no need for this to be so and it only arises from a misunderstanding departure from true learning.

5. The fundamental error of scientific knowledge is the *conversion of philosophical thought into a supposedly objective knowledge* about something. Such conversion happens in everyday thinking just as much as in the sciences. One such conversion is that which turns existential illumination into psychological knowledge, turns freedom into a factor of empirical existence and chooses the individual human life as a whole, mistakenly, for its theme. Mistakenly, because human life as 'this individual as a whole' always remains that which encompasses, the Being which we are, and recedes behind every attempt to objectify or systematise it, even when we call on the most extensive of the complex unities that form the content of our knowledge. But we should not arbitrarily conceive of that which encompasses in the same way as objects in the categories of event, causality, substance, force, etc., although when we make comprehensive statements we tend to use such expressions which we have immediately to treat with reserve.

(e) *Philosophical confusion*

To be at the mercy of some disguised philosophy brings confusion into science and into the attitude of the scientist. The confusions are endless and therefore we will only discuss a few examples of them:

i. *The transcending movement of philosophical thought* may be a speculation that becomes a fuller awareness of Being, an illumination conferred by

Existence itself, a call from Transcendence itself. If this movement is converted into objective assertions and prescriptions, directions and declared goals, then our thought about life itself may become a characterless sophistry, and existential illumination the subjective egocentricity of psychological interpretation. The code-messages of Being, deciphered by the transcending thought, may then become concrete objects for credulous belief and the philosophic conception of eternity the bottomless negation of time and history and so on. The movement of transcendence into truth is in every case the rise from the concretely meaningful to what transcends it and the movement into untruth is the defection into the absolute of the restrictedly known object and a deployment of one's ideas within the endlessness of the finite.

From time to time in psychopathology a movement has occurred which sought to contrive some knowledge of the whole by means of a large-scale design which would comprehend the profoundest psychic forces and penetrate behind phenomena to their foundations. Such designs or theories, as they have been called, were specific constructs and as such were limited aids to explanation but in fact as total points of view which aspired to a value of their own they were philosophies. Corresponding to the positivist character of the past century they couched themselves in the terms of the natural sciences and of psychology. Methodologically they were all equipped to evolve an ability to interpret every reality. They evaded decisive alternatives and therefore any proof or disproof. Their methods are marked first by an endless repetitive sameness (tautology), secondly by circular arguments (the vicious circle) and thirdly, by an arbitrary basing of the individual case on general principles already accepted. Now it is noteworthy that these various theories, which mistaken as they are cannot belong to science, can at the same time be different methods of expounding philosophic truths. As what they say is inaccessible to scientific proof, the criterion of their possible inherent truth must lie elsewhere. When they strike the truth they lay no claim to an objective knowledge of a compelling character. They prove themselves in human life which understands itself in them. They are characterised by their content which expresses itself in circular fashion (every great philosophy thinks in this way but so does every poor one also, as, for instance, materialism—the phenomenal world is a product of the brain, the brain is a part of the world, thus the brain produces itself). Their truth rests in the creative step which breaks a way through the endlessness into a concrete and historical presentness of Being.

(f) *Ways of looking at the world (Weltanschauung) passing for scientific knowledge*

It is the psychotherapists rather than the psychiatrists who have often been tempted to let their theories become movements of faith and their schools a number of sects. There are, it is true, psychotherapists who are significant and wholly independent people. But for the majority some close cohesion is a necessity since it is only this which gives them as it were some objective

authority in the name of which they can act and from which they can derive the feeling of an absolute knowledge and superiority in relation to other sects and schools. The famous example from the past is Freud and the movement which he founded and led.

In 1919 I characterised this movement as follows: In so far as psychoanalysis contains a feeling for genuineness and truth Freud has influenced many in their outlook on the world. But this feeling can be encountered at a more profound level and more acutely in the works of great self-revealers such as Nietzsche and Kierkegaard. Freud cannot be compared with psychologists of this sort. He keeps his own self in the background and does not become involved. He says that one should analyse one's dreams and that this is how one comes to comprehend psychoanalysis. He gives dream-interpretations in the case of others but on his own side remains inscrutable, although in his main Opus about the dream he also reports some of his own dreams which are mainly innocuous and interpreted within certain limits. But above all he shows a peculiar imaginative poverty in the deductions he draws as to meaning. It is almost always the crudest matters that are offered for our understanding. The mass of ordinary sensual people, city dwellers with their chaotic psychic life, recognise themselves in terms of Freud's psychology. Unlike Freud, who appeals to the vital and sexual elements in man, it is also possible for us to appeal to man's mind and spirit and develop human psychology in this way. Freud often sees with great acuteness what are the results of a repressed sexuality but he never once asks what happens when mind and spirit are repressed.

There is a close connection between the psychology of meaningful connection and the personality that is drawn towards it. Hence one always asks what kind of individual sees something here and affirms or rejects it. The battle between the understanding insights becomes a battle of personalities who 'mutually understand' each other and so endeavour simultaneously to grasp and destroy the mistaken theories of the others. Freud himself makes use of this method when he assesses the resistance of psychologists and psychiatrists to his theories as follows: 'Psychoanalysis wants to bring into consciousness what has been repressed in psychic life and he who passes judgment on it is himself a man who has such repressions and may perhaps only just be able to maintain them. It must therefore be bound to raise in him the same resistances it calls up in the patient; such resistance easily finds itself disguised in an intellectual rejection . . . we frequently find the same thing with our adversaries as we find with our patients; that is, a conspicuous affective influence plays upon their powers of judgment in the direction of a derogatory one.' This way of carrying on the battle belongs to the psychology of meaning. Thus a psychiatrist has replied—though much more pedestrianly—that in psychoanalysis we are dealing with credulous beliefs and mass-psychoses. This kind of battle where people intrude personally into each other's psyche can become a malicious matter and a struggle for power and superiority. But it can also be a battle of love and can establish the deepest of relationships between man and man. Freudian psychology seems in the main adapted to the first form of fighting. The important thing is to force the other into the situation of being psychoanalysed and communication is in fact not on the same plane.

If Freud's personality were to be clearly revealed so that we could fully comprehend the world of his psychological ideas, he would have had to be psychoanalysed. But as it is we cannot see the person clearly in his work. He shows a restrained

personality in his writing as opposed to the overt exaggeration of some of his pupils to whom nevertheless he supplied the material. He does not disown them and carries a part responsibility for them. In comparison with them he is moderate, however surprising and daring his themes may be. His presentation is elegant and at times fascinating. He avoids any appeal to philosophy, never poses as a prophet and has in fact aroused a universal philosophic interest.¹ Freedom from one's shackles without the pain of new ones, permissiveness, scepticism and resignation; this is an outlook on the world meet for many neurotics, artistic bohemians, the fanatically minded and any who would gain a supremacy through psychology. It is necessary to see the Freudian devotees to grasp what forces and tendencies are hidden away in their work. But Freud himself remains personally veiled, an understanding psychologist who, in contrast to other such great psychologists of history, has managed to keep himself in hiding.

Socially the effect of Freud's work seems to have been the founding of a sect, brought about by his organisation of an association and his expulsion of renegade pupils. Freudianism has become a movement of faith within the guise of science. There can be no discussion of faith, but one can sometimes learn from people with whom one cannot discuss. Freudianism as a whole is an existing fact which has made it universally clear that psychotherapeutic sects as such must be something like substitute-religions, their teaching becomes a dogma of salvation and their therapy a redemption. Such sects enter into a misleading and unjustified competition—first with medical science; secondly with that unsectarian humanism which, usually founded in Christianity, tries to help the foolish, find a way for the derelict, look realistically at a man but never give up hope and wants to do good as far as possible and even consider the impossible as possible for God's sake; thirdly, with genuine philosophy, that seriousness of inward action which Kierkegaard and Nietzsche illumined for us even if they have not pointed out the path explicitly (which would be impossible). From the point of view of history these psychological sects are all one and the same because without effect. But within psychopathology they present a danger of a philosophical kind. They tend to nihilism, a callous fanaticism and an arbitrary scepticism. In the end they always work to existential ruin. But psychotherapy does not have to support itself on views that lead to the formation of sects. Indeed for a psychotherapy that is supported by science and philosophy the vital matter is to prevent itself being seduced into any such sectarianism.

Kunz² developed an interesting criticism of Freud's work which seems actually related to my own but makes a different assessment. In Freud's method he recognised a new way of getting psychological knowledge 'which it is true had already

¹ All theories tend to be presented with the enthusiasm of a world-outlook. Freud had none of this and espoused a style of sober objectivity, but his influence became the starting-point of a universal movement which finally moved a long way from him and yet was animated by him—e.g. C. G. Jung, *Die Psychologie der unbewusste Prozesse* (Zürich, Rascher, 1917); A. Maeder, *Heilung u. Entwicklung im Seelenleben* (Zürich, Rascher, 1918).

² Hans Kunz, 'Die existentielle Bedeutung der Psychoanalyse in ihrer Konsequenz für deren Kritik', *Nervenarzt.*, vol. 3 (1930), p. 657.

been used by Nietzsche'. 'It is precisely the "human aspect" of man which is methodically put to the question, just as Nietzsche and Kierkegaard had previously done it in an indirect and unsystematic way. Fundamental doubts are cast on the truth and evidential value of self-introspection and this is replaced by what one might call an "existential test". It does not matter what anyone knows or says of himself nor what interpretation he makes of himself—unintentional self-deception is a widespread human trait—it only matters what "he is". And "being human" is far from being unambiguous, transparent and clear; it is something fundamentally dubious, equivocal and obscure. Hence adequate knowledge must be forcibly obtained by overcoming resistances. This is a fundamental reality of psychoanalysis which Freud misunderstood in the interpretation of his own work. We have to grasp the peculiar role of psychoanalytic teaching in the light of this. First, its power of conviction which is not that of a biological or empirical knowledge.' As he goes on to say, 'The analysts have experienced the truth of analysis in a way which carries vastly more force and power of conviction than the usual evidence of logically formulated insights—since existential truth experienced in personal communication is extremely effective, they can therefore hardly give way on this in the face of much more restricted formal evidence of a theoretical kind.' In the second place it appears that the psychoanalysts themselves allow just as little as their opponents for a developing basic reality which tries to reveal itself here. He says, 'They cannot tolerate the fact that takes place in every analysis: that is, the disintegration of the whole Existence of the individual. Hence the demand for fresh security supplied by the well-defined limits of the body of theory.'

Kunz also differentiates Freud from the rest of the analysts who are his orthodox pupils. 'Is it chance that it is always the "unanalysed" Freud who time and again breaks through the psychoanalytic horizons and never his analysed followers? . . . Why are pupils with a viewpoint of their own persecuted with such bitter antagonism? The necessities of the moment and foreground facts cannot wholly cover the power-tendencies taking hidden effect in the analysis. Any sovereign attitude to psychoanalysis necessarily puts the latter to question and that means a loss of power, which is something that neither Freud nor his followers can tolerate.' The dogmatic theory therefore not only gives security against events which have been set afoot (as happens with all existential psychology and philosophy) but becomes a supreme tool for power drives which do not necessarily belong to psychology or to the existential trend as such. The consequence is 'the psycho-analytic body of theory is not nearly as secure as the analysts—with the exception of Freud himself—pretend and must repeatedly pretend to their patients and opponents as well as to their own circle'.

I myself cannot follow Kunz in this recognition of psychoanalysis as an existential event in the course of interpersonal communication. When a few decades ago I studied Freud thoroughly I only saw the non-existential, nihilistic principle of his work which seemed to me destructive both of science and philosophy. Later I have only sampled his work and that of his followers and this has confirmed me in my opinion. Yet it is difficult to convince others in respect of these deeper judgments. Anyone who can see the point at all will see it in a flash.

(g) Existential philosophy and psychopathology

The matter of the Will, which psychopathology should not lose sight of, has brought to our attention the existential or existence-dissolving drives at

work in the sectarian movements of psychotherapy. In these movements of faith, there is no question of mistakes which can be discussed but a problem of truth or falsehood which is answered (through superficial and in itself sterile discussion) by faith or ideological conviction. Some psychiatrists are perhaps too easy-going in their acceptance while others may be too hasty with muddled objections. There are questions in every case which the psychopathologist cannot answer but can only grasp in essence while excluding them from the field of pure science. But if he turns to the efforts of modern existential philosophy and uses *these ideas as a means of acquiring psychopathological knowledge*, making them an actual element of psychopathology itself, he is making a scientific error.

1. *Existential illumination and the psychology of meaning.* On page 310 we discussed the intermediate position of the psychology of meaningful connections. Its ideas have a double significance. They either pave the way towards an empirical scientific psychology which will help us to establish facts and acquire a practical knowledge with which we can achieve certain effects or they prepare for schemata of possible meanings, which will help us to evoke response, rouse what is dormant and unconscious by reflecting it as in a mirror, and exert our influence by starting trains of thought, and encouraging inner activity and involvement in symbols. In the former case we conduct ourselves scientifically and impersonally; in the latter, philosophically and personally. Psychological ideas as such are never the form in which contents of faith are communicated. They are the means which philosophy uses as it illuminates Existence and they cease to exist as such in philosophy when it appeals to Transcendence.

The thinking which illuminates Existence depends on the psychology of meaningful connections and is itself a stimulus to such a psychology. So too, although the philosophy of Existence itself is not a field for psychology, every psychologist becomes in practice a philosopher illuminating Existence whether he knows it or not and whether he wants it or not.

2. *Ontology and the study of psychological structure.* Within the tradition of existential thought since Kierkegaard and Nietzsche, Heidegger tried to create a definite ideological framework, which he called 'fundamental ontology'. He elaborated a number of 'existentialia' (analogous to the 'categories' of objective immediacy). These 'existentialia', such as 'Being-in-the-world' (Dasein), Emotional tone (Stimmung), Anxiety (Angst), Care or Concern (Sorge) were to characterise the ontological element, which preconditions all human existence and conduct and determines them, whether they are close to source and primary or watered down, derived and secondary in the ways of the 'average man'.

The concrete illustrations are valuable but I consider Heidegger's attempt to be a *philosophical error* in principle because it does not lead the student on to philosophise in his turn but offers him a total schema of human life as if it were knowledge. The theoretical structure gives no help with the individual's real

historical existence (as a means to heighten or preserve a reliable way of life) but becomes a way of obscuring things once more. This is all the more disastrous since the language used is closest to Existence itself yet misses its actuality and can rob it of its true intensity.

Our interest in this ontology of human existence, however, is its possible value as a theory *when applied to psychology* (and what it may help to produce in the way of empirical knowledge); also whether it has value as a possible construct for particular meaningful connections. But it cannot become a theory of the psychological structure of man which will absorb our entire psychopathological knowledge, put it into a new light and order it accordingly.

Kunz considered that 'existential psychology can theorise as well as concretise' but I would like to contradict him as follows: It is precisely the existential as such which is not objective; if it should become so, it is in philosophical terms falsified. I agree with him when he favours 'a scientific enquiry into the nature of man that is existentially rooted'. But here he is talking of the demands on the investigator, not about the methods and content of the investigation.

Psychology takes psychic material as objective and present. But ontology does this too in fact and conceptually defines it in its own terms, all the more misleadingly since it has made the non-objective a principle of its operations. The less there is of the methods of mirrored illumination, evocative penetration into freedom and suspension of one's concepts within 'ironic' circles of thought and the more there is of demonstration, exposition and structuring of material, the more ontology becomes a theory of what is simply present and available.

Those authors who apply this ontology in their psychopathology seem to me to be in constant contact with philosophic essentials but to be treating them as if they were something objective, known and discovered. In this, philosophy is lost sight of and no real knowledge is acquired. In their writings there sometimes seems to me a short-winded attempt at theology and philosophy which misapprehends itself as some supposed piece of knowledge. I miss any decisive reaction to ideas and methods which in a philosophic sense conceal, destroy and indeed exclude human life; in short, any reaction to the 'devil' in psychology.

3. *Four different areas of thought with their specific methods.* In summary we have to distinguish:

(aa) *Possible schemata* for the psychology of meaningful connections (cp. chapter I in Part II). These have a double significance:

(bb) Within the medium of objective meaningful phenomena (expressive gesture, actions, bearing, productions) they lead through understanding to a knowledge of the genetic connections between *empirical* psychic facts.

(cc) Alternatively they are a means whereby thought can illumine the facts and lead to a *philosophical appeal* (a path which the doctor takes in his actual practice).

(dd) An ontology is built up by taking certain psychological expressions and adding a philosophical attempt to transcend them into the origin of 'what is', into Being itself. Such an ontology falsifies the *philosophic effort* through ambiguity: though a dogma of Being, it makes constant appeal to transcendence; at the same time through a pseudo-knowledge, it seduces one to neglect any vital and responsible philosophic effort, to evade it or actually fight it. Once this ontology is thought to provide a fundamental knowledge for the comprehension of life and its psychological facts, it leads psychology astray as well. Indeed a decade and a half of such effort has not brought any new knowledge to psychopathology, only a few excellent descriptions.

4. *To question the nature of something is not to question its potential use.* The demand for the investigator to make such distinctions as the above means that he should not mix up the methods and the goals of his thought. Whichever path he takes he should try to reach maximal clarity and wherever possible acquire a knowledge that is unexceptional. It does not mean that the psychopathologist should give up the attempt to illuminate Existence nor that the philosopher should abandon psychopathology. It is not a matter of robbing science of something integral but of clarification within that science. We should not moreover be deflected from the essence of the matter by questions of terminology; one can of course *call* a large part of philosophy 'psychology' and then the decisive matter will be the differentiation of method, meaning and aim within the entire field of this 'psychology'.¹

(h) *Metaphysical interpretation of illness*

The fact of the psychoses is a puzzle to us. They are the unsolved problem of human life as such. The fact that they exist is the concern of everyone. That they are there and that the world and human life is such as to make them possible and inevitable not only gives us pause but makes us shudder. This concern is one of the mainsprings of our desire for psychopathological knowledge.

Metaphysical interpretations of being ill are not a matter for psychopathology as a science. Whether illness is understood in religious or moral terms as guilt and atonement or assessed as some derailment of nature ('had God so foreseen he would not have created the world') or whether it is interpreted as a testing challenge to the self or a constant sign of human powerlessness, a memento of human insignificance—these are all mere expressions of the general concern and are not in any sense insight. By interpretations such as these man reassures himself about this really unbearable fact; they may help some individual patients to a self-evaluation, console them or emphasise their misfortune.

Now there are interpretations, of schizophrenic changes in particular, which hover between a description of actual experiences and a metaphysical interpretation of these so that the reader has constantly to be separating out

¹ Cf. the comments of J. Meinertz, *Psychotherapie—eine Wissenschaft!* (Berlin, 1939).

what is true description and what is the underlying important thing and what is metaphysical and existential interpretation. The following example shows this hovering between the actual experience, theory and philosophy and the penetrating as well as the exasperating character of such confusions:¹

At the beginning of schizophrenia—as the writer puts it—the patient is torn out of a haven of ‘togetherness’ into a new and insubstantial mode of existence. In this sense we have to understand it when a patient may say: ‘one loses the most elementary sensation of being oneself’ and ‘feels driven from one’s own ground and from one’s own body’. ‘Thought has broken bounds and the self is only a spectator.’ ‘Ideas take on a life of their own.’ The writer goes on to describe and interpret: The former world is estranged for the patient and has no more significance for him. The change in basic mood, an expression of his changed Being-in-the-world, discloses a new world to him as the one he knew declines. The patient experiences a nothingness unless he finds a home in the delusional structure. The new reality of a world which is constituted of hallucinations and delusions is peculiarly devoid of substance. Therefore it is not real to the patient in the sense of his previous reality. But it is real in so far as it is effective for the patient and existentially significant. Life stands still for the patient, the future unfolds itself simply as a suspended, anticipatory dream, not as concrete self-realisation. Life can still stream on in moments of illumination and ecstasy but it no longer develops into the future. Existence itself is only a profound *coming upon oneself* in the isolation of a life that has lost all continuity. And yet the patient still somehow understands what defeats understanding and it becomes illuminated by his past. Thus the schizophrenic himself exists in an insubstantial unreality. His present suspended dreamlike way of life has thrust him out of the world with which he was familiar into a world without foundations. He is no longer at home anywhere, not in togetherness and not in himself. He experiences the destruction of his historical Existence itself as the annihilation of the meaning of his life, as the end of his world.

Here reflection on the factual situation and the radical fate of a patient as seen from the point of view of a healthy person is mixed up with patients’ utterances and certain contents of their delusional experiences in a total effort at understanding, which is in no way the real or true self-understanding of the patients themselves but a development of the more upsetting elements as they appear to a healthy person.

§ 4. THE CONCEPT OF HEALTH AND ILLNESS

(a) *The doubtful nature of the concept of illness (Krankheitsbegriff)*

Everyone uses the concepts of healthy and sick when judging the phenomena of life, human performance and people themselves. The naïve certainty with which such concepts are used is often surprising and so is the anxiety which invests them. We will deride people and dub them with psychiatric labels and yet look askance at psychiatrists as ‘born ignoramuses’ who have set up a sort of ‘Inquisition’ without its blood-stained seriousness. It may sometimes

¹ A. Storch, ‘Die Welt der beginnenden Schizophrenie: Ein existential analytischer Versuch’, *Z. Neur.*, vol. 127 (1930), p. 799.

be 'the thing' to despise the 'psychiatric point of view' but the same individual who expresses this scorn may on another occasion talk of 'degenerate' and 'unhealthy' when faced with certain personalities, psychic phenomena or performances.

If we collect examples of the way in which the concept of 'sick' is applied we find ourselves gradually knowing less and less what healthy and sick may mean. Anyone who applies these concepts and finds himself driven into a corner usually points in the end to Medicine which determines empirically and scientifically, and has so determined, what is 'sick'. But this is outside the question. The medical person is least of all concerned with what healthy and sick mean in general. He is scientifically concerned with a host of living processes and well-defined illnesses. What 'sick' in general may mean depends less on a doctor's judgment than on the judgment of the patients and the prevailing conceptions of the contemporary culture. With the great majority of physical disorders this is not so noticeable but with psychic illnesses it is very much so. The same psychic state will bring the one individual to the psychiatrist as a sick person while it will take another to the confessional as one suffering from sin and guilt. Among doctors there has been much lively discussion on the question of 'sick or not' in relation to the so-called traumatic neuroses, those post-accident states where compensation is payable if the person is 'sick'. Here the judgment 'sick', as made by the patient in the light of his material interests, comes in conflict with society's judgment 'not sick' and the battle is fought out in the head of the assessing physician, in the last resort without result.

(b) *Value-norms and statistical norms*

If we consider the host of ways in which the concept of illness has been used and look for a common factor we find no constant similarity between any of the forms of being or events that have been called 'sick'. Rather the only single thing in common is that a value-judgment is expressed. In some sense, but not always the same sense, 'sick' implies something harmful, unwanted and of an inferior character.

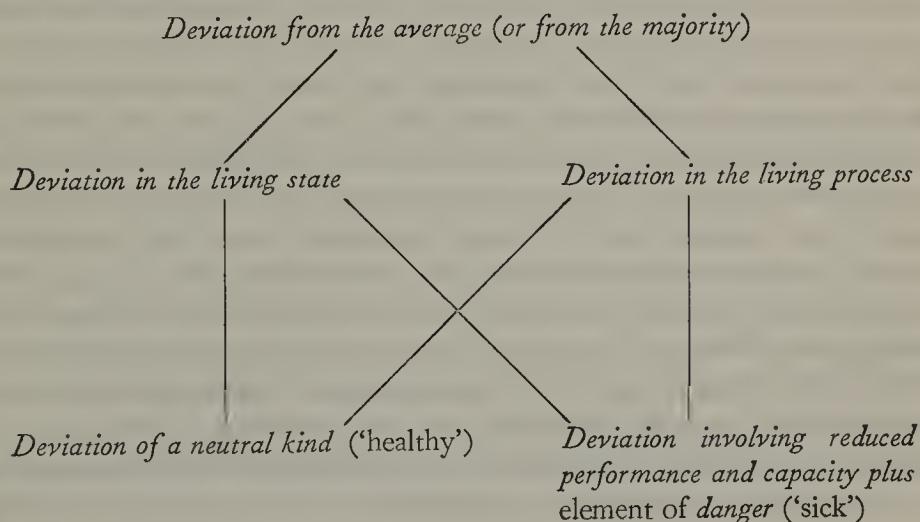
If we want to get away from value-concepts and value-judgments of this sort we have to look for an empirical concept of what sickness is. The *concept of the average* affords us such a concept. Healthy then is what accords with the majority, the average. Sick is what is rare and what deviates beyond a certain point from the average. We shall see however that this does not bring us any solution of the problem.

(c) *The concept of illness in somatic medicine*

The situation in the case of physical events is relatively simple. What is desired is life, long life, ability to procreate, physical capacity, strength, little fatigability, absence of pain, a lasting state in which the body, apart from pleasurable feelings of its existence, is disregarded as much as possible. This is all so obviously desired by everyone that the concept of physical illness attains

a far-reaching constancy. Medical science does not consist in elaborating these standards to arrive at a general concept of illness any more than it feels it should discover a single remedy for all its cases. The doctor is no wiser if a general meaning for 'sick' is established. His function rather consists in ascertaining what precise kind of state or event is presenting itself, on what it depends, how it proceeds and what will affect it. Instead of some general concept of illness, a mere value-judgment, he creates a wealth of concepts regarding different events and forms of Being (e.g. injury, infection, tumour, decrease or increase of endocrine secretion, etc.). Nevertheless, as the whole problem derives originally from the general value-norm and remains tied to this through the doctor's therapeutic aims, he will tend to give the term 'illness' to all those concrete concepts of Being which he himself has created and where any kind of value-judgment is in fact minimal.

The transformation of the concept of illness as a value-concept into a collection of concrete concepts of Being ended in forcing the general concept of illness to divest itself of any element of value-judgment. The concept of what is average is an empirical concept of what concretely is. The average is to be taken as 'health' and deviation from the average as 'illness'—the average here is granted a certain conventional extent—a pure consideration of what concretely is. Looking at life, now as a *state*, now as a *process* (the flow of life in its entirety) we differentiate on the one hand those deviations from the average that belong to the state (e.g. anatomic anomalies, malformations, absence of iris-pigment, etc., and physiological anomalies such as pentosuria) and on the other hand those that belong to life as it flows (the disease-processes proper). So far all value-judgments are excluded and we can distinguish the patient's concept of illness as a mere value-judgment from that of the doctor's concept which is a total concept of what concretely is—based on an idea of what is average. It might bring us closer to actual practice if we reintroduced the value-judgment once more in a secondary position as the following diagram shows (after Albrecht):



For the moment the conflict between the concepts seems satisfactorily resolved. There are however the following theoretical difficulties: 1. In the majority of people we find phenomena, e.g. dental caries, which though an average finding is yet called 'unhealthy'. 2. There are deviations from the average in respect of longevity, exceptional physical strength and powers of resistance which one would never label as 'sick'. It would be necessary to introduce a third category of 'super-healthy' alongside those of 'sick' and 'deviation of a neutral kind'. 3. In fact we can practically never establish the average in the case of the living human body. Such ascertained averages as there are, are confined to anatomical measurements and to little else. One almost never knows what the average is.

Reflecting on this and remembering what really goes on in the doctor's thinking we can well appreciate that when the doctor thinks scientifically and speaks of 'deviations' he scarcely ever implies an average in fact but some kind of ideal concept. He may not have any preconceived clear norm for health but he is guided by some idea of a norm, e.g. when he calls dental caries a morbid condition. Repeatedly the concept of health suggests a norm that is not an average but a value-standard. But our knowledge of the human body does not presuppose this standard, it only has it in mind as an idea and the more we know in detail of the organ-relationships, the different structures and functions, the more we take hold of this idea. To know it completely would mean we knew life completely. Health is primarily a crude concept related to ultimate values such as life, capacity for performance, etc. The more we know of the purposeful connections of the living body—biological knowledge proper—the more we move towards a refined teleology and the clearer grows our concept of health as a normative biological concept which is never clarified entirely.

The accepted value-concept of health and sickness, from which empirical medicine sprang, and the aim to establish empirical medical concepts of 'what concretely is' not unnaturally come into conflict. This is mainly due to the basic phenomenon that the individual *feels himself* to be ill, *knows or wants to know* his illness and *adopts an attitude* to his illness. It is true that, speaking broadly, the feeling that one is ill coincides by and large with some objective somatic finding. That the patient then adopts an attitude, jumps from a perception of what he has thought to be an unimportant complaint to a judgment that 'he is ill' and that this either relates to a local deficiency in an otherwise healthy individual or expresses an awareness that the whole individual is sick—are all important facts for the patient's life-history but only of incidental importance for the somatic disorder. Conflict is felt only with the borderline case. There is either *somatic finding without any awareness of illness* or any corresponding degree of awareness (early carcinoma of the stomach, glioma of the retina) and then, as the patient lacks any sufficient ground in his own sensations, condition and perceptions, it is only with the help of the doctor's judgment that he can reach any medical insight; or there are *feelings of illness without any objective finding* when

people come to the doctor and feel themselves to be seriously ill but the doctor finds nothing, calls them 'nervy' and despatches them to the psychiatrist. All these borderline cases, where the somatic physician finds no coincidence between the kind and degree of his findings and the kind and degree of the feelings of illness, present us with the task (which is not impossible in principle) of finding the appropriate measure of subjective feeling by means of a medical judgment.

But with the psychic disorders the matter is altogether different and we are presented with a real problem. Either there is no somatic finding at all or the inappropriateness of the patient's attitude is part of the illness or there may be specific symptoms arising from a determination to be ill.

(d) The concept of illness in psychiatry

In somatic medicine discussions about the concept of illness showed themselves to be of relatively little importance. They are of interest for those who are specially attracted to questions of principle. But in psychiatry these questions become of much theoretical and practical importance.

1. *The application of value-norms and statistical norms.* Psychic value-norms multiply and in the end include all possible kinds of standards and these standards themselves become problematic. Even less than in the somatic field can we speak of some unitary concept of the 'sick person'. We can shed all such standards and think about psychic life in terms of averages and this has been done. But in fact we only know the average in the crudest of findings, such as school attainment, etc. In fact when judging whether something is 'unhealthy' we make much less use of the average as our starting-point when we are dealing with psychic matters than we do with somatic events. If we formulate a standard other than the biological one of maintaining life and the species, freedom from pain, etc., we would have to speak of matters like social adjustment (adaptability, co-operativeness), capacity for happiness and contentment, integrity of personality, harmony of character-traits and a constancy of them, full maturation of the human disposition, a concord of tendencies and drives, etc.

The multiplicity of psychic standards means much greater fluctuations in what should be styled as 'psychically sick' than in what should be styled 'somatic illness'—which by comparison seems almost constant. The application of the concept of illness to the psychic field in general remained in abeyance longer than its application to physical matters. It was thought that demons, guilt and wickedness were responsible rather than natural processes which could be studied empirically and their causes learnt. Then only idiots and those who were raving mad were thought to be ill, later melancholics as well, but during the last century the circle widened continually, particularly in relation to social usefulness. The vast increase in the number of hospital inmates rests on the fact that such people can no longer live under the complex conditions of modern civilisation, which continues to increase its demands on

social performance. In earlier days they could live in the country and work with others but were not harnessed to any social machine, as it were. The borderline for sickness therefore has been drawn according to what psychologically is a superficial point of view and, when anti-social tendencies appear, according to the viewpoint of police administration. There are different borderlines for the poor and for the property-owning and they are different again in a psychiatric clinic, a sanatorium and a psychotherapist's consulting room.

So the most heterogeneous of psychic realities have found themselves together under the general concept of 'ill' and still find themselves there. 'Ill' is a depreciatory concept which covers every possible kind of negative value. The simple statement 'ill' therefore in all its generality says absolutely nothing in the psychic field since the word includes idiots as well as the genius and can embrace everyone. We are in no way instructed by learning that someone is psychically sick. We are only the wiser when we hear of well-defined, concrete psychic phenomena and events.

The fact that value-norms and concrete concepts of 'what is' interweave continually in the word 'illness' leads to apparently unavoidable errors: the word 'ill' denotes primarily something with a negative value; but there is the immediate awareness that illness is a kind of being and assessment of it takes on an empirical-diagnostic character. With lay-medicine in particular the crude idea persists that one is either ill or not ill (the relics of demonology in rational form) and having passed the judgment 'ill' which rests merely on subjective standards, the one who passes the judgment comes after a while to believe that he really has some scientific knowledge here.

Wilmanns once expressed this neatly in conversation showing the paradoxical character of the concept of illness: 'Normality', he said, 'is a slighter degree of feeble-mindedness.' Logically argued this means—if we take intellectual giftedness as our standard—the majority of men are slightly feeble-minded. But the average, that is, the attribute of the majority, is the measure for health, and therefore slight feeble-mindedness is what is healthy. But slight feeble-mindedness is a term for something 'sick'. Therefore something that is sick is also normal. Therefore healthy=sick. This means the obvious dissolution of this pair of concepts if they are to depend on norms and averages.

Finally, the concept of psychic illness—which denotes some kind of deficiency—takes a surprising turn when it covers phenomena that can be and have been evaluated positively. Analytic pathographies of outstanding personalities have shown that illness not only interrupts and destroys, but that something is achieved in spite of it and even more that it can be the actual condition for certain performances. The morbid state can itself reveal the profound deeps and 'sheer cliffs of fall' universal to mankind.

I will desist from exposing the paradoxes which arise if one takes 'sick' in the psychic field to mean some unitary whole which carries a negative value. As scientists we want to know: what kind of phenomena are possible in the

human psyche? As practitioners we want to know what are the means whereby we can advance the very diverse desirabilities in psychic life? For these purposes we do not need the concept of 'illness in general' at all and we now know that no such general and uniform concept exists.

Out of all this let us make the following résumé: The point of view, widespread and in common use even by doctors, that gives factual importance to the question 'Is there a morbid element or not?' contains a vestige of those old ideas according to which illnesses were Beings who took possession of people. We may say: this is an event which is unfavourable from such and such a point of view or one which will probably or certainly bring yet more unfavourable events in its train (the beginning of a process leading to death, loss of capacities, etc.). But if we term something as 'morbid' in a general way we are none the wiser. In spite of this the general question 'Is it something morbid?' is put very often either to be settled with a negative reply or if the answer is in the affirmative to be taken directly as a moral excuse or as something depreciatory—in either case with an equal lack of justification.

2. *Speculations on illness and health in general.* We know that illness and health as such are far from unequivocal concepts but we will linger a little over certain theories which operate with these broad general concepts. They have no scientific value, it is true, but they open up vistas and possible attitudes to which we cannot be indifferent if we are thinking of human life as a whole.

(aa) *Biological illness and illness in Man.* If we put ourselves within the most extensive of the biological horizons, we see the source of illness lies: (1) in the way all living creatures live off each other, preying and devouring as exemplified in the existence of parasites and bacteria; (2) in the radical changes of environment which set excessive demands on some way of life that cannot adapt to them; (3) in the mutations which are unfavourable for life in a particular situation. Being ill belongs to living as such. The danger of living is the consequence of its perpetual tentativeness, but this tentativeness is the source of its increase and unlimited complexity. However, this tentativeness has to accept its losses which show themselves in the decline of achievement, in chronic ugliness and defect (adapted to a particular environment, but only to this) and in the foundering of even the most dazzling momentary success. Being ill is not only the lot of isolated exceptions in life but a part of living itself as an instant in its ascent and a risk to be overcome. Life proceeds by experiment and its course is at one and the same time success and failure, the gaining or the losing of a point.

Within this biological whole we find the *specifically human*. Man is exceptional among all living things. He has the largest potential scope and the biggest chances but with this goes the greatest risk. Thinkers have often conceived man's life as a whole in the form of a sickness, a disorder of living or a primordial disarray, a wounding of human nature through original sin. Nietzsche and the theologians speak with one voice on this though they mean very different things.

It is not mere chance therefore that poets have used symbols and figures of madness for the essence of human life in its highest and most horrible possibilities, in its greatness and decline. Thus Cervantes in *Don Quixote* and Ibsen in *Peer Gynt*, Dostoevski in *The Idiot*, Shakespeare in *Lear* and *Hamlet* (the poets took real traits from schizophrenia, hysteria, feeble-mindedness and personality disorder). It is not mere chance that all the world accepts the wisdom of fools. In the writings of psychiatrists such as Luxenburger we find some statement of what is specific to the sick human as such: 'Schizothymia is the problem of humanity itself: and the Norm is all that which comes within the scope of a wide variation, without those excesses which one would have to call psychopathic or the distortions which would be called psychotic.' Here we see generally the optimism which regards health as the essence of man, who normally realises in himself harmony, proportion, truth and completeness.

It is worth noting that madness has evoked awe as well as horror. The 'holy sickness' of epilepsy was thought to be the effects of daemonic or divine influences. Plato says: 'Now the greatest goods come to us from a madness which is lent to us by divine favour' . . . 'according to ancient testimony a madness sent from the gods is more desirable by far than mere human reasonableness'. Nietzsche poured his scorn on those who rejected the bacchic dances of the Greeks and the dionysian orgies as if they were 'popular disorders' to be mocked at and deprecated from a level of healthy smugness. 'The poor things have obviously no inkling how pallid and ghostlike their so-called health would have seemed to these others.' Nietzsche defines the cultured philistine as follows: 'Lastly, he invents a general effective formula "health", in respect of his habits, ways of looking at things, his likes and dislikes and dismisses every uncomfortable disturber of his peace under the suspicion of being sick or highly strung.' 'But it is a fatal fact that the spirit will descend with particular sympathy on the unhealthy and the unsound while the philistine is often spiritually lacking though given to a robust philosophy.' Both Plato and Nietzsche are speaking of illness not in the sense of its being less than health and sheerly destructive but as an enlarged state, an enhanced state, a state of creativity. Madness of this sort is more than health. Nietzsche asks: Perhaps there are healthy neuroses? In any case, where there is an awakened sense of the human abyss, and no possible pretext for ordering the world, no possible human ideals or genuine outlook on the world, madness and psychopathy acquire a human significance. They are an actuality in which such possibilities are revealed, which the healthy person conceals from himself, avoids and guards himself against. But the healthy person who keeps his psyche marginally exposed and who investigates the psychopathological will find there what he potentially is or what is essentially there for him, distant and strange though it may be, a message from beyond the actual margins of his experience. The fear and awe felt for certain forms of illness are not only historically matters of superstition but of lasting significance.

Novalis says: 'Our illnesses are phenomena of heightened sensation. They try to translate themselves into a 'higher force.' A modern psychiatrist writes: 'A neurosis is not simply a weakness but may be the hidden stamp of excellence in a man' (G. R. Heyer). The affection which a medical superintendent feels for the patients in his care and some notion of a meaning in mental illness may perhaps explain such paradoxical remarks as those of Jessen at a Congress of Natural Scientists in Kiel on the 21st of August, 1846, when he said: 'I have got to know at least 1,500 mental patients and treated them medically. I have lived among them and had more dealings with them than with sensible people. If I were asked to make a judgment as to the moral value of these mad persons compared with those who are considered sane, I could only make it in favour of the former. I have to admit that I have a higher esteem for those who are mentally ill, I like living among them, and in their company I do not miss my contact with the healthy; indeed to a certain extent they seem to me more natural and acceptable than I find people in general.' Broadly speaking he thinks only someone with a great deal of sensibility can fall mentally ill. Hence the conviction 'that it is much more of an honour than a disgrace for someone to fall ill with a mental disorder' (quoted from Neisser, *Msch. Psychiatr.*, vol. 64).

(bb) *Health*. A precise definition of health seems pointless if we see the essence of Man as the incompleteness of his Being. However, there are a whole series of general definitions:

The oldest is that of Alcmaon and he has many followers even up to the present: *Health is a harmony of opposing forces*. Cicero characterised it as a happy mutual relationship of the different psychic states. In modern times health is often thought to lie midway between opposites that are mutually bound and are kept unified in a common tension.

The Stoics and Epicureans valued health above everything in their opposition to every tendency to enthusiasm, to the exceptional and the dangerous. The Epicureans found health to be complete *contentment* with a *measured* satisfaction of every need. The Stoics felt that every passion, every sentiment, was an illness and their moral teaching was to a large extent a kind of therapy to destroy psychic disorders in favour of a healthy *ataraxia*.

Nowadays psychiatrists see health as a *capacity to fulfil 'the natural potential of the human lot'* (v. Weizäcker). Indeed one would like to know what that might be; or similarly: a *finding of the self*, self-realisation, or *full and harmonious integration into the community*.

The *various concepts of illness* are correspondent with these definitions of health: Illness is conceived as being: (1) a disintegration into opposites, an isolation of opposites, a disharmony of forces; (2) affect and its consequences; (3) disingenuousness as, e.g., a flight into illness, an evasion or method of hiding. The third definition has been particularly discussed. V. v. Weizäcker writes: 'When an individual in difficulties acquires the respectability of an illness and a social reaction is converted into a pathological symptom some falsification of meaning has taken place which provokes our respect for truth to some criticism.' 'The neurotic achieves an act of concealment and betrays this through his guilt feelings. We have also often seen a flare-up of guilt feelings

in non-neurotic, organically ill people. They fight with themselves in the prodromal stages as to whether they should give in or not or during convalescence whether they should remain ill nor not.' He therefore argues 'that health has something to do with genuineness and ill-health with disingenuousness'. This recalls the ideas of the older psychiatrists: the innocent never go mad, only the guilty (Heinroth); moral perfection and mental health are one (Groos); that is, where the innate drive towards the good develops freely no physical event can call forth a mental illness.¹ Here, too, belongs Klages' conception; psychopathy (personality-disorder) is a form of suffering brought about by self-deceptions that are vital to the person's life.

In contrast to all this comes Nietzsche's pronouncement: 'Healthiness as such does not exist' and his mistrust of every unequivocal, forthright, optimistic concept of health. v. Weizäcker hints at the paradox of human illness when he says that 'severe illness often means the revision of an entire life-epoch' and thus in another context illness may have a 'curative, creative' significance. He also emphasises, however, the 'law whereby the removal of one evil gives place to another'. The harmony of opposites is a limiting ideal: it is not a concept of what actually is and as a possibility it has no hope of fulfilment. Ataraxia and contentment bring an impoverishment of the psyche and disturbances arise from all that has been passed over and neglected.

3. *Structuring the psychiatric concept of illness.* Mad people do not exist as a particular species (Griesinger). Instead of regarding psychic illness in a summary fashion we must try to structure it in some way. The psychiatrist sets little store on the general judgment of 'illness'. The heterogeneous realities which he observes are ordered into a number of concepts according to what is there, whether for instance the presenting picture is one of a chronic state or a stage in a process. In the clinic or hospital large numbers of people are treated who do not suffer from any morbid process but only from some unfavourable constitutional variant, from their personality. Here in fact our science starts, in the field of the 'normal' and with the study of personality. Once psychiatry began to designate personalities as 'sick' it became simply a practical matter where to draw the line in regard to all the individual variations.

(aa) *Starting-points for defining psychic illness*

The concept of illness in psychiatry is characterised by the fact that the patient's attitude to his illness, his feeling of being ill, his awareness of illness or the complete absence of both, is not something additional to be easily corrected as in the purely somatic disorders but always an integral part of the illness itself. In many cases it is not the patient himself but only the observer of the patient who accepts the illness.

In the *observer's* case the starting-point is *something which cannot be meaningfully understood* whether this is a disordering of the meaningful connections by abnormal mechanisms or something 'quite mad', that is a radical break-

¹ Gruhle treats matters of history in vol. 9 (schizophrenia) of Bumke's *Handbuch*.

down of the possibilities of communication, a threat arising from incomprehensible motives. Differential diagnosis rests on distinguishing the different kinds of ununderstandability, slight symptoms which to the lay person do not appear at all morbid can be the indicators of a most serious and destructive process whereas florid phenomena (states of excitement, called furor) can be symptoms of a relatively harmless hysteria.

In the *patient's* case the starting-point is *what he suffers*, whether from his own existence or from something which he feels has broken into his existence in an alien fashion. Yet this happens to all human beings universally and the individual is faced with the question whether he is master of himself and how can he become so. For an affected person, however, the illness lies in some deviation from this normal happening, in the unprecedented nature of the event and in the actual content and style of the experience.

These starting-points for defining illness are not reliable. There is no concordance between the phenomena as first observed and the nature, severity and trend of the disease-process. The psychopathologist, therefore, penetrates to deeper levels by a number of methodical observations and by discovering what phenomena cluster together and the way in which they run their course, etc. As a result we now find three concepts of disease (see p. 605 for the three-fold classification).

(bb) The three types of psychiatric disease-concept

Disease is defined: (1) as a somatic process; (2) as a serious event which *breaks into* a healthy life for the first time and *procretes a psychic change*; a somatic base is suspected for this but as yet not known; (3) as a variation of *human life* far removed from the average and somehow undesired by the affected person or by his environment and therefore in need of treatment.

1. The psychiatrist seems rescued from the difficult concept of illness when he finds some *somatic* process as an essential part of the illness and can establish it objectively and define it. This reflects the basic attitudes of medicine and the natural sciences which only accept the somatic as the decisive factor. Psychopathology is only a means for finding physical symptoms. Physiology, not psychology, is the final goal for medical investigation. As physicians we have to be concerned with the body. 'If there were something like a mental illness we could do nothing to help' (Hughlings Jackson—as quoted by Sittig). Only those psychic events ought to be called morbid or treated as illness which are due to morbid processes in the brain. In fact there is a field of organic cerebral disease where the demand for a somatic basis can be gratified and where the psychic events are symptoms of a known physical event. But the difficulties which remain are by no means negligible. In scarcely a quarter of hospital patients do we know the organic basis for the disorder. There is no coincidence between the severity of the cerebral changes and that of the disorder. There are severe somatic disorders where the mind remains clear to the moment of death.

2. The majority of *psychoses in the three hereditary groupings* show no

somatic disorder of such a kind that one could diagnose the psychosis thereby. Hence the concept of illness is here primarily and wholly dependent on the psychic changes. In many cases it is true we find somatic phenomena on which we can base the supposition that underlying the whole there is a somatic event which we shall one day know. But in many cases there are no such phenomena. It is therefore probable that yet further somatic disorders may be defined and chiselled out of this area and be attached to the concept of the first group. But there will remain a field which will obviously still have to be grasped on its own though perhaps more clearly than we can do today.

When investigating these illnesses we would like to discover—as with the first group—‘basic functions’ in the psychic events, the disturbance of which could make the manifold phenomena comprehensible. We would not uncover, it is true, the somatic process but we would find what was the specific factor and particularly in the case of schizophrenia what was the new element in contrast to the healthy state. By purely psychological means we could discover something of the nature of the illness though the assistance of theoretical concepts would still be needed. ‘This purely functional consideration of psychic life which of course is not only advantageous when enquiring into schizophrenia but a fresh foundation for psychopathology in general has no precedent in the history of psychiatry’ (Gruhle). If we could but achieve indubitable results in this way we could define illness in this group as a disturbance of basic functions. Up to now this goal has not been reached but we are left with a multiplicity of theories and a host of descriptions.

3. In the case of the third type of disease-concept—the unwanted variations of human nature—we do not find any somatic basis in the form of an organic disorder nor do we expect to find it. The body plays a part as in all healthy psychic life. The illness—in spite of the gap between health and the neurotic mechanism—does not bring anything new in principle as contrasted with the previous state of health although developments can be initiated which prove ruinous for the psyche. There are basic properties of human existence which show themselves in the exceptional case more markedly, effectively and alarmingly than in the majority of people. This is the field which has given ground for the saying ‘all human life is a sickness’.

If we get a concrete knowledge of the third group some light is thrown in its turn on the psychic disorders of organic origin. Human life as such is involved at every point, the concepts of the natural sciences are indispensable but here do not suffice and everywhere we find a gulf between man and beast.

§ 5. THE MEANING OF MEDICAL PRACTICE

This book has been concerned with the science of psychopathology. In our reflection on the whole of human life we have still to discuss the meaning of medical practice and what this is once it becomes concerned with the human individual as such.

(a) The relation of knowledge to practice

It is demanded of psychopathology that it should serve practice and not infrequently it is blamed for not doing so. A sick person should be helped, a doctor is there to heal. His function is all too easily damaged by his pre-occupation with pure science. Knowledge on its own is useless and pure science results in therapeutic nihilism. Once we know what is there, can recognise it and safely predict what will be its course, the feeling grows that there is nothing more to do but hand the patients over to some kind of care, without expecting that we can really help them. This, so it has been suggested, might be a particular danger in respect of the severe psychoses and inborn abnormalities of personality.

On the other hand there exists an optimistic desire to be of help. Something should be done or attempted in all circumstances. People believe in effecting cure. Knowledge loses in interest when it does not serve any therapeutic purpose. If science fails one, then there is faith in one's art and good fortune; at any rate one will contrive an atmosphere of cure, even if this is only some therapeutic establishment that ticks over idly.

Both therapeutic nihilism and therapeutic over-enthusiasm are equally irresponsible. In both cases critical judgment is lost, on the one hand when passivity wrongly tries to justify to itself that nothing can be done and on the other hand when blind activity seems to think that good will and enthusiasm are in themselves worth while and can achieve something: that is, practice only needs aptitude not knowledge. But in the long run effective practice can only be based on the certainties of knowledge.

Practice in its turn becomes a means to knowledge. It not only achieves just what was intended but unexpected things as well. Thus therapeutic schools unwittingly foster the phenomena which they cure. In Charcot's time there was a wealth of hysterical phenomena which almost disappeared from the scene once interest in them had vanished. So too in the days when hypno-therapy emanated from Nancy and dominated the picture, hypnotic phenomena came into being all over Europe to an extent never witnessed again since then. Every school of psychotherapy with its own defined outlook, technical and psychological points of view, has its own typical patients. In sanatoria, we find the products of sanatorium life. None of this is intended, and as soon as we recognise the connection we want to find a remedy.

The basic fact remains that, through contact with patients, psychotherapeutic intervention and the actual experience of effect and counter-effect open up possibilities of knowledge which can never be gained when the risks of therapeutic experiment are merely contemplated. 'We have to act to deepen our knowledge,' says v. Weizsäcker.

Therapeutic intentions and the experiences which can only be arrived at through therapeutic activity provide us with a system of psychopathology which gives practical orientation to our scientific knowledge and enables us to

evaluate and order it from this practical point of view. Textbooks of psychotherapy are therefore to some extent the same as those of psychopathology. They are, it is true, limited by the practical horizon, but in so far as they report upon experience, they introduce something essential for the completeness of psychopathological theory.

(b) *The contingent nature of all therapy*

All therapy, psychotherapy and attitudes to patients depend upon the State, religion, social conditions, the dominant cultural tendencies of the age and finally, but never solely, on accepted scientific views.

The *State* lays down, or moulds by its policies, the basic human relationships, the organisation of help and security, the utilisation of resources, the giving or withholding of rights. There is no guardianship or detention in mental hospitals without State powers. Whatever the therapy, an arbitrary element is present which derives in the last resort from the authority and demands of the State. Every consultation takes place within a situation in which the doctor has effective authority, heightened by the clinic and his own official position. Where there is no statutory power to give a basis for this, power must necessarily be exercised through an authority, which in that case has to be personally acquired.

Religion, or its absence, determines the aim of the therapeutic relationship. When doctor and patient are bound by the same faith, they recognise something other than themselves that gives final decisions, judgment, direction and sets the frame within which the particular psychotherapeutic measures can take place. When these conditions are absent, the place of religion is taken by a secular philosophy. The doctor takes over the functions of the priest. There is as it were the idea of a worldly confession, consultations for the public on matters of the soul. Once the objective group sanction is put aside, psychotherapy becomes in danger of being more than just a means; it may become the expression of a more or less confused philosophy of life, an absolute one or one that changes like a chameleon, serious or mock-serious but always personal and private.

Sharing in something objective—whether symbols, a faith, the accepted philosophy of some group—is a necessary condition for any profound cohesion among men. People very rarely stick together as individuals out of a personal loyalty or simply find happiness in a transcendent destiny shared with one other human being. Many modern psychotherapists labour under the illusion that, when faced with neuroses and personality disorders, the highest possible expectation is realisation of the patient's own self, development of his powers of synthetic reasoning and a balanced human fulfilment in terms of his own personal pattern. Psychotherapy must be set within a frame of common beliefs and values. If not, the individual is thrown back to an extreme degree on his own resources, and even if he can respond only minimally to this, psychotherapy becomes nothing else than superfluous; if, however, in a total

atmosphere of disbelief, the individual cannot respond at all, psychotherapy may only too easily become a smoke-screen for failure.

Social conditions determine the innumerable situations in which the individual finds himself. The financial level of a social class, for example, may well determine the psychotherapeutic measures, which all cost time and therefore money when they demand long-term probing of the individual patient.

Science creates those pre-conditions for knowledge which are the only bases for definite goals in therapy. But science itself does not provide the goal though it gives us means for reaching it. Science, when it is genuine, makes statements that are of general validity. At the same time it is critical, for it knows what it does *not* know. Practice is dependent on science only in its methods, not as regards its aims.

In actual practice there are temptations to evade this situation, that is, evade the dependence on science and the fact that science is insufficient to provide us with all the reasons for our actions. Things are expected from science which it can never provide. In this age of superstitious belief in science, science is used to conceal unanswerable facts. Where decision can only be a matter of personal responsibility, science is called on to give an answer, on the basis of its general validity, as if it knew, even when in fact no such knowledge exists. Science, thus, seems to provide reasons for what has in fact come about through quite other necessities. This is the case when the doctor misses the mark in certain cases of compensation neuroses, criminal responsibility and in many of his psychotherapeutic directives.

A form of pseudo-science may be used to express something that is by no means known but only wished for, something simply conceived of, wanted and believed in. Science is then made plastic to suit the purposes of practice. A therapy that pacifies, obscures and reassures gives rise to conceptual schemata that are turned to the purposes of a therapy that asserts, decides, permits and forbids. Science becomes a convention and lends a scientific tone to psychotherapeutic practice analogous to the theological climate of earlier times.

A line of demarcation, therefore, has to be drawn within all types of therapeutic practice. Everything that is sufficiently grounded in general scientific presuppositions (which must be *de facto* accepted as valid) has to be separated from everything that is based on a religion (or on a concept of the universe or on a philosophy), or the lack of such: from this stems the whole direction, or lack of direction, of the therapy, its whole style or lack of style, its specific atmosphere and colour.

(c) *Legal steps, expert opinion and psychotherapy*

Psychiatric patients may sometimes break the law, become alarming or at any rate somewhat eerie to those around them. Something has to be done about them. The medical motive here is twofold. In the interests of society such patients have to be made *harmless*. In the interests of the patients themselves some attempt must be made at *cure*.

In many cases *public safety* demands the committal of the patient to hospital. He needs to be protected from doing violence. We want moreover to take him out of the public eye. We vary the form of segregation and try to make it humane so that relatives are satisfied and public conscience is appeased. Our own concept and interpretation of insanity involuntarily cause us to hide it away although it is one of the basic facts of human reality. In all our actions and thoughts we tend to simplify and dispose of it, free ourselves from looking at it properly, minimise its reality in our interpretation of it and make everything as comfortable as possible.

The interest of the patient calls for therapy. Committal to hospital is necessary for his own sake; for instance, to prevent suicide, to feed him, and carry out all possible therapeutic measures.

In actual practice there is a tacit presupposition that we all know what is sickness and what is health. Where this is a matter of common agreement and generally valid as with the majority of somatic illnesses, organic psychoses such as General Paralysis and the most severe forms of mental illness, there is no problem but there is a considerable one when we come to the vast number of milder cases, particularly the personality disorders (*psychopathies*) and the neuroses.

Whether the person is mentally ill or not is the practical measure for decisions in the individual case. How this decision is arrived at throughout different ages and situations has always been a matter for the authorities in conjunction with the extent of insight of the time.

The question of whether a person is mentally ill or not gains special significance when there is a judgment to be made on the '*degree of free-will in offenders*'. Any clear-cut definition of an act of free-will is always of a practical nature. Science has no technical knowledge of freedom; it can only say something about empirical facts—whether a patient knows what he did and knows that it is forbidden, whether he acted wilfully and whether he is aware it was against the law. Concerning free-will itself, science can only judge according to the given conventional ruling, which ascribes or denies psychic freedom in certain states that can be empirically ascertained. On the matter of freedom, Damerow (1853) wrote: 'Just a few of the patients in this mental institution (1,100) are or have been responsible for their actions all the time'. According to this the diagnosis of illness as such never precludes an act of free-will. This can only be determined by analysis of the individual's state at the time of the act. However, conventional procedure is apt to work out differently. For instance, a man in a normal state of alcoholic intoxication, however severe, is regarded as being in possession of free-will, but not if he is in some unusual state of intoxication. The diagnosis of General Paralysis as such precludes free-will. I will illustrate practical difficulties with two brief examples from my own experiences as a psychiatric expert in court before the first World War:

A postman in the country, who had always carried out his duties properly, committed a small theft. It was found out that he had been in a mental hospital

in the past. He was referred for an opinion. Consideration of the old case-history showed he undoubtedly had had a schizophrenic episode (Schub). Because the old history was known, it was possible in the present examination to identify with confidence certain symptoms as schizophrenic. The diagnosis was clear. At that time schizophrenia (*dementia praecox*) was conventionally as valid a reason as General Paralysis for the abrogation of criminal responsibility. (The confusion of the concept of schizophrenia which arose later and which let it merge into normality was not then in use.) The man was quiet, composed and not obviously ill, but he was, nevertheless, described by the expert, on the grounds of the above diagnosis, as an ill man who came under Section 51 of the Criminal Code. The Public Prosecutor was most indignant, everyone, including the expert, was a bit taken aback and thought it strange, but the Law operated automatically for his acquittal.

The second example was a typical case of pseudologia; the patient used to have periods when his fantastic abilities ran riot and he had once more committed a series of frauds. For three-quarters of an hour, in the court over which von Lilienthal the famous criminologist was presiding, I described the romantic story of this life of crime. I also showed how the behaviour was limited to certain periods, how the offender seemed to be precipitated into it with headaches, etc., and drew the conclusion that one was dealing with an hysterical, a variation of personality, not a disease process. One could not free him from criminal responsibility, at any rate at the beginning of the frauds, but the impression of some inner compulsion, made aesthetically convincing perhaps by my sensational description, led the court to acquit the man, contrary to expert opinion.¹

The field of psychotherapy has to be kept apart from all these legal measures and expert opinions. Psychotherapy is an attempt to use psychic communication in order to help the patient explore the inner depths of his mind and find there some hold whereby he may regain the road to health. Psychotherapy was formerly a haphazard procedure but in the last few decades it has become an extensive problem of practice. The fundamentals of it need to be clear before we can make any judgments about it, whether these will be of a negative sort or highly partisan in character.

(d) The link with different levels of general medical therapy

What the doctor does towards cure happens at various levels of meaning for the patient. A number of stages of therapeutic activity have to be conceived. Each stage has limits where it ceases to be effective and a leap up has to be made to the next level.

(aa) The doctor removes a tumour surgically, opens an abscess, gives quinine against malaria, salvarsan against syphilis. In such instances he applies his *technical knowledge of cause and effect* and through mechanical and chemical

¹ It is worth while studying earlier criteria for criminal responsibility—e.g. Fr. W. Hagen, in *Chorinsky* (Erlangen, 1872), pp. 192–214.

means repairs the *disturbed connections in the apparatus of life*. This area of therapy is the most effective and best understood in its effects. Its *limit* is everything living.

(bb) The doctor *submits the living being to certain conditions*, of diet, environment, rest or exertion, training, etc. Here he makes definite arrangements which will facilitate *the living being as a whole to help itself*. He behaves like a gardener in that he cultivates, fosters and according to results continually changes his procedure. This is the area of therapy in which it shows itself to be a rational art, based on an instinctive feeling for everything that lives. Its *limit* is the fact that man not only harbours a living being but is himself a thinking psyche.

(cc) Instead of the doctor putting the body technically in order so far as its various parts are concerned, and so far as the body as a whole is concerned tending and nursing it, he addresses himself directly to the patient as *another rational being*. Instead of treating him as an object, he enters into communication with him. The patient *is to know* what is happening to him so that he will co-operate with the doctor in dealing with the illness as something alien. Both for doctor and patient the illness has become something objective and the treated patient remains outside the game as himself, while along with the doctor he furthers the success of the various therapeutic measures. But the patient also *wants to know* what is happening to him. He considers it undignified not to know. The doctor accepts this demand for freedom and without reservation will tell him everything he knows and thinks, leaving it to the patient as to what he does with this knowledge and how he comes to terms with it. The *limit* here is the fact that man cannot be relied on to be a rational creature, but is a thinking psyche and his thinking profoundly influences the vital existence of his body.

Fear and expectation, opinion and observation, all have an immense effect on the body. Man does not face his own body simply and freely. The doctor, therefore, affects the body indirectly through what he communicates. The extreme case where an individual exercises nothing but a beneficial vital effect on his own body, despite all that he is told about it or can possibly think about it, is very rare. As a result the doctor cannot just tell the patient all that he knows and thinks about him, but can only communicate things to him in such a way that the defenceless patient derives no harm. The doctor must also see that the patient does not use the information in any vitally disastrous way.

In the rare case of a patient who is allowed to know everything, he must have the strength to balance up any objective knowledge critically and not let it grow into something absolute. This means that, even when things seem inevitable, he must see them as containing an element of the problematical and possible. Everything empirical has this property and even where a benign outcome is predicted almost with certainty, he would still need to remember the possible risks. Having this knowledge, he must be able to plan for the future

sensibly and accept the chances of decline. Should the patient be allowed to know the full truth, anxiety would not have to gain the mastery in the shape of fear. This situation is an exception, if indeed it happens at all, so that doctors are faced with a new function: instead of communicating the full truth to a patient they must constantly think of him in the totality of his body-psyche unity.

(dd) This treatment of a patient as a body-psyche unity leads to a continual *aporia*. As a human being the patient has the right to be told in full what is happening to him. But inasmuch as he is a human being, he comes to grief because of his anxiety, which upsets what he knows with disastrous effects. The patient therefore loses his right to know. Theoretically, however, this painful position is not a final one, because the individual may mature in the direction of the exceptional case, where the full truth can be known and accepted. It is just in this intermediary position where the patient swings between feeling hopelessly imprisoned and affirming himself as a human being that *psychotherapy is supposed to help*.

Psychotherapy can take place while doctor and patient are both unaware. The doctor limits what he tells and speaks authoritatively; the patient duly accepts what he is told and does not think about it but has blind confidence in its certainty. Authority and submission remove anxiety in the doctor as well as in the patient. Both go on living in a pseudo-certainty. In view of the relativity of all medical knowledge, the doctor, in so far as he is aware of this, may become uncertain himself and to that extent his authority will suffer, which protects his own feeling of uncertainty like a mask. If however the doctor, in his superior position, surrenders his authority by imparting some criticism of his inevitably limited knowledge, the patient's anxiety will grow and as a result of this unreserved honesty the doctor will find it impossible to be a doctor in this particular situation. For this reason doctor and patient instinctively adhere to authority as something reassuring. The sensitiveness of the doctor, lest he should not be wholly believed and followed, and that of the patient, lest the doctor should not assert himself with complete certainty, mutually condition each other.

The unconscious state where psychotherapy occurs through exercise of authority becomes a conscious state when the doctor addresses his treatment to the patient as a body-psyche unity and for the first time begins to develop his psychotherapy in all kinds of directions. Now, in contrast to unreserved communication from one person's reason to another's, the doctor will break off communication unnoticed by the patient and on his behalf since it is the doctor who now controls the limits. The doctor draws inwardly to a distance (though he does not show it), takes the whole individual as his object and weighs up the effects of his entire therapy within which every word will be controlled. The patient is no longer freely told what the doctor may think or feel, but each word, each act of the doctor, has to be in principle calculated as to its psychic effect. From the doctor's point of view, patient and doctor have

distanced themselves completely, while the patient on his side thinks he feels a personal closeness. The doctor turns himself into a function of the therapeutic process.

This mode of acting can range over an extraordinarily wide field, from quite crude measures to far-reaching, philosophical designs. The so-called '*Überrumpelungstherapie*' (bowling the patient over), electrical hocus-pocus, imposed changes of environment, hypnosis, authoritative requests and commands, are all recipes of a drastic therapeutic attack and frequently successful in relation to certain symptoms. But procedures such as these have only limited application in practice and are hardly capable of further development or elaboration in depth. In the psychotherapeutic methods of depth-psychology—psychoanalysis and psychosynthesis—and all its variants, higher-level procedures are used which, nevertheless, always contain an element that depends on someone's belief in the truth of a theory.

The *limit* of all these psychotherapies is, *firstly*, the factual impossibility of any doctor achieving full distance (subjectivity in the form of sympathy or antipathy always intervenes); and the further impossibility of his ever being in possession of enough vitality and native psychic vigour to influence the patient's psyche on his own. Somehow he himself has to share in the beliefs which the patient is expected to accept. *Secondly*, there is the basic impossibility of objectifying any individual fully, thus making him an object for treatment. Once a person is fully objectified, he is never his real self. But what he himself is and what he becomes is in the last resort an essential for the development or cure of his neurotic symptoms. In relation to the individual himself and his potential true Existence, the doctor can only act within the concrete, historical situation, where the patient is no longer just a case but a human destiny that unfolds in the light of its own self-illumination. Once the individual has turned into an object, he can be treated by technical means, nursing care and skill, but the individual as himself can only discover himself through the mutual sharing of destinies.

(ee) Therefore what is left as the ultimate thing in the doctor-patient relationship is *existential communication*, which goes far beyond any therapy, that is, beyond anything that can be planned or methodically staged. The whole treatment is thus absorbed and defined within a community of two selves who live out the possibilities of Existence itself, as reasonable beings. For example, there are no rules deriving from some supposed assessment of the individual as a whole, which determine whether the person shall conceal or reveal; nor is the whole thing quite fortuitous, as if the person might listen to everything and then be left to his own devices. One questions and gropes from one freedom to another within the concreteness of the actual situation, taking no responsibility for the other nor making any abstract demands. Concealment has to be decried as much as revelation should this happen as a mere intellectual performance without any mutual sharing of destinies. Doctor and patient are both human beings and as such are fellow-travellers in destiny. The doctor is not a

pure technician nor pure authority, but Existence itself for its own sake, a transient human creature like his patient. There is no final solution.

The *limit* is the fact that individuals can only share their destiny as fellow-travellers within the frame of what is called Transcendent being. Mere existence does not bind persons together, nor does Existence itself as such. For in individuals Existence itself, although entirely free when in the world, is still by its very nature something given only by Transcendence, from which it knows itself derived.

If one recalls now the various meanings of medical therapy, having followed all the stages we have considered above to the point where therapy comes to an end and its place is taken by the full human interchange, which guides but can never itself conduct any therapy, then the psychiatrist's (psychotherapist's) knowledge and activity will be seen to acquire a *specific meaning of their own within the art and practice of medicine*. By virtue of his speciality, the psychiatrist alone considers the individual consciously and methodically as a whole, not as one of his organs nor yet as an entire body with no reference to anything else. The psychiatrist alone is accustomed to take the social situation into account, the environment, the personal history and the experiences of the patient, and consciously give them a place in his therapeutic plan. Doctors are equipped for this comprehensive task, in so far as they are psychiatrists.

The final, decisive occurrence in any patient's therapy can be called 'revelation'. The patient becomes clear to himself, first by taking in the doctor's communicated knowledge and learning certain details about himself; secondly, by seeing himself as it were in a mirror, and learning something of what he is like; thirdly, by bringing himself out further through an inner activity in which he gets to know himself more deeply, and fourthly, by establishing and filling out the revelation of himself in the course of existential communication. This process of clarification is an essential feature of psychotherapy but it must not be simplified because it is a structured whole and we shall only be led astray if one stage is taken for the other. This process of clarification in the shape of the self-revelation of an individual extends far beyond what may be accessible to any psychotherapeutic plan. It carries one on into the philosophical realm of the individual growth of a self.

If we take the extremes, there is a radical difference in the meaning of therapy according to whether the doctor addresses himself to the patient's primary self, tries to clarify this at all levels and makes effective communication by acting as a partner in revelation, or whether he directs his therapeutic efforts at pathological mechanisms only, uses the methods of the natural sciences and tries to influence the situation by physical and psychological means. Better self-understanding may be followed by recovery of the pathological mechanisms because in this case they only became affected when the patient's inner psychic life falsified his existential possibilities. But pathological mechanisms can also come about without any such context. They may even arise within the context

of some genuine upsurge of Existence itself. In that case they need a fundamentally different approach than that offered by depth-psychology and psychotherapy.

Thus in therapy the widest polarities lie in whether the doctor turns to what can be discovered by science, that is to the biological event, or whether he turns to the freedom of man. A mistake is made about the whole of human life, should the doctor in looking at persons let them be submerged in the biological event; so too, should he convert human freedom into that sort of being which, like nature, is empirically there and can be used technically as an instrument of therapy. Life I can treat, but to freedom I can only appeal.

(e) *Types of inner obstacle—the patient's decision to undergo psychotherapy*

There are three types of inner obstacle; first, there is the absolute obstacle that human nature cannot be changed in its essence, but only modified superficially; secondly, there is the obstacle of an individual's inner psychological 'set' and thirdly, there is the primary obstacle of the self. The first type of obstacle can be tackled in a way analogous to the training of animals, the second by re-education and discipline, the third can become the target for existential communication. Every person will come upon these obstacles in himself. He may train himself, educate himself and communicate with himself towards better self-illumination. But should he enter into relationship with another person over this, then in the first instance (training) he becomes purely an object. In the second instance (re-education) he keeps relatively good touch with the other but yet there is a distance kept, which gives scope for attitudes of deliberate instruction. In the third instance, he is himself linked with the other's destiny and confronts him on the same level with a perfect openness of approach.¹ Training is nothing but a soulless manoeuvre; re-education uses mental content, with discussion always taking place under authoritative conditions; existential communication is a mutual self-illumination, which remains essentially an event in time and does not signify any generally applicable insight into the individual case. Real it may be but it cannot become a therapeutic instrument for use in any planned, deliberate way.

In spite of people's need for help, they are not only disinclined towards psychotherapy but to any kind of medical treatment. There is something in them that prefers self-help. This inner obstacle is an obstacle which they want to overcome by themselves. Hence Nietzsche's remark: 'Should anyone give advice to a patient, he acquires a feeling of superiority over him, whether the advice is accepted or not. For this reason, irritable and proud patients hate their advisors even more than their illness.'

The situation gets easier only if patient and doctor work together against an illness as if it were something alien to them both. Thus patient and doctor face the disturbance together with an equal self-detachment. But if the psyche

¹ Regarding modes of communication—see my *Philosophie*, Bd. II, the chapter on communication.

has to declare itself in need of treatment, it resists on principle. The person feels himself as quite different psychically from what he feels about himself bodily. The obstacle which the self sets up permits the individual indeed to form loving and fighting relationships with some other self but not to accept a dependence and guidance which will determine his innermost life without his being aware of it. (This is not the accepted guidance as to what one is to do and how one is to act in the external world.) There are two preconditions then for psychotherapy. One is the person's awareness of ordinary human weakness, which accepts the notion that some sort of inner guidance is necessary and so he is ready to put himself in the hands of a personal counsellor; he does not lower his stock in any way by these views, since he simply permits himself what every man needs. The other precondition is that he has a specific awareness of illness. The decision that 'I am mentally sick' determines the decision for psychiatric treatment since therapy is needed only by somebody who is ill.

However, we know that the concept of illness has many ambiguities. The statement that one is ill can mean, for instance, one cannot master one's own psychic happenings, or there is some reduction in performance, there is suffering or a failure to accept responsibility for one's own inadequacy, one's drives and feelings or for one's own actions.

The decision to accept oneself as ill means something like a *capitis diminutio*—a lowering of the flag. The psychic phenomena in question are not like a cold or a pneumonia, nor like General Paralysis or a brain-tumour, dementia praecox or epilepsy. They are still phenomena within the realm of freedom. A need for therapy here signifies acceptance of loss of freedom, though in fact freedom is still there and maintains its rights at the same time as it renounces them. If, however, a series of psychic phenomena end in loss of responsibility because free-will has become enslaved, any possibility of trusting the individual, giving him some responsible function or gaining reasonable co-operation, is inevitably limited from the start. As a result everyone who is independent, realistic or has any sort of faith at all recoils from psychotherapeutic ways which penetrate the psychic depths and concern themselves with the person as a whole. But where the individual as a whole is not concerned and there is some possibility for more specific techniques in psychotherapy, hypnosis for instance, autogenic training or physical exercises, etc., there is no question of dealing with the human psyche as such; we simply use psychic techniques for a limited purpose (e.g. for ridding a patient of certain physical complaints). Even then, because they are *psychic* techniques, the question still remains whether personal embarrassment or self-esteem will permit their use.

In any case we cannot deny that the decision to undergo psychotherapy is a decision indeed and means something like an irrevocable choice in anyone's life, for better or for worse.

(f) *The aims and limits of psychotherapy*

What does the patient want to achieve when he goes to a psychiatrist?

What does the doctor see as his treatment-goal? 'Health' in some undefined sense. But for one person 'health' means an unthinking, optimistic, steady equilibrium through life, for another it means an awareness of God's constant presence and a feeling of peace and confidence, trust in the world and the future; while a third person believes himself healthy when all the unhappiness of his life, the activities which he dislikes, all that is wrong in his situation, is covered up by deceptive ideals and fictitious explanations. And perhaps there is no small number of those whose health and happiness is best enhanced by the treatment Dr. Relling proffered in Ibsen's *The Wild Duck*: 'I take care', he says, 'to preserve his life-lie', and talking about the 'fever for justification' he remarks sarcastically, 'If you take away the average person's life-lie, you rob him of his happiness too.' However much truthfulness is desirable in therapy—a view we support unreservedly—it is all the same prejudicial to imagine that untruth makes people ill. There are people whose vitality thrives on untruthfulness both towards themselves and the world at large. We must therefore, consider all the more carefully *what cure means* and what are the limits of psychotherapeutic effort although there are no final answers to these questions.

(1) *The question—what is cure?* With every kind of therapy there is a tacit understanding that everyone knows what cure means. There is usually no problem so far as somatic illnesses are concerned but in the case of the neuroses and personality disorders (psychopathies), the situation is different. Cure becomes linked inseparably with what we call faith, general philosophical outlook or personal morality although the relationship is a highly ambiguous one (containing both truth and falsehood). It is pure fiction to believe that the doctor only confines himself to what has been thought healthy and objectively desirable by philosophy and religion.

J. H. Schultz, for example, discusses the aim of therapy in relation to the 'autogenous states of relaxation' which he investigated. They are said to be 'independent of any philosophical attitude' since in psychotherapy 'the individual is the measure of all things'; autogenous states 'serve that unique self-realisation which is proper for life'. The highest aim of psychotherapy is said to be 'the self-realisation of the patient', the 'developing and shaping of the full human status, that of harmonious freedom'. 'Autogenous relaxation', he says, 'by means of this self-directed introspection simply extends a work which it is most appropriate for personality to perform upon itself.¹' These are rather vague and dubious formulations. States of relaxation have been used for thousands of years in the techniques of Yoga, in all methods of mystical contemplation, in the exercises of the Jesuits—but always with a difference. The aim in these states has always been the existential meaning of the experiences, the attainment of something absolute and unconditioned; the goal has never been the exercise of a psychic technique nor the individual's own empirical state, presupposed as immanently perfectible by him. Schultz has dropped

¹ J. H. Schultz, *Das autogene Training*, pp. 244, 295, etc.

these tenets of faith and retains only the technique (which as a result he was the first to investigate empirically and methodically). He lost sight therefore of the deeper effects of these states on the individual's awareness of being, ignores the metaphysical sources of experience and misses the existential vigour and sharp seriousness of all these activities. He confines himself to empirical medical effects but unwittingly he uses formulations of the treatment-goal which substitute for the earlier impulses of faith and already presuppose a certain philosophical outlook on his part—roughly that of a bourgeois individualism that has deviated rather from the level of Goethean humanism, and from which I am sure Schultz himself is far removed. Formulations such as these presuppose a final definition of man, though in fact what this is remains highly obscure.

The statement of v. Weizsäcker may be quoted in contrast. He says: 'It is the ultimate destiny of man, precisely, that can never be made the object of any therapy; it would be blasphemous.' He clearly expresses the indefiniteness of any therapeutic goal when he says: 'We can do much, if we are successful, in setting certain limits to morbid events and confining them in definite channels.' v. Weizsäcker knows that the therapeutic goal cannot be defined in scientific or human terms alone, but by something else in the world, that is extremely tangible: 'If we want to confine ourselves purely to human attitudes, these are limited by the social order.'

The aim of all psychotherapeutic effort is often quoted as 'health', capacity for work, ability to perform and enjoy (Freud), adaptation to society (Adler), delight in creation, a capacity for happiness. The uncertainty and multiplicity of such formulations indicate their doubtfulness.

We cannot rid ourselves entirely of some basic philosophical viewpoint when formulating our psychotherapeutic goals. This may get obscured or undergo chaotic changes, but we cannot develop any psychotherapy that is purely medical, self-contained and appears to be its own justification. This holds even when isolated phenomena are under consideration. For instance, *to dispel anxiety* is generally thought to be a self-evident *therapeutic aim*. Gebssattel's¹ dictum however is true: 'We are as doubtful whether we really want a life without anxiety as we are certain that we want a life without fear'. Large numbers, particularly of modern people, seem to live fearlessly because they lack imagination. There is as it were an impoverishment of the heart. This freedom from anxiety is but the other side of a deeper loss of freedom. Arousal of anxiety and with it of a more vital humanity might be just the task for someone possessed by Eros paidagogos (informing passion).

Prinzhorn² formulates the exactly opposite goal when he first accepts the different psychotherapeutic schools as beliefs unavoidably sectarian in character (though on another occasion he sees psychotherapy merging in future into the unity of medical practice). He explicitly argues that it is impossible

¹ v. Gebssattel, *Nervenarzt*, vol. 11 (1938), p. 480.

² Hans Prinzhorn, *Psychotherapie* (Leipzig, 1929).

for any psychotherapy to be autonomous from a philosophy. He makes the psychotherapeutic task an exalted one, he sees the therapist 'mediating between an anxious loneliness and some living whole, some possibility of new community, the world itself and perhaps God'—now the therapist becomes mediator either through his *personality*, through a mental suppleness that lacks objectivity, lacks any sanction for what is done or said, or else because he is a member of some intimate, cultural community, religious, national or party-political; only thus is he able to return firm answers when questions of authority arise. '*The purely personal element in therapy can only be removed* by making some reference to a higher power in the name of which the therapist acts. In that case the sectarian character of the psychotherapeutic schools is no deviancy but rather the direct consequence of a necessary development.'

(2) *The limits of psychotherapy.* *The possibility of what is to be achieved* must determine the treatment-goal. There are certain insurmountable limits to psychotherapy and there are these two in particular:

(aa) Therapy cannot be a *substitute for something that only life itself can bring*. For instance, we can only become transparently ourselves through a lifetime of loving communication in the course of a destiny shared with others. On the other hand such clarification as is brought about by psychotherapeutic means always remains something limited, objective, theoretical and restricted by authority. A professional performance constantly repeated on behalf of many never reaches the goal which only engagement in mutuality can attain. Further, life brings responsible tasks, perforce, and there are the real demands of work which no therapy however artful can contrive.

(bb) A person is *originally thus and no other* and therapy finds itself confronted with this factor which it cannot alter. I in my freedom may confront this fact that I am thus and no other, confront it as something I may change or at least transform through acceptance, but any therapy of others has to reckon with unalterable elements, the mark of some lasting essence, something inborn. It is true we cannot say what this is in any given case but it is a basic experience of every doctor that where this 'being thus and no other' is the cause of the patient's distress, it provides an insurmountable obstacle which will frustrate every therapeutic attempt. In the face of this 'being thus and no other', therapy finds itself at a loss. The therapeutic attitude can only retain its integrity if it accepts that fundamentally. When vexed by the question of which among all the given facts he must accept and which he can hope to modify, every thoughtful psychopathologist feels the constant impulse to clarify this unchangeable element, try to re-identify it and lift it to the level of a diagnostic quantity. But he has a wide field to play over. Either the unchangeable element is obscured since therapy aims at reassuring and deceiving, measures are adopted '*ut aliquid fiat*' and the aim becomes not so much the cure of an illness as the creation of an atmosphere of friendly help; one supports the 'life-lie' and avoids 'encroaching' too far. Or on the other hand there is open action, the therapist tries to get the individual himself to achieve adequate self-under-

standing; he does not undertake to relieve him but endeavours to give him some clarification. This means some way of life has to be found even for those with personality disorders (psychopaths) and every kind of personality. Wherever the person's nature is really abnormal, Nietzsche's saying may seem true: 'Every nature has its own philosophy, so has everyone who is unhappy, evil or exceptional.' In psychotherapy we have to resign ourselves in the end to patience, to a 'psychiatric tolerance', even towards the oddest and most irritating of people.

Therapeutic effort is limited both by the reality of the environment and by the patient being 'thus and no other'. Because of this, therapy in the end always becomes some kind of philosophical undertaking. Should it choose to illumine rather than obscure, it will have to teach humility and renunciation as well as the need to grasp at positive possibilities. Obviously this is not something that psychology or medicine can accomplish but only the close collaboration of doctor and patient in a mutual philosophic faith.

(g) *The personal role of the doctor*

We have seen that in the *doctor-patient relationship, authority* is always present and may have beneficial effects. In the rare case where true communication is achieved, this is lost again immediately, unless authority is entirely discarded. Usually, however, authority is needed but the doctor must never use his physical, social and psychological superiority as if it were absolute and the patient no longer a human being like the doctor. Attitudes of authority, like scientific attitudes, are only a part, never the whole, of the doctor's attitude to the patient.

In psychotherapy the demand for the personal involvement of the doctor is so heavy that complete gratification only occurs in isolated cases, if at all. v. Weizsäcker formulated the demand as follows: 'Only when the doctor has been deeply touched by the illness, infected by it, excited, frightened, shaken, only when it has been transferred to him, continues in him and is referred to himself by his own consciousness—only then and to that extent can he deal with it successfully.'

Communication, however, is usually distorted by the patients' typical needs. One of the relationships between individuals which is of importance for the psychiatrist is that which Freud describes as a '*transference*' of admiring, loving and also hostile feelings on to the doctor. This transference is unavoidable in psychotherapy and it can be a dangerous reef on which to break if we do not recognise it and deal with it. Many doctors bask in the superior position that has been foisted on them by their patients. On the other hand, the desire of many other doctors to dismiss all these transferences, submissions and dependencies, these one-sided erotic relationships, in order to create the one desired relationship of understanding communication founders on the elementary needs of the patients who simply want someone they can dearly love and who will save them.

Responsible psychiatrists will turn *their own psychology*, the psychology of the doctor, into *an object for their conscious reflection*. Indeed the relationship between doctor and patient is far from unambiguous. Expert information, friendly help on equal terms, the authority of a doctor's order, all have essentially different meanings. Often there is a struggle between doctor and patient, sometimes a struggle for superiority, sometimes for clarification. Deep illumination comes either on the basis of an absolute authority in which someone believes, or on the basis of a mutual relationship, which implies that the doctor has to study himself as well as the patient.

We have no objective picture of what the contemporary psychotherapist in fact is like. *He has to be a philosopher*, consciously or no, methodically or haphazardly, in earnest or not, spontaneously or following contemporary fashions. It is not theory but his example which teaches us what manner of man he may be. The art of therapy, of relationship, gesture and attitude cannot be reduced to a few simple rules. We can never anticipate how reason and compassion, presence of mind and frankness, will show themselves in the given moment nor what will be their effect. The greatest possibility of all has been expressed in the Hippocratic sentence: *iatros philosophos isotheos*.

(h) *Different psychiatric attitudes*

Successful psychiatrists necessarily correspond in their natures to the needs and desires of 'nervous patients', since the mass of patients decide who is to be the successful therapist, and not the actual value or correctness of the doctor's own views or behaviour. Obviously, therefore, the greatest successes of all have not belonged to psychiatrists but to the shamans, priests, leaders of sects, wonder-workers, confessors and spiritual guides of earlier times.

The '*exercitia spiritualia*' of Ignatius Loyola were enormously successful and provide us with examples of real psychic cure; they were aimed at the control, arbitrary production and repression of every kind of emotion, affect or thought. Yoga techniques and the meditative exercises of Buddhism are also extraordinarily effective. In our own times perhaps the movement in the States for the cure of 'emotional disorders' or the cures at Lourdes have all had greater success (if we take mere numbers) than all the psychiatrists together. A few people may be helped to health by a stoic philosophy. Others again, even fewer, may be helped by Nietzsche's reckless honesty over the self.

All these movements can point to failures as well as successes. The '*exercitia spiritualia*' have been reported as bringing on 'religious mania'; and unstable people have been thrown off their balance by the doctrines of Nietzsche. If Freudian psychoanalysis produces its quota of conspicuous failures, symptomatic deterioration and painful suffering, this is common to all psychological methods when there is wholesale application of them. One type of patient will find one method suitable, another type will find another. Any therapy which wins success will be highly characteristic of the people of that time; it will have the contemporary features of its patients.

Our own age is characterised by the fact that psychiatrists are now performing in secular fashion what earlier was performed on the grounds of faith. The basic medical knowledge of the doctor derives from the natural sciences and constantly colours the situation but, whether he wants to or not, he is always exercising some psychological and moral influence. Since we have forced doctors into the role of performing an increasing number of functions that formerly belonged to priests and philosophers, we now find ourselves with a great many different kinds of doctors. Once the unity of faith is lacking, the needs of patients and doctors admit a host of possibilities. How a psychiatrist acts will depend not only on his general philosophical outlook and on his instinctive goals, but also on the hidden pressure which the nature of his patients exercises upon him. Obviously, therefore, *psychiatrists practise many different types of psychotherapy.*

There is one group we can disregard; these are the credulous stupids who use untested methods and cure everyone by faradial treatment, hypnotic or water treatments, powders and pills, and who achieve successes by sheer force of personality, wherever crude suggestion will do the trick. We also have the fraud, dishonest with himself as with his patients; he uses the psychotherapeutic relationship to assuage every possible kind of need both in himself and his patients (sense of power, erotic drives, sensationalism). The writings of these gentlemen have a characteristic tone and style; they weave fantastic theories, show a contempt for other opinions, a superiority derived from the naïve, confident assertions that they alone are in sole possession of truth; they incline towards the pathetic and the grandiose, tend to repeat simple propositions and present us with *obiter dicta* which are supposed to deal with every contradiction.

Then we find *the good doctor, the ingenuous individual* who consciously confines himself to everything somatic and yet just because of this unwittingly exercises a psychological effect, all the more so as such an intention never enters his thoughts. Then there are *the sceptics*, who possess an all-round scientific education and see reality undisguised, yet still doubt what they know. They may well give counsel to their patients and instruct them but they never penetrate with any deep effect.

Were I to try and characterise *a type* of psychiatrist who *in this scientific age* manages to remain balanced between the paradoxes of all his various functions, yet touches all the psychic dimensions with undoubted success, the following picture seems to take shape: He is a man who has a solid background of somatic medicine, physiology and the natural sciences. His attitude with his patients is predominantly one of empirical observation, of factual assessment and generally one that understands and appreciates reality. He will not easily find himself deceived nor will he readily adhere to any dogmas, fanaticisms or absolutisms. On the other hand he is without any fundamental convictions of his own and he has no knowledge of ultimates so he treats all dicta, facts, methods and terminologies as if they all belonged to the same general level of the sciences. His thinking does not form part of any comprehensive, conceptual

system; this seems to him an advantage and he excuses the haphazard nature of his ideas by his own empirical attitude or by their supposedly heuristic value. The authority of science replaces the loss of all other authorities. He lives in a general atmosphere of conciliation and *laissez faire* only broken on rare occasions when he uses moral indignation, especially against the forces that threaten his profession. For him there is no such thing as absolute seriousness. He enjoys the laxity of a general basic scepticism, where the essential thing is to make the effective gesture and even his scientific attitude becomes such a gesture. His scientific ideas are tested and selected according to what success they acquire in the environment and with his patients. He genuinely play-acts, as it were, and adapts himself unconsciously to the situation. He does not rely on any serious, philosophic position but lets the following views support him: such and such a theory is true after its own fashion, but that other theory is also useful and none the less true. Profound scepticism enables him to leave the unhappy and needy patient some room for gratifying dreams and beliefs as the case and situation demand. Falsity is believed to be unavoidable but has to be kept under control and used for a purpose. This is the source for the solemn attitudes we meet, the sceptical smile, the ironical dignity, the engaging charm and the readiness to listen to anything unusual. Such doctors are phenomena of our present transition from the past ages of faith and learning to an era of positivistic materialism. Traditionally doctors are at home in the former and live on it as on a vanishing capital, but they also know their way about the latter, so they are not to be pinned down to any one particular principle. We may pin them down to the principles of our times—that is, success, utility, scientific attitude, search for techniques and effective gestures—and we may believe that we see them, no longer as they are, but simply as their professional selves, deeply interested in their work yet disengaged; the situation, however, forces us to pause. It is almost as if, ‘in the very middle of time’ as one age goes down before the next, some spark of timeless knowledge lights up within them.

If we are looking for the prototype of the *ideal psychiatrist*, the one who will combine scientific attitudes of the sceptic with a powerful impressive personality and a profound existential faith, Nietzsche's words are not altogether inapt: ‘No profession can be developed to such great heights as that of the physician, especially since the “spiritual doctors”, the so-called “custodians of the soul” are no longer permitted to practise magic arts and most educated people tend to avoid them. No physician is thought to have reached the highest level if he is simply well acquainted with the best and most recent methods, versed in them and able to draw those brilliant conclusions as to cause and effect that lead to diagnostic fame. He must also be persuasive, adapt himself to each individual and be able to bring innermost matters to light in his clients. He needs to have a strong humanity which by its very appearance can disperse timidity which is the force that undermines in any kind of suffering. He should have the address of a diplomat, whether he helps those to happiness who need

it for their recovery or those who need to give happiness for their health's sake (and can do so). He needs the subtlety of a detective or a lawyer if he is to understand people's secret souls without betraying that he does so—in short nowadays the good physician requires the skill and vantage ground of every other profession. Where he is so equipped, he can become a benefactor to the whole of his society.'

There are no scientific grounds for determining what kind of psychotherapist one will become nor the type which will be considered ideal. Certainly a psychotherapist should have a training in somatic medicine and in psychopathology, both of which have to be scientifically based. If he has no such training, he would only be a charlatan, yet with this training alone he is still not a psychotherapist. Science is only a part of his necessary equipment. Much more has to be added. Among the *personal prerequisites*, the width of his own horizon plays a part, so does the ability to be detached at times from any value-judgment, to be accepting and totally free of prejudice (an ability only found in those who generally possess very well defined values and have a personality that is mature). Finally, there is the necessity for fundamental warmth and a natural kindness. It is therefore clear that a good psychotherapist can only be a rare phenomenon and even then he is usually only good for a certain circle of people for whom he is well suited. A psychotherapist for everyone is an impossibility. However, force of circumstance makes it the psychotherapist's usual duty to treat everyone who may ask his help. That fact should help him to keep his claims to modest proportions.

(i) *Harmful psychological atmospheres*

People who have a faith or a philosophy will gain unintentional self-illumination in conjunction with their actual performance, they are led on by everything that befalls them, by ideas, by truth itself and by God. Self-reflection may serve them on the way but in itself it is never a primary force, it only becomes effective through actual being, which in turn lays hold of its help. But once self-reflection in the form of psychological study of the self becomes the whole atmosphere in which a person lives, there is no end to it since the person's psychic life is not yet Being itself but only a place where Being is envisaged. There is a dangerous tendency in psychotherapy to convert the psychic actuality of an individual into an end in itself. The person who turns his psyche into a god because he has lost both world and god finds himself standing finally in the void.

He misses the gripping force of things themselves, of objects of faith, images and symbols, tasks to perform, of anything absolute in the world. Psychological self-reflection can never achieve that which only becomes possible through a surrender to being. Here lie the radical differences between the purposeful manipulations of psychotherapists directed upon the psyche and the practices of priests, mystics and philosophers of all times, directed through the ages towards God or Being; between confidences, self-revelations

given to the doctor and confession in church. The transcendent reality marks the difference. Mere psychological knowledge of possibilities and the use of psychological influences to bring the desired end about can never realise the possibilities in me. The individual must set about things, not about himself (or only about himself as a means); he must set about God, not about faith; about Being, not about Thinking; about something he loves, not love itself; about performance, not experience; about realisation not about mere possibility—or rather he must set about all these alternatives as means of transit, not for their own sakes alone.

Within the psychological atmosphere an *egocentric attitude to life* develops, especially when the very opposite is intended, the individual as the subject of all this becomes the measure of all things. Existence thus becomes wholly relative as a result of this psychological knowledge which tends to absolutes and is taken as if it were the knowledge of what happens in fact.

A *specific brazenness* is fostered, a tendency to display one's psychic entrails, to say just that which is destroyed in the saying; there develops a curiosity over experience, an imposition on others of a purely psychological reality.

The murkiness which is always latent in this psychological atmosphere grows tangible when contrasted with the clear-cut activities of the general physician who does a clear and effective therapy in his own field, though he ignores the psychic elements and certainly misses a good deal by this, or when contrasted with the honesty of strong faith. Here the individual will do what he can within the framework of what is knowable, he puts up with everything else and leaves it to God without alleging any pseudo-psychological knowledge of it and without doing it violence or robbing it of its dignity.

However, we only need to know these psychological risks in order to meet them. So far as the objects and aims of psychology and psychotherapy are concerned, these are never an end in themselves and, once a high level of awareness has been reached, are approaches we cannot do without.

(k) *The public aspect of psychotherapy*

In the course of the last century and a half, the confinement of *mental patients* in institutions created a number of small worlds. Psychiatrists worked out the idea of reducing this problem to a minimum for both patients and society. *Diseases of the nervous system* were made a matter for independent clinics and for neuro-psychiatrists, but the neuroses and endogenous psychoses are no more closely related to the known neurological illnesses than they are to the other somatic disorders. *Psychotherapy* became a somewhat haphazard performance carried out by psychiatrists, neurologists and general physicians, without any basis of orderly principle. It is only during the last few decades that psychotherapy has become a profession on its own, and the status of psychotherapist became established. Psychotherapists were mostly doctors but they were supplemented by psychotherapists who were psychologists with a

different training. Psychotherapy became the subject-matter of special journals. Congresses of psychotherapists came to number more than 500 participants. In 1936 something happened that was fundamentally new. The 'Deutsche Institut für Psychologische Forschung und Psychotherapie' was founded in Berlin under M. H. Göring. This was the last step whereby psychotherapy became institutionalised.

In this public sense psychotherapy has to establish itself as a branch of medical therapeutics in its own right. The exercise of the profession, therefore, has to be put under conditions which will serve the best performance. There has to be a possibility for training and instruction and the necessary psychological knowledge needs to be linked methodically with practice. This means that a number of scattered efforts have to be co-ordinated. Everything that has been initiated by individual endeavour and developed within cliques and schools must now shape itself into some integrated whole. The Institute tries to establish an interchange of mutual influence between all the forces of psychological knowledge and skill. The intention is to bridge the opposites, establish what all forms of psychotherapy have in common and demonstrate the unity of the idea. An out-patient department serves a practice which increases steadily. It is hoped to gain an extensive basis for research by regularly working through the case-histories. In this way, perhaps for the first time, it would prove possible to amass a number of psychotherapeutic biographies.¹

The main deficiency of this initial institution is that it functions apart from any psychiatric clinic. Psychotherapists who have no sound knowledge of the psychoses gained from their own experience and no contact with them in institutional practice can easily make fatal mistakes of diagnosis; they also fall victims to the fantastic nonsense which occupies so much space in the psychotherapeutic literature. When there is no proper grounding in the reality of the psychoses and no passionately sought understanding of them, every individual or anthropological presentation will, from the reality point of view, carry serious flaws. If we are to study man properly we have to take into account both the openness of unrestricted possibility and the limitations imposed by the real impenetrability of what is not understandable. These limitations only receive confirmation through the practice of psychiatry, the openness will only come to us through philosophy. Psychotherapy cannot live simply on its own resources.

Psychotherapy, as we have seen, has its roots in medicine but in its *contemporary reality* it has gone far beyond the field of medicine. As a phenomenon it belongs to an age poor in faith in the sense of an ecclesiastical tradition. Psychotherapy nowadays not only wants to help the neurotic but mankind itself in all its spiritual and personal needs. It is significantly, though not traditionally, linked with confession, unburdening of the soul, the care of souls as in the ages of faith. Psychotherapy makes demands and gives promises

¹ Information on what has been done may be obtained from the yearly volumes of the *Zentralblatt für Psychotherapie*, No. 9 (1936), onwards.

which extend to mankind in general. We cannot yet foresee what will come of it.

Like every human undertaking, psychotherapy has *its own dangers*. Instead of bringing help to people in distress, it may become a kind of religion, similar to that of the gnostic sects of 1,500 years ago. It may be a substitute for metaphysics and eroticism, for faith and assertiveness, or a substitute outlet for unscrupulous drives. Beneath its apparently high level of aspiration, it may in fact do nothing but reduce the psyche to a uniform and trivial level.

Psychotherapy, however, possesses its own defence against all such risks in so far as it has some understanding of what it knows. The knowledgeable psychotherapist can see through errors very clearly and for that reason is all the more to be blamed should he succumb to them. But only some *established institution* can give formal development and provide rules and regulations which will embody the whole scientific and professional tradition while protecting against these risks.

Gradually we may expect some properly constructed notion of institutional psychotherapy, arising from all that has been learnt in practice. This will rest with those who are actively engaged in it. At this point we can only make a few incidental remarks which may stimulate thought. Aware as we are of the extraordinary possibilities of psychotherapy, we are looking for some clear distinctions. We will not undertake to draw any real picture of what psychotherapy is or has been like in practice but will make a few points from which we might start if we wish to construct a theory of it. In this we shall have to confine ourselves to the most marginal of possibilities, as only the fine point of some extremely simple line of thought can give us a suitable instrument for probing reality as it is.

The basic difficulty is that psychotherapy is a practice which addresses itself to the human being as a whole and the doctor is called on to be more than a physician, so we are furnished with a point of view that is radically different and much more comprehensive than the purely psychopathological one.

(1) *The psychotherapist must understand himself.* In somatically caused illness we cannot require the doctor to do for himself what he does for the patient and prove his art on his own person—a physician may be able to treat a nephritis in his patient with great success and no less well even though he neglects it and mistreats it in himself. In psychic matters, however, the situation is different. The psychotherapist who has not seen through himself can never truly see through his patient because then he allows the assertion of alien, ununderstandable drives within himself. The psychotherapist who cannot help himself can never really help his patient. It is therefore an old demand that the physician should himself be the object of his own psychological scrutiny, and recently this has been resurrected as a primary requisite. Jung formulated it as follows (abbreviated):

The relation between doctor and patient is a personal relationship within the

impersonal framework of medical treatment . . . treatment is the product of reciprocal influences . . . an encounter takes place between two people who bring with them a vaguely defined sphere of unawareness as well as what is possibly a state of clear, full consciousness . . . if any contact is made, both parties will be changed . . . the patient influences the doctor unwittingly and brings changes about in the doctor's unconscious . . . effects which we cannot formulate better than in the terms of the old idea of transferring the illness on to someone healthy, whose own good health has to drive the demon of illness into submission . . . in acknowledgement of these facts even Freud accepted my *demand that the physician should himself be analysed*. This means that the doctor is just as much in analysis as the patient . . . analytical psychology therefore requires an *application to the doctor himself* of the *system he has for the time accepted* and he must do this with the same ruthlessness and tenacity as he shows towards the patient . . . it is not popular to demand that the doctor has to suffer change in order to be able to modify the patient, first because this seems impracticable, secondly because preoccupation with oneself is subject to prejudice and thirdly because at times it is painful to find in oneself all that one expects to find in one's patients . . . the most recent developments of analytical psychology put the doctor's personality into the foreground either as a therapeutic factor or the opposite . . . the doctor is no longer allowed to escape from his own difficulties by treating those of others . . .¹

From this viewpoint has evolved the *demand for a training analysis*. No one who has not been relentlessly analysed for 100 to 150 hours a year by the methods of depth-psychology is thought fit to take part in expert discussions in psychology nor to practise psychotherapy. 'We do not want to learn on patients but on ourselves. We do not want to uncover the most vital things and deal with them before we have to a certain extent understood and seen through ourselves. We owe this to our patients.'² Hence the training analysis is intended to become an essential part of the training of future psychotherapists. There is unusual insistence on this demand, although there are leading psychotherapists who have not, so far as we know, allowed any analysis of themselves by methods of depth-psychology. In this regard certain matters need to be kept clear:

(aa) *There is a valid and unavoidable demand for self-illumination.* The only question is *how can this be achieved* and whether the direct help of someone else is necessary, someone who will lay bare the psychic recesses for a professional fee. Self-revelation should not be confused with an inter-personal method of analysis. We cannot secure what Existence itself must foster. Nor can we control or attest to intra-psychic events which always remain unique and unrepeatable. It is, therefore, worth considering whether the demand for self-illumination should be denied the widest possible play of choice for its realisation. The individual should be able to choose whether he will entrust himself to someone else for analysis or whether he will be indirectly stimulated by personal contact or whether in the course of his life he will link himself

¹ C. S. Jung, *Seelenprobleme der Gegenwart* (Zürich, 1931), p. 31.

² C. S. Jung, *Z. Psychother.*, vol. 10 (1938), p. 202.

with the great illuminating experiences of history (e.g. Kierkegaard's 'Sickness unto Death') and receive his own personal revelations, or whether he will do all of this together. If what is innermost to one is turned into something that can be externally controlled and the preconception upheld that among accredited psychotherapists there are always some to be found to whom any young adult could reveal and entrust himself unreservedly, it may well be that exceptional persons will be deterred from such a profession, and possibly just those who are the most indispensable, humane and soundest among them, and best able to advance psychotherapy further in research and practice. The founders of institutional psychotherapeutic training must ask themselves (liberating their own desire for illumination from the confusions of their own school) whether the demand for a training analysis does not sometimes hide something like a demand for a declaration of faith and the vindication of something that pertains more to the preservation of a sect than to a public form of therapy. They should also ask themselves whether the true idea of constant self-illumination as necessary for the psychotherapist is not in the end a misunderstanding when there is a fixation upon one particular form of exploration, which wavers between an analysis, with the therapist impersonally present in the background, and a personal communication face to face. It would be a confirmation of my own suspicions if there should be a demand for training analyses according to the different psychotherapeutic schools and a separation of one from the other so that the prospective student would have to make his choice. A truce would have to be called as between warring religions, whereby each secretly hopes that in the end it will prevail as the only, true one. Should this happen it would clearly expose the philosophical character of the required training analysis and how it was in fact a substitute for the movements of religious faith.

In psychotherapy a deceptive path leads us into the confines of private philosophies and to avoid this we have to drop, not the training analysis, but the training analysis as an indispensable condition for training in psychotherapy. The only unconditional requirement is that the psychotherapist should illuminate himself, but this should not be subjected to any objective control, examination or assessment, by others. The content of the established institutional training would have to be what is accessible to all and objectively valid, although in practice everything decisive will depend on the personalities who make use of what they have been taught.

Every profession needs the protection of a well-defined tradition. A young profession in process of establishing itself may have unrestricted possibilities but it may become limited by the choice of its initial organisation. To choose a training analysis as an arbitrary criterion for admission to the profession would lead to the restrictedness of several mutually exclusive and opportunistically tolerant schools and finally to the extinction of the profession itself. The individual needs a lifetime to found himself successfully upon that traditional practical wisdom of mankind from Plato to Nietzsche, which is the character-

istic feature of psychotherapy as distinct from medical therapy in the narrower sense. Or, to put it differently: Every intellectual movement is materially determined by the men who founded it. Winkelmann set the level for archaeology which obtains to this day though most of his theses have had to be abandoned. His natural distinction and the depth of his ideas all left their mark. But in regard to psychotherapy we must not be deceived, no movement of this high order could ever be based on Freud, Adler and Jung, and because one grows dependent on one's opponent, no successful engagement with them along their own lines will ever find the way. This can only come by our getting a grasp on the great traditional truths. It would be well for present-day experience to recognise these truths and appropriate them to psychotherapeutic practice in which therapists are now completing the foundations for the future in a situation of transition. They are being called on to create a body of teaching which can be accepted and which so far does not exist. There can be no final appeal to experience nor to a number of personality-types that call for their own particular methods. Creative understanding, that glimpses and demonstrates what is true, simply collapses among vague simplifications of this sort. Once truth has been grasped from the depths of our tradition and concretised in contemporary form, we should automatically recognise the valuable, inadequate, accidental and destructive elements in the older authors who today still influence to a large extent, either anonymously or overtly, the psychotherapy which they themselves have set in motion.

(bb) We have to draw a distinction between a *depth-psychology which illumines* and a *psychological technique*. Depth-psychology as practised implies an involvement with contents and viewpoints, the experience of which influences the whole outlook of the individual and acts by unconscious suggestion, however aware the individual is. The actual undergoing of the therapy already implies an acceptance. Psychological techniques on the other hand which are used therapeutically (hypnosis, autogenic training, exercises, etc.) bring a specific set of experiences gained through the use of a new instrument. It is fair to ask that psychological techniques which we want to use on someone else should first be tried out on ourselves with the help of experts. But where techniques are set aside in favour of direct and personal contact, the meaning of which can never be arbitrarily contrived and which therefore no amount of methodical reflection can turn into a technique, we must be careful not to confuse the two. Success depends on our confronting the unconscious depths with an enhanced respect. We have to avoid turning everything into a technique if we are to keep open communication with our own nature. We must not expect that the personal qualities of the psychotherapist will spring from formal instruction; the professional demands are much more far-reaching and among them there is something essential that most decisively cannot be taught.

(2) *Healthy and neurotic people.* In the passage quoted above on the need for the physician to apply the analysis to himself Jung continues:

The self-criticism and self-exploration inseparably linked with this question call for a concept of the psyche quite different from the purely biological concept that has been in use up to the present because the human psyche . . . not only entails the patient but also the doctor . . . not only the object but also the subject . . . what before was a method of medical therapy now has become a method of self-education . . . *here analytical psychology breaks the bonds* which hitherto confined it to the doctor's consulting-room. It fills the wide gap which hitherto placed the occidental cultures at a psychic disadvantage to those of the orient. We only recognised psychic submission and constraint . . . When a psychology which is primarily medical takes the doctor himself as its object, *it is no longer just a method of treatment for patients*; it now deals with those who are healthy and who can only be said to be ill in the sense that all men suffer.

Jung clearly formulated something that had been happening all along. But what might have been considered a weakness or a fault in therapy was turned by him into a strength and a function of it. It is all the more urgent for us, therefore, to bear in mind a few fundamental distinctions:

(aa) *The difference between neurosis and health.* Only a minority of people are neurotic, the majority are healthy.

Schultz-Hencke depicts a universal human characteristic in his work on the inhibited individual.¹ He also distinguishes phenomena of a relatively crude nature. 'Only a fraction of humanity knows them; they mean distress; they are almost always experienced as morbid . . . perhaps every tenth person will experience these morbid consequences of inhibition in rudimentary fashion at least once. But mostly only for a brief period here or there in his life. There may well be a dozen of such phenomena. As a rule a normal person only experiences one of these provided he belongs to the 10 per cent so that amongst 100 people only one will be acquainted with a definite morbid experience which he has fleetingly encountered on one occasion . . . hence it is not much use for the sufferer to describe his morbid phenomena; they are not understood . . . the patient has to go to the doctor.' Schultz-Hencke reckons that there are 'perhaps half a million Germans who can only be helped by "bringing up the heavy artillery"'.

These pronouncements on the frequency of the neuroses try to estimate the approximate extent of their incidence. Their assertions imply the following: There is *an essential difference* between neurotic phenomena and the healthy psychic life which all can share. The majority of people have no experience of neurotic phenomena and therefore do not understand these phenomena at all.

There are *transitions* between neurosis and health in so far as a minority of healthy people can show neurotic phenomena, usually in episodic form. This does not mean that all people are a little neurotic but only that isolated, transient phenomena may appear in otherwise healthy persons. It also means that only a small minority of people will be affected by sporadic, neurotic

¹ Harald Schultz-Hencke, *Der gehemmte Mensch* (Leipzig, 1940).

phenomena; the majority know nothing about such things whatsoever, and the few who do can be regarded as on the whole healthy persons at that.

Though there cannot be any serious doubt over these views, the last may perhaps be questioned. Neurotic phenomena are the *consequences* of psychic difficulties which every healthy person knows and overcomes. Existential psychological situations of 'anguish' belong to humanity in general and are not neurotic manifestations. We cannot deny that in the majority of neuroses the universal difficulties of life play an essential part but failure to stand up to the stresses of life through lack of self-understanding, through dishonesty, self-deception, and poor-quality behaviour tends to produce inferior character rather than neurosis. Neurotics are different from these countless, existentially deteriorating but healthy people, as there is also a difference between base behaviour and illness. Before neurosis can be said to arise, something decisive and specific for neurosis must be added: there must be a definite disposition of the psychic mechanisms. It is these alone which permit neurosis to arise from some failure to meet the urgency of the life-situation. Neurosis is thus possible even where there is self-understanding and integrity. We can sometimes say of a neurotic person, 'His neurosis deserves respect'. Given the mechanisms, neurotic phenomena can appear not only through craven refusal but through the actual seriousness of the upward struggle.

(bb) *The distinction between therapy and assistance in psychic distress.* Everyone needs self-illumination and self-reassurance through his inner activity. We all need to master life's problems, renounce and refuse as well as accept the reality of life as it is given. The neurotic minority alone need therapy. Coping with life's difficulties, maturing, fulfilling one's existence means one thing, the curing of neurosis another. Correspondingly there is a difference between helping psychic stress and medical therapy.

Every healthy person has the task of finding a way out of life's problems, of taking up some attitude towards himself and educating himself. If the problems are great, some other person—a psychotherapist perhaps—may well be able to throw some light upon them. But neurotic phenomena require special medical measures for their cure, although, within the framework of these, general human help can be invaluable in a rather unforeseeable way. With certain neurotic phenomena the process of becoming oneself is also a means to cure the neurosis. Depth-psychology at its limits coincides with the illumination of Existence itself and calls for personal closeness and friendship of a unique and contemporary character. Within medical confines psychotherapy becomes on the contrary an application of techniques that can be described, it remains impersonal and can be repeatedly applied and taught.

Between people everywhere communication is possible which cannot be scientifically or medically contrived and in which self-fulfilment comes about through a revelation of the person, but in relation to neurosis in the psychotherapeutic sense there is both more and less to do. There is less existential communication (however pleasant and helpful such communication may be

for the neurotic and however much he needs it should he recover), because such communication cannot take place according to plan, intentionally or professionally. But there is more than existential communication, in so far as psychotherapy is the application of an expert technique, and measures, tested by experience, are taking specific effect.

This has relevance for the answer to a practical question. It would be grotesque to ask a fee for providing existential communication. Fees only make sense where there is the offer of technical services which depend on a definite body of knowledge, a teachable expertise that can be applied universally and repeated. But as in all medical therapy we find on occasion the unintentional beginnings of existential communication between doctor and patient, so it is when we come to psychotherapy. Communication of this order is something additional which can neither be sought nor given in return for money. But we cannot turn into a therapeutic principle or purpose everything that may happen in the course of depth-analysis or during that illumination of Existence when two people are face to face. Such communication is possible in all human relationships, and where they are genuine and fateful, it will support and further them but in respect to itself it stands beyond the human world of give and take.

(cc) *Universalisation of psychotherapy.* None of the above distinctions prevent psychotherapy being offered to all people who, for instance, have difficulties with their work or who cannot solve their domestic or family misunderstandings, or who are baffled by problems of educating their children. Even healthy people find complications for which a resolution needs to be found. Methodical knowledge and technical ability in the hands of some able person may be of help even where there are no psychopathological phenomena and such help may be more successful and lasting than in the case of neurosis itself. Sensible counsel at the right moment can do wonders, and attainment of insight makes scales fall from the eyes of some people, even so do counsellors who act within some institutional setting achieve success. The possibilities here cannot be foretold.

This constitutes a step from medical psychotherapy to a concern for the problems of healthy people so far as they can be helped psychologically. In the long run therefore it is all the more necessary to be clear what these activities mean. There is a common phrase which suggests that healthy people at present are not inclined to submit themselves to help of this sort; when someone has rejected our offer of help we say: we could treat him if only he had some symptom or other (i.e. some neurotic manifestation).

We obscure the whole idea of psychotherapy if we adopt the attitude: psychotherapy is necessary for everyone and not only a solution of stress; the stresses involved are after all shared by all mankind. Such a view goes beyond all measure. Every person helps himself through communication with his closest and dearest and through such faith as he can muster from what the world offers him. He only takes the step of turning to some stranger, paying

him a fee and revealing himself without that reserve which only stress breaks down, when he is in dire distress, lacking perhaps any true relationship, having fallen out with his environment or lost faith in an empty world. We have not yet solved the problem of how help of this sort can be organised if the distinction between medical psychotherapy and general psychological counselling is to be preserved, that is, whether we should foster the tendency to universalise psychotherapy into a general form of psychological guidance or whether in the end new limitations should be set confining psychotherapy to the neuroses and presupposing a judgment of 'ill-health'.

(3) *The personality of the psychotherapist.* A great deal is expected of a psychotherapist; superior wisdom, unshakeable kindness, ineradicable optimism; he is supposed to contain them all. Ideally, it requires a life-long self-scrutiny by someone rich in experience if humility is to be ensured by a proper knowledge of human limits and one's own limitations. As soon as psychotherapy has become organised into a profession through the provision of theory and training, how can opportunities be created for *exceptional personalities* to take their own line of action? Training, selection, control, create defences against unsuitable persons, and this is all the more necessary as it is still a growing profession, not yet consolidated by any time-honoured tradition; it will therefore be invaded by many disturbed, neurotic and curious people.

(aa) *Creating standards.* If there is a future for psychotherapy, there will one day be a human representation of how it can be done to perfection. The personal factor plays a central role in psychotherapy in a very specific way but the right person has not yet arrived. But even the best of prototypes would have his own particular limits and lacks and could not be wholly imitated. He could only offer some orientation and encouragement for his successors. While we are without any public example of such a prototype whose life could be reviewed, we can only discuss in abstract fashion what we might expect. We have selected a few examples from the usual cultural and ethical requirements:

Opposition to sectarianism. Psychotherapy rests on faith but does not create a faith. If the therapist is to preserve his integrity he must be able to accept real faith openly and positively; he must also resist the tendency (which experience shows is unavoidable) to turn psychotherapy into some philosophical system and convert the circle of psychotherapists, pupils and patients into a sect.

I once asked a doctor whether it would perhaps be advisable to call in a psychotherapist for a hysterical patient and he answered: 'No, she is a practising Christian'. Such an absolute alternative is of course not wholly valid but it has some application to all that we find of a world-ordering character in various psychotherapeutic writings. Psychotherapy that has become sectarian in character cannot be a representative of any public form of therapy. It will take shape for a time among private circles and then dissolve unless one of the

psychotherapists becomes the successful founder of a new religion. We can only counter those sectarian tendencies that lead to groups formed round esoterically admired masters and to psychotherapeutic dogmas by demanding as our standards: clarity regarding the secularisation of faith, which is the general tendency of our times; a recognition of the great traditional faiths in so far as they are still alive; the cultivation in oneself of a basic philosophic attitude as the universal medium for knowledge, vision and ability; and clarity over the fact that such attitudes always point to self-recreation in every individual psychotherapist. He has to be a person who can rely on his own resources.

Respect for people. The nature of his experiences and certain necessary psychotherapeutic measures may well induce in the psychotherapist a certain contempt for people. He feels rather like an animal-trainer, lays patients low under hypnosis, drills the unco-operative. He meets with two kinds of situations: first, where there is a plain, commendable readiness to undergo treatment, and neurosis may enhance a person's stature (one can feel love for such neurotics in whom the deeps of existence become manifest), secondly, where neurotic people never become themselves but maintain their life-lie; they do not accept reality and its values but use and misuse them as symbols for something else (in extreme cases they make it possible for one to feel disgust for human beings). The psychotherapist is only kept from a contempt for humanity through the fundamental attitude of wanting to help people as people. He is helped in this by being aware of his own weak points, his own derailments and failures and preserving them in his memory throughout life, but he is also helped by his knowledge of possible success and the liberating and supporting character of fresh encounters. If anyone chooses to be a psychotherapist, he should know of the difficult experiences that await him and be certain of his own love for humanity.

Opposition to therapeutic one-sidedness. There is always a risk of seeing something else in the patient from what one sees in oneself. The therapist goes to work on the patient as if he were some natural object of little concern to himself. But psychologically speaking man finds himself in the other. It is only then that he can help with all that is within him. The psychotherapist therefore must make himself the object of his own psychology to the same extent and degree of depth as he expects from his patient.

(bb) *Acceptance of training.* In view of the difficult nature of the profession and the high personal standards required, it is right that access to the practice of psychotherapy should be governed by conditions at least as stringent as those of medicine, so far as teaching, living and practical experience go, nor should psychotherapy ever be separated from medicine. But the demand for medical training cannot be maintained as if it were the only possible basis for helping people in distress. For this, any profession which involves intensive mental work and self-discipline, experience of the world and closeness to other humans, will provide equally good foundation. Only mature people can take

up psychotherapy of this character. That the somatic therapy of neurosis should remain in the hands of physicians is just as much a matter of course as that they should invite non-medical people in as auxiliaries and that where the application of psychotherapy is extended to healthy persons, even non-medical people achieve increasing importance.

(cc) *Training.* Apart from the practical experience which has to be directly acquired, there is an important question to be answered regarding what cultural tradition should form the basis of psychotherapeutic studies. It is likely that psychotherapy will only reach any standing if the practitioner returns to the profounder sources of human knowledge, in addition to studying the psychotherapists of the last fifty years, who when all is said and done have confined themselves to the neuroses and are, philosophically speaking, of a lowly order. A human image wants to be gained from an anthropology nurtured on Greek philosophy, on Augustine and Kierkegaard, Kant, Hegel and Nietzsche. At present we have no firm criteria for our cultural and psychological standards. The level is still extremely fluctuating. The human image should only be defined by the greatest of human beings and only they should coin the modes of speech to be used in talking of the psyche. It is from them we can learn to use the concepts which will help the individual to illuminate himself.

(dd) *Control.* Institutions or organisations can only exercise a superficial control in order to eliminate the unsuitable in due course and make it more difficult for the psychotherapist to make mistakes.

(1) By offering a number of opportunities the institution may usefully resist levelling-down through mutual agreement and the tendency to dissipate into individual efforts. It should offer possibilities for solitude which is the source of all quality, by giving the individual the freest possible range for his initiative; validation must take place in meaningful exchanges between psychotherapists, they should see themselves in the light of their own work (so far as this can be seen), converse with each other and freely discuss scientific publications, they should invite criticisms of these and of themselves and impose no limits to this.

(2) Because of its intimacy psychotherapy brings certain risks which no-one knows better than the psychotherapist himself. There are occasional rumours of individual lapses and occasionally they are true. But they are sufficient to call for the requirement that should a psychotherapist develop an erotic relationship with his patient of a sexual character, even if it were only once, he should desist from psychotherapy.

A further requirement could be that a psychotherapist should be married if he or she treats persons of the opposite sex. The average, secularised psychotherapist can hardly have the rigorous standards expected from a Catholic priest, supported by the tenets of his faith. But such a requirement seems to offer too naive a solution. Marriage gives no guarantee of good behaviour and the unmarried can be beyond reproach. The required psychic level of the

psychotherapist cannot be determined by the mere fact of his marriage, although the latter may well enhance it.

This particular problem is touched on rather than discussed in the psychotherapeutic theories of 'transference'. The psychotherapist as a person cannot help but play a decisive part in the psychic processes of the patient. What has to be done is to combine this *personal function* with *impassible distance* so that objectivity is preserved and in the course of the unavoidable, unique indiscretion of the revelations of depth-psychology personal factors in the psychotherapist are successfully excluded. Within the personal factor something impersonal must be operative. Even social contact between psychotherapist and patient is already a mistake, and what relationship there is must be limited to the psychotherapeutic contact. But if this distance cannot be achieved, the risks are obvious. Once an element of desire and mutual private attachment enters into the ordinary respect for the person who carries out psychic counsel and cure, in principle the situation is ruined. Should it ever be thought that the erotic links between patient and psychotherapist and the erotic satisfaction of the one by the other were the main factors in cure (in current phraseology—provide the most effective transference and means for its solution), psychotherapy would have become little else than skilful seduction. The historical study of the gnostic sects reveals the unending metamorphoses which the role of the therapist can assume, in the guise of physician, saviour or lover.

APPENDIX

APPENDIX

We have now systematically reviewed the various standpoints from which we can get to know abnormal psychic life. As an appendix to this we will attempt a brief survey of certain practical and historical matters. We shall touch on the *examination* of patients and their *treatment*, and on *prognosis*, and take a look at the past *history of scientific psychopathology*.

§ I. EXAMINATION OF PATIENTS

(a) General

In the examination of our patients we have to combine a number of opposing factors. We have to submit to the patients' individuality and allow them to give verbal expression to it. On the other hand we have to investigate the situation from a number of definite points of view with certain guiding aims in mind. If we neglect the latter we get a chaos of detail. If we neglect the former we simply pigeonhole the particulars into a few rigid categories which we already have; we see nothing fresh and are likely to do violence to our material. *A wealth of well-established viewpoints and an appropriate adaptation of them to the individual case* marks the ideal investigator.

From this it follows that one cannot have a prepared questionnaire in mind and simply run through it, although for a particular purpose a fixed set of questions may help in the examination. Questionnaires are a help for beginners who are supposed to write histories without a background of sufficient general knowledge. They are also useful for the refreshment of one's memory. But what is best and most important for the investigator is the stimulus exerted on him by the patient and the presenting phenomena. Questions have to be varied. What sort of individual confronts one, what is so far known about him by chance or design, the situation in which one is with the patient, his state of consciousness and other matters, all require in some degree the fresh creation of suitable enquiries in every case. That is why we should not approach patients with a ready-made schema but only be certain in our minds as to which points need clarification and which approaches needs to be taken into account in the examination. One learns the latter from the entire field of general psychopathology and in particular from the analysis of individual types of illness in special psychiatry. We can only know what questions to ask if we have a fund of general knowledge. The conceptual schemata and the structure of our conceptual knowledge are the real sense-organs of our questioning. If this variation of individual examination is an art and means fresh creativity in every case, we must also remember that the *communication* of what we have found, if it is to have any validity, must be a matter of science

and requires well-established concepts in constant use. It is therefore a mistake to create 'ad hoc' one's own naturally rather hazy psychopathological concepts in each case and forget them again with the next case. In the examination of the individual case the psychopathologist works creatively and is always shifting his ground; but when he reports his findings he will keep to certain fixed concepts and only set up fresh ones with the greatest caution and with their lasting use in mind.

(b) *Methods of examination*

The first and always most important method of examination is that of *conversation* with the patient. This may take place in many different ways. The ability to conduct it systematically and yet adapt it sensitively to the individual case is the whole skill of the psychiatrist. A good questioner is someone who excludes his own personal attitude, not only in matters of verbal expression but in his whole bearing. The individual who has to protect his 'position', his medical authority and give the impression of superior knowledge fails in many cases to gain the necessary sympathy with his patient. One must have a sufficiently strong personality to be able to efface oneself completely and permit a certain complicity. One should be able to drop one's own 'standpoint' in speech and attitude. The good examiner must let the patient speak and say as little as possible himself.¹ He should observe behaviour and gesture during the conversation and the many small phenomena of expression, the tone of voice, a smile or a glance, everything that unconsciously determines the final impression. We make use of our own *first impressions* on meeting an individual. These are unrepeatable, immediate, unique and sometimes give us a feeling of something that is only confirmed a good deal later on. Psychoanalysis tries to enrich results by getting the patient to recount his dreams and by free association while all the phenomena of expression are closely observed.²

Contact with mentally abnormal people has to be learnt. To begin with we have to try and avoid anything that might arouse resentment and refusal in the patient. We must practise a neutral politeness, listen attentively and apart from one's own views go along with the patient a little in his ideas and judgments. We will not reject anything the patient considers as important as if this were of no account. We will keep our own personal evaluations entirely in the background.

In addition to this most important method of examination, the simple conversation with the patient, there are a number of aids which can play a considerable part. We try to obtain some objective material by means of a

¹ Klaesi reports some excellent examples of schizophrenic conversation. *Über die Bedeutung u. Entstehung der Stereotypien* (Berlin, Karger, 1922). Here are literal reports of explorations, what aids were used, how matters were timed, what methods were used to influence the patient. We learn more from concrete examples of this sort than from any general set of precepts. For really good methods of exploration one needs the tradition of a clinic and personal example. Newton's principle holds here: *In addiscendis scientiis exempla plus proscunt quam praecepta.*

² See A. Richter, *Z. Neur.*, vol. 146, p. 620, for a good criticism of 'Methode des freien Einfalls'.

history taken from relatives and others in the environment and we try to get a reliable life-history from *records* and evidence of every kind. Further, *letters*, *autobiographies* and other productions of the patients sometimes give us valuable insights. If the patient is prepared and able to do so we can ask him to write a *self-description* of his psychotic experiences. To complete the personal examination we can make use of *intelligence testing* according to a well-determined schema, picture-description, story-repetition, etc.¹ In a few cases we can apply real *psychological experiments*. A physical examination is of course obligatory in all cases though it only rarely yields results which materially assist the assessment of the mental illness, e.g. in organic cerebral disorders and the symptomatic psychoses.

(c) *The aims of the examination*

By means of the objective data as much as by the patients' own story we endeavour to arrive at a full *biographical account* of the individual as a whole in relation to psychic, social and somatic factors. We further try to gain a knowledge of the *contents* of the psychic life. Without inducing the patient to self-observation or a general concentration upon himself and his psyche we try to guide the conversation in such a way that we elicit his ideas, views, convictions and notions and his own opinions as to his attitude to others around him. Above all we try to grasp what is really essential from the point of view of the psychopathology, e.g. hints of persecution or harmful interferences. Every detail which perhaps seems of no consequence to the patient and which he only produces by the way may become the starting-point for an exact interrogation.

The biographical details and the contents are what the beginner usually will investigate spontaneously. We know that there still remains what is to us perhaps the more important but the more difficult half of the enquiry. To reach a *phenomenological* clarity we have to direct the patients, so far as they can manage it, to give us the form of their psychic experience and observe themselves so that we can learn something of the subjective mode of their experience and not merely its content. We stimulate the patients to compare the different states which they experience. We make use of the patients' own psychological judgment in so far as they are now the true observers so that we may get our data on false perceptions, for example, or on delusional experiences, anomalies of personality-awareness, etc.

All the goals of examination mentioned so far can only be attained if the patient is relatively sensible. He must be ready to give information and we must be able to pin him down. If he is not fully sensible we are clearly faced with the task which has to be faced in every examination: the description and analysis of the momentary state, the picture of '*the mental state*'. We try to

¹ Köppen and Kutzinski, *Systematische Beobachtungen über die Wiedergabe kleiner Erzählungen durch Geisteskranke* (Berlin, 1910). Levy-Suhl, 'Die Prüfung der sittlichen Reife jugendlicher Angeklagter', *Z. Psychother.*, vol. 4, p. 146; cp. *Angew. Psychol.*, vol. 9, p. 245, now the Rorschach test.

determine the state of consciousness, the degree of attention, the sequence of ideas, etc., with the help of suitable questions and experimental aids (e.g. the presentation of test-pictures).¹ Frequently we have to be satisfied with recording the spontaneous utterances of the patients and with a description of their behaviour, when in cases of acute psychosis we do not succeed in establishing a proper relationship with the patient.

(d) *Viewpoints for evaluating the results of the examination*

The question repeatedly recurs whether patients' statements are correct and reliable. Only too often we find that our information is false. Intentional untruth, unnoticed distortions of memory, repressions, all play a prominent role so that whenever possible we should try to get objective data as a check. The phenomenological contributions suffer from the patients' psychological incapacity, from their restricted interests, so that in the majority of cases we have to do without full clarification. Simulation of mental illness is rare.² On the other hand simulation may be a component, particularly with hysterical psychoses, e.g. some reactive prison-psychoses, but as the psychosis develops this disappears. More frequently we get *dissimulation*, the concealment of morbid symptoms: the chronic paranoic conceals his delusional system and knows that everyone considers it quite mad; the melancholic hides his profound despair beneath a quiet and smiling exterior so that he is thought to be recovered and thus can gain an opportunity for suicide.

Suggestive questions play a special role in the investigation of patients. These are questions which already contain that which one wants to know and only need to be answered with a yes or no (e.g. do you sometimes feel when you wake that you have been wakened by someone?). In the narrower sense they are questions which already suggest the answer yes or no (e.g. you do have headaches?). Suggestive questions of this sort have been expressly forbidden. The demand was for general questions only: how does the patient feel, what has he experienced, how did it go with him, what then happened, etc., and every time that the patient said something positive he should be stimulated by general questions to say something further. In very many cases this is certainly the only proper method of examination. But not in all. Here, as so often, the correct procedure is not complete avoidance of using a risky tool but its *purposeful use*. If one uses a suggestive question one must be aware of this and evaluate the answers in a critical fashion. If one wants to conduct an examination without employing any such questions one will get to know much less. Apart from the case where one wants to investigate suggestibility directly,

¹ Heilbronner, *Msch. Psychiatr.*, vol. 17 (1905), p. 115.

² Cp. L. Becker, *Die Simulation von Krankheiten u. ihre Bedeutung* (Leipzig, 1908). 'Über Simulation von Geisteskrankheit', Sträussler, *Z. Neur.*, vol. 46 (1919), p. 207. It is possible to carry on a conscious simulation of mental illness for months and deceive the doctors, as shown by cases of prisoners of war. Cp. the interesting work of Klieneberger, 'Über simulation geistiger Störungen', *Z. Neur.*, vol. 71, p. 239. Über das Gelingen von Simulation: Utitz, *Psychologie der Simulation* (Stuttgart, Ferdinand Enke, 1918).

one can in many cases, e.g. in schizophrenia, quietly enquire about a number of different phenomena among the false perceptions, etc., without fearing that one is suggesting the answers. Many patients are simply not suggestible and one's caution is proportionate to the degree of suggestibility present. In the case of markedly suggestible persons, particularly hysterics, one will of course avoid suggestive questions absolutely.

At the end of the examination one endeavours to evaluate all the results and come to a *diagnosis* of the particular disease-group. The numerous elements which have to be considered here are only to be learnt in special psychiatry. We would, however, like to demonstrate with the following example one general point which plays a part in the diagnosis of incurable psychoses and is primarily a matter of investigatory technique:

One lets the patient give a detailed story of himself and his experiences; one enquires when some point is obscure and in this way proceeds through his life, and particularly through the years which are suspect, for the beginning of an illness. As one participates in this experience with an inward understanding one notices at first that connections are obscure and finally *quite incomprehensible*. One makes a note of these, compares them together, and eventually may find that they can be understood or on the other hand they accumulate and cluster together at some particular time. In that case one has found the most vivid and striking characteristic of the mental illness proper which cannot be demonstrated in any single symptom but which as one lives into the patients' experiences impresses itself forcibly on one as a tangible gap in one's understanding. Even if we can be relatively certain ourselves that there is a risk of a 'process' when we meet this '*experience of not being able to understand*' we shall nevertheless try to confirm this by looking for some proof of particular elementary symptoms and in almost all cases we shall find them. The inconspicuous process 'without florid symptoms' is always an uncertain matter in respect to the correctness of the diagnosis.

The *case-history* is written on the basis of the examination. Opinions still diverge greatly as to how this should be written. Generally the requirement is that it should be objective. Judgments, conclusions and empty schematic categories should not be introduced but the facts should be reported in a lively and concrete way. But description should be selective, since any description of an individual if it is to be complete would be an unending and therefore an impossible undertaking. Where selection has been to the point the individual case emerges from the good case-history concretely and illuminated from a number of directions. Where the case-history is bad, we have first to eliminate everything unnecessary, superfluous, uninformative and remove the rubbish of meaningless observations so at last we can arrive at some picture from what is left. Now selection is for the most part a matter of personal skill. But where investigators are of a similar mind this can be enhanced by a deliberate study of the psychopathological points of view. The clearer these viewpoints become, the less partisan will the case-history be, whereas confused points of view leave the careful investigator to sink in the wastes of all that can be described or

reported while he writes an endless case-history that still manages perhaps to omit just that which is psychopathologically most important. A good case-history is always lengthy but a long case-history is not necessarily good. There is only one way to learn how to write case-histories besides practice—that is the all-round study of scientific psychopathology. The psychopathologist is revealed in the case-history he writes. What he knows and perceives, how he reacts, what he asks and how he assesses and experiences the situation, will not only tell us how much he understands but what he is like.

§ 2. THE FUNCTION OF THERAPY

The goal of scientific effort satisfies our need for knowledge and involves a practical application of results to give improved means for achieving our purposes. From this stems the powerful impact of the natural sciences which comes not so much from deepened concepts and increased knowledge but from the importance of our findings in the mastery of natural causes for practical ends. We would like to achieve something similar in the case of the study of psychology and psychopathology. But compared with the natural sciences these studies do not afford us very much in this respect. The scientific knowledge of psychopathology is indeed a precondition for any psychiatric therapy. This therapy, however, so far as it can be taught, is not derived from such knowledge alone to any major extent but remains an art that uses science as one of its instruments. The art can indeed be developed and enriched and transmitted through personal contact but it can only be learned in its technical aspects and re-applied to a limited degree.

A successful therapeutic effort may make us conclude that it has been responsible for the desired effect and even conclude further from this therapeutic effect what type of illness has been involved. Both such conclusions however are misleading.

Experience teaches us that almost all methods are helpful for a short time in some way or other. Gruhle found with surgical intervention in genuine epilepsy that the therapeutic results were obviously as often fatal as they were successful and this is true of therapeutic results in general.

'Very many epileptics react well to the skull being opened, that is, there is a reduction in the number of attacks and a revival of their total psychic vitality which is often badly depressed. But the impatience of ambitious surgeons led to the publication of such experiments prematurely. After some time the attacks returned in the great majority of the cases. The simple opening of the skull . . . does not remove the cause in any comprehensible way but it reduces the irritability and proneness to seizures in those cases where fluctuations due to pressure were a marked feature . . . In other cases the trepanation takes effect just as any operation would; that is, it is a very common observation that any operation, an appendicectomy for instance, will have a beneficial effect on the course of the epilepsy. Experienced doctors know well that in cases of long standing a real improvement may be brought about from time to time if they make some intervention . . . for instance, a salt-free, vegetarian diet, a

vigorous cold-water treatment, a powerful laxative given over some 5 days, a considerable blood-letting, purging combined with a hunger-cure, etc., but the effects last only for a short time.'¹

The question why such miscellaneous therapeutic success is possible can be answered in several ways. Any comment on the matter tends to emphasise the favourable cases and ignore the failures. The effects appear when the illness or phase is coming to an end in any case. The influence of suggestion can hardly be over-rated even when neither doctor nor patient give it any thought. Along with those satisfactory therapeutic effects which can be repeated and reported upon because the connections are known there are therapeutic effects which depend on a lucky intervention which succeeds on the one occasion only though one cannot repeat it identically afterwards. The reason for this is as follows:

Even the causal connection of biological events is not a simple one-to-one relationship but occurs via the intertwining of a number of reciprocal processes which are subject to complicated directives and structure each other at a number of different levels and according to different hierarchies. We may compare meaningful connections in the psychic field which tend to develop reciprocally as well as in polarities. In spite of all our knowledge our therapeutic attitude to these events which we cannot grasp as a whole is often that of an amateur faced with an apparatus he does not really comprehend. He tries it from all sides, observes where he goes wrong and after a number of failures, but sometimes at first go, he achieves success. In the same way when observing a patient we suddenly may grasp a hopeful possibility, founded perhaps on something we know, but we can never exactly repeat what happened or calculate it precisely. In the end we cannot say how it came about nor what was the decisive point in the success. On another occasion one cannot repeat it. As a critical observer one is surprised at one's own success because one does not know how one has managed it. Control experiments are of course lacking. In therapy of this kind instinct plays a part in all that is known, an instinct which senses far more than conscious knowledge can ever tell one.

To use one's therapeutic successes as a *means of scientific knowledge* is therefore uncommonly misleading, particularly in psychotherapy. The old medical saying that one should avoid a conclusion 'ex juvantibus' has even greater application here. Research demands an unprejudiced observation of failure as well as of success. In medicine indeed this is obvious. But in psychotherapy one could wish for some decisively clear publication of failures. Too often we read only vague judgments and besides the cases of striking success only find statistics built on ill-defined categories such as 'improved', etc.

Let us look briefly at medical practice from three alternative points of view: practice is directed towards the individual and his cure (therapy proper) or it is directed towards his progeny (eugenics); therapeutic practice is directed either to the body or the psyche; it takes place as a voluntary matter or within a closed institution (voluntary consultation or under institutional auspices).

¹ Gruhle, *Nervenarzt.*, vol. 1, p. 60.

(a) *Therapy and eugenics*

What the individual becomes is conditioned by his Anlage and his environment. The factors due to the environment can be influenced by therapy, those due to the Anlage only by eugenics.

As almost everything that is due to the Anlage (disposition) needs the environment for its realisation, therapy extends to the Anlage in so far as this depends on the environment. This is the case even with the endogenous psychoses to a certain degree, as has been shown with uniovular twins, where the one is schizophrenic yet in a small number of cases the other does not become schizophrenic at all in spite of this. Whatever enhances or inhibits such an Anlage must be contained in the environment. If we could differentiate the two, treatment would have to be conducted in such a way that an undesirable Anlage should not manifest itself at all. But this is a utopian idea. In reality therapy meets its actual impassable limits when confronted with the quality of the individual, with his Anlage, which for the most part he has inherited. In the case of the severe endogenous psychoses these limits are so impassable that they give ground for that specific hopelessness which constantly crops up in the therapy of psychosis and evinces a therapeutic nihilism. If in countless cases we cannot help the individual with such a constitution yet we can at least reflect what should be done to see that as few as possible are born with such a constitution. Galton designed a programme for ensuring the best possible heredity for the coming generations and called it Eugenics. Nietzsche had already thought of the doctor in unspecific fashion as 'the benefactor of his entire society' in that 'he could set up an aristocracy of mind and body' in his capacity as maker or preventer of marriages. To be effective the measures for the control of procreation can only be taken by the State. With its help doctors could acquire the power of applying the reliable findings of genetic research, i.e. they could hinder the procreation of the most damaging hereditary dispositions where these can be scientifically known.¹ Presumably this will always remain an experiment where the evils produced are likely to be far worse than the advantages achieved.

Preventive measures in the battle against alcoholism, drug addiction (morphine, cocaine, etc.) and syphilis are equally only possible with the help of the State if they are to be effective and are of very great importance.

(b) *Physical treatments*

There is a difference in meaning between somatic and psychic therapy. In the treatment of physical illnesses the final aim is clear: recovery in the biological sense. The viewpoint of somatic medicine is unaffected whether it concerns an animal or a man. But as soon as we want to influence the human psyche the aim is not at all clear in what sense. We must put it to ourselves:

¹ Ernst Rüdin, *Psychiatrische Rassenhygiene* (München, 1938). *Erblehre und Rassenhygiene im völkischen Staat* (ed. E. Rüdin) (München, 1934). *Gesetz zur Verhütung erbkranken Nachwuchses*, elucidated by Gütt, Rüdin and Ruttke (München, 1934).

what do we really desire to achieve in this case? Further, somatic methods of treatment make use of *extra-conscious causal connections* in order to affect the foundations of psychic life and by this the psyche itself. Psychic methods of treatment are applied to the psyche via genetically meaningful connections and may indirectly produce physical changes as well.

In practice both methods of treatment are often one and the same since the one brings the other with it. But the difference in meaning is radical.

The doctor of course treats first the *physical causes* of psychic disorders in so far as these are known to him and accessible to this approach. This involves processes in the brain and nervous system as well as physical illnesses and general somatic conditions.

To select a few examples of physical treatment we may take epilepsy, where attacks are diminished by bromide, luminol, etc.; cerebral arteriosclerosis which is treated like arteriosclerosis in other organs by methods of hygiene and dietetics; cerebral syphilis which can sometimes be improved markedly by specific therapy. The systematic rich feeding and dietetic measures with which asthenic constitutions are treated sometimes result in a psychic improvement as well. Panic states are damped down with opiates, excited states with scopolamin and so on.

It is extremely difficult to make any critical assessment of the effect of somatic treatment.

With neurotics physical treatment is not only open to question very often in this respect but it is never a neutral matter. Often there is the danger that the doctor unwittingly suggests to the patient an excessive observation of his body and it is not unusual for a purely physical treatment to result in this way in a worsening of the abnormal nervous state ('the physician causes the illness'—iatrogenic illness).

In latter years there has been a very great interest shown in the *recent physical methods of treating the major psychoses*. General Paralysis has hitherto been incurable but can now be brought to a halt with partial recovery by the therapy of malaria-injection introduced by Wagner-Jauregg. For a whole number of other disease-states various shock-therapies have shown their effectiveness, as, for instance, electro-shock therapy (Cerletti-Rom);¹ this leads to an epileptic seizure with therapeutic results. There has been a surprising recovery from schizophrenia with the help of insulin or cardiazol shock, using procedures that have been painstakingly developed,² though the published efforts are not yet unambiguous, particularly as regards the amount of lasting success. Circular depressions are cured by cardiazol-shock. In General Paralysis therapy either destroys the syphilitic spirochete through the high body-temperature or because of some specific plasmodic effect. It is still

¹ For example, Forel, *Z. Psychopath.*, vol. 12, p. 267. Repond, *Z. Psychopath.*, vol. 27, p. 270.

² M. Saukel, *Neue Behandlungsmethode der Schizophrenie* (Vienna-Leipzig, 1935). Oberholzer, *Allg. Z. Psychiatr.*, vol. 114 (1940), p. 271. M. Müller, 'Die Insulin-Cardiazolbehandlung in der Psychiatrie', *Fschr. Neur.*, vol. 11 (1939), pp. 361, 417, 455. L. v. Meduna, *Die Konvulsionstherapie der Schizophrenie* (Halle, 1937).

obscure as to how shock-therapy acts. The length to which we go nowadays in the use of radical methods is shown by the surgical removal of part of the frontal lobes in schizophrenia with the result that patients become quiet, a few are able to work and others grow passive through lack of drive.¹

It is worth noting what Bonhoeffer² says in his historical review of the whirling-machines, revulsion-cures, the burning with hot irons and all the countless other methods of compulsion used as therapy at the beginning of the nineteenth century: 'One need not doubt the actual effectiveness of these forced cures. Probably they involved similar shock-effects as we nowadays achieve with drugs such as cardiazol and insulin.' He considered the psychiatrists of those days just as clever and critical as those of today and understood their methods in the face of the helplessness induced by excited patients and the failure to quieten them as 'attempts to bring methods of compulsion and punishment derived from the Middle Ages into harmony with a thoroughgoing medical and humane approach'—as 'measures of compulsion based on a fundamentally humane attitude'. So we might conclude that the hopelessness of psychotherapy in this present period of chemotherapy has led to a new form of extreme effort to see what can possibly be achieved. Boss³ traces out historically two basic principles of therapy for the psychoses. Either an increase of power, positive stimuli, an enticement to live, pleasant environment or drastic onslaughts, frightening the patients to death, terrifying methods, attempts at suffocating them, submerging them almost to the point of death, torturing them—whipping, scalding, starving, making them vomit, purging, etc. Among the latter group of methods, where the expectation is that the 'self-preservative drive' of the patient is intensified the greater the threat to the organism, we may count the methods of insulin shock.

Our means for effective and curative physical treatment are scarce, particularly since we know nothing of the decisive somatic causes in the case of the vast majority of mental abnormalities and illnesses.

(c) Psychotherapy⁴

Psychotherapy is the name given to all those methods of treatment that affect both psyche and body by measures which proceed via the psyche. The co-operation of the patient is always required. Psychotherapy has application

¹ Freeman and Watts, *Verh. 3 internat. neur. Kongr.*, Kopenhagen 1939 (see *Nervenarzt*, vol. 14, p. 135).

² Bonhoeffer, *Z. Neur.*, vol. 168, pp. 41 ff.

³ M. Boss, 'Die Grundprinzipien der Schizophrenietherapie', *Z. Neur.*, vol. 157, p. 358.

⁴ Fritz Mohr, 'Psychotherapie' in *Handbuch der Neurologie*, Lewandowsky (Berlin, Julius Spranger, 1910). Isserlin in *Ergebnissen der Neurologie und Psychiatrie*, vol. 1/1 (Jena, 1912). *Handbuch der Therapie der Nervenkrankheiten* by Vogt (Jena, Gustav Fischer, 1916). J. H. Schultz, *Die seelische Krankenbehandlung (Psychotherapie)* (Jena, 1919; 4th edn. 1930). Good information on all methods, undogmatic and sensible criticism, shows what can be achieved by rational methods where there is good will and sympathy; tends to present basic principles schematically. Kläsi, 'Ueber psychiatrisch-poliklinische Behandlungsmethoden', *Z. Neur.*, vol. 36, p. 431. Fritz Mohr, *Psycho-physische Behandlungsmethoden* (Leipzig, 1925). H. Prinzhorn, *Psychotherapie (Voraussetzungen, Wesen, Grenzen)* (Leipzig, 1929). The principal discussions say what perhaps many experienced psychiatrists think but rarely express, full of experience and acute observation, rather too easily content in his positive ideas with the body—psyche unity and caught up in Klages' philosophy.

to those who suffer from the many types of personality-disorder (psychopathies), also to the mildly psychotic patient, to all people who feel ill and suffer from their psychic state, and almost without exception to physical illnesses, which so often are overlaid with neurotic symptoms and with which the personality must inwardly come to terms. In all these instances we have in our possession the following means of influencing the psyche:

1. Methods of suggestion

Without addressing ourselves to the patient's personality, we use mechanisms of suggestion to obtain certain concrete effects: the removal of particular symptoms, of physical sequelae, the improvement of sleep, etc. We render the patient accessible to suggestion either in the *hypnotic* state¹ or in the *waking* state and we persuade him of what we want to achieve. Everything depends on the vividness and impressiveness of the ideas we can rouse in the patient and on the vitally forceful presence of the suggestor. All this is helped by the patient's faith and, given that, a good result is rapidly achieved.

Although doctor and patient are not always aware of it, the influence of suggestion is also at work in a large number of medicinal, electro-therapeutic and other measures, which over the ages have attained striking success with psychically and nervously ill people. It is all the same whether one prescribes sugared water, coloured water, tonic pills; whether one actually sends a galvanic current through the body or only pretends to do so with the help of complicated apparatus. The important thing is that the patient should be convinced of the significance of what is done. He must have faith in the power of science or in the skill and knowledge of his doctor, as a person both resolute and authoritative.²

2. Cathartic methods

In so far as patients suffer from the after-effects of experiences and their particular symptoms are a manifestation of these, the affects (emotions) which are the source of the trouble need to be 'abreacted' in some manner. This kind of psycho-analytic treatment was developed into a method by Breuer and Freud. The later elaborations by Freud need not be accepted in detail, so long as we recognise the underlying principle. That is, we let the patients unburden themselves, direct the conversation when important matters seem concealed, show them understanding and give an assurance that we make no moral judgments about them. 'Confessions' of this sort often bring relief. There are

¹ Bernheim, *Die Suggestion und ihre Heilwirkung* (trans. Freud) (Leipzig, 1888). Forel, *Der Hypnotismus* (Stuttgart, 1911). Trömner, 'Hypnose u. Suggestion' (Sammlung, *Aus Natur u. Geisteswelt*) (Teubner). L. Hirschlauff, *Hypnotismus und Suggestionstherapie* (Leipzig, 1904; 2nd edn., 1919). Ludwig Mayer, *Die technik der Hypnose* (München, 1938, 2nd edn.).

² During the first World War an old, crude method practised in the Erbs clinic (Heidelberg) became well known. Strong galvanic currents were used for the immediate removal of hysterical phenomena. Kaufmann, 'Die planmässige Heilung komplizierter Bewegungsstörungen bei Soldaten in einer Sitzung', *Münch. med. Wsch.*, 1916, 1. Kehrer, *Z. Neur.* 36. 1.

some cases where completely forgotten (dissociated) experiences can be made conscious and where this leads to a direct cessation of an abnormal physical or psychic symptom. Frank has elaborated a method for calling forth forgotten experiences in the course of a hypnotic half-sleep and then abreacting them.¹

3. Methods involving practice and training

The patient works upon himself regularly and repeatedly, following certain rules. The aim is to achieve indirectly certain changes in psychic attitude that are desired and to help the patient acquire new capacities.

(aa) *Exercises.*² Physical exercises are used widely nowadays and take many different forms. Unconscious psychic life, unwitting attitudes and inner states can be influenced either by the conscious will—usually with but small effect—or by the performance of certain acts (magic rites, religious and folk ceremonials, etc.). In these modern days of unbelief we attempt to bring about such changes in the unconscious psychic life by the more matter-of-fact way of physical exercises. By relaxation and release, by bracing or fortifying the body, we change the psyche at the same time.

In the case of the harassed, always active Westerner, who persistently keeps his will-power at the stretch, relaxation exercises are of the greatest importance. Some therapists favour breathing exercises; breathing with its inspiration and expiration acts as a symbol of taking the outer world in and surrendering to it. By a conscious training in breathing it is thought that the unconscious psychic life can be freed enough so as to trust itself to the world.

(bb) *Autogenic training.* This was evolved into a method by J. H. Schultz.³ It implies a deliberate effort of will directed upon one's own psychic and somatic life, through first inducing a change in consciousness and then, through auto-suggestion, a state of 'complete inward self-relaxation'.

4. Methods of re-education

The more the patient turns to the doctor to accept his authority and be guided, the more the relationship may assume the character of re-education. The patient is taken out of his usual environment into a hospital, a spa or sanatorium. Within the authoritative atmosphere of an ordered existence, he becomes re-educated. There is a complete regimentation of the patient's life. He must know what he is to do hour by hour and has to stick strictly to his programme.

5. Methods that address themselves to personality

If responsibility for the therapeutic effect is laid on the patient and final

¹ Frank, *Affektstörungen* (Berlin, 1913).

² G. R. Heyer, 'Seelische Führung durch Gymnastik', *Nervenarzt*, vol. 1 (1928), p. 408. E. Mathias, *Vom Sinn der Leibesübungen* (München, 1928). J. Faust, *Aktive Entspannungsbehandlung* (Stuttgart, 2nd edn., 1938).

³ J. H. Schultz, *Das autogene Training* (Leipzig, 1932). D. Hengel, *Autogenes Training als Erlebnis* (Leipzig, 1938).

decisions are left to him, if his own discretion remains the measure and he has to take direct action himself, then the method followed is fundamentally different from all the ones mentioned above. It is simpler in form but more significant for the human being than the preceding methods. It is the most difficult to reduce to a few rules and depends to a large extent on tact and sensitivity to nuance.

(aa) The doctor *tells the patient what he knows of the psychopathology*, and what exactly is the matter with him. For instance, where a patient understands the phasic character of his cyclothymia, this helps him to get rid of unfounded fears and comprehend the extra-conscious causes of the various phenomena, which perhaps have been troubling him on moral grounds.

(bb) The doctor *wants to reason and convince* and works on the value-judgments and general outlook of the patient. We speak here of methods of persuasion.¹

(cc) The doctor *addresses himself to the will-power*. In the one case he fosters an effort of will, in another the rejection of some misplaced self-discipline. It is of decisive importance for him to distinguish those phenomena which are to a certain extent accessible to the patient's self-control from those which are not (compulsive phenomena, for example). To the careful, critical observer it is often uncertain at what point the patient's will can or should take a hold and where, in another case, such an effort is only likely to make things worse and what is needed is relaxation.

We know our conscious life is, as it were, only the topmost layer of a wide and deep realm of sub-conscious and extra-conscious events. Self-education lies in influencing this sub-conscious, psychic life, directing its effects, giving them free rein or inhibiting them. Contrasting methods are required, depending on the kind of psychic life. On the one hand, in the face of inhibition and conventional influences, it is necessary to encourage surrender to the unconscious, ability to wait, a capacity to listen to the voice of instinct and feeling; slumbering elements in the unconscious need to be aroused. On the other hand, we have to train the will-power to inhibit and suppress when certain areas of the unconscious have grown at the expense of others and thrown the patient off his balance. Thus on the one hand the doctor's influence encourages activity and effort and on the other relaxation and surrender—a display of confidence by the patient in his own unconscious.

The individual is almost always in a face-to-face position with himself, with his own unconscious. It is uncommon for a patient to identify himself completely with his unconscious, with his instincts and feelings. Usually the personality is locked in combat with its own fundamentals. If one is to exert a definite influence on the patient, a necessary condition is to understand in detail this antagonism between the personality and its own unconscious. It is not those people whose unconscious is distinguished by the reliability, strength and steadiness of their feelings and instincts and who are aware that

¹ Paul Dubois, *Die Psychoneurosen* (deutsch) (Berne, 1905).

they are at one with their unconscious who come to the psychiatrist but those whose unconscious is confused, unreliable, erratic, those who are at war with their unconscious, with themselves and constantly sit, as it were, on a smouldering volcano.

(dd) *Self-illumination* is a precondition for meaningful and effective attitudes towards oneself. The doctor wants to help the patient understand himself. We speak of analytical methods in this connection. They are rarely harmless, often they are disturbing, sometimes shattering. We may well ask ourselves who would risk stripping the individual psyche to its foundations, unless from the outset it is certain that the person will be able to stand by himself and live on his own resources once these have been freed, or that, should he seem powerless, some objective support will be ready to offer him help which he can accept.

Where general attitudes to life are concerned, everything depends on the personality of the psychiatrist and his own philosophical outlook. This raises so many difficulties and conflicts that the individual psychiatrist has to reach his decisions simply on the basis of instinctive conviction rather than by any process of scientific reasoning.

Having obtained an over-all view of psychotherapeutic methods, we can make some comparisons. In the first place, we will compare the different attempts made to promote recovery by a *modification of the life situation*.

The crudest, most superficial method is a *change in milieu*. The patient is removed from his accustomed environment and from the frictions and difficulties which have accumulated in his own personal world. He is then exposed to new stimuli and impressions. Observation is made whether this helps him and whether through the rest and reflection, through the change and the temporary liberation from the troubles of his personal world, he gains strength and can progress. The doctor brings about no inward change directly.

Occupation therapy submits psyche and body to ordinary life-requirements—instead of an empty passing of the time or being left entirely to oneself. It keeps the patient in touch with the world and is supposed to use what strength the patient has available for the restoration of his disordered functions through some form of activity.

Social work. The social worker, so far as this is practically possible, changes the life situation by reducing hurtful stress. In addition, and also where such care is not possible, general advice in relation to the life-situation will help and so will positive attitudes on the part of everyone concerned.¹

In the second place, we will compare the different ways in which patients *experience the content* of their psychotherapeutic relationship with the doctor. Mere acknowledgement of what the doctor says, merely thinking about it and considering it, has no real effect. Contents, interpretations, viewpoints and

¹ Leonhard Seif, *Wege der Erziehungshilfe* (München, 1940), with special reference to difficulties in the upbringing of children.

goals all have to be a matter of actual experience before they can take proper effect. This may happen in a number of different ways:

Ideas are given picture-form and thus impress more vividly. Only so do they take effect in waking-suggestion or in hypnosis. The suggestor must see to it that what he says has a pictorial quality which will engage the imagination.

There has to be a desired goal. Something has to enter the *behaviour-tendency* that is compelling and unavoidable. This is induced by authoritative requests, compelling commands, sometimes issued bluntly in the form of abrupt orders or shouting at the patient.

Symbols in the form of archaic images, contents of universal appeal, have to be substantially there and believed in. There is a particular gratification which comes from a revelation of what actually is. This fortifies the patient's own awareness of being with something fundamental, which gives both resonance and shape to his inner attitudes. The therapist who works along such lines finds himself the prophet of a faith.

In counselling and instructing the patient how to look at his real situation, at his personal world and at himself, the important thing is that he should implement a decisive yes and no. It is no help to him just to learn something; there has to follow a certain vision of things and, if they are to be mastered, a recognition and taking over of them. It is the individual's responsibility to decide what he will assimilate and what he will reject. His own existential decision ultimately determines his actual way of life. It is beyond any psychotherapist to make him achieve this. The most he can do in his communication with the patient is to develop possibilities in the conversational interchange which may afford unpredictable opportunities for an awakening.

In Macbeth the doctor utters a harsh truth. Macbeth asks him: How does your patient, doctor?

DOCTOR: Not so sick, my Lord,
As she is troubled with thick-coming fancies,
That keep her from her rest.

MACBETH: Cure her of that;
Canst thou not minister to a mind diseased;
Pluck from the memory a rooted sorrow;
Raze out the written troubles of the brain;
And with some sweet oblivious antidote,
Cleanse the stuff'd bosom of that perilous stuff
Which weighs upon the heart?

DOCTOR: *Therein the patient
Must minister to himself.*

(d) Hospital admission and treatment¹

Rational treatment is not really an attainable goal as regards the large

¹ For the history, see Clemens Neisser, 'Die Weiterentwicklung der praktischen Psychiatrie, insbesondere der Anstaltspsychiatrie im Sinne Griesingers', *Mschr. Psychiatr.*, vol. 63 (1927), p. 314. For a detailed treatment see Carl Schneider, *Behandlung und Verhütung der Geisteskrankheiten* (Berlin, 1939).

majority of mental patients in the strict sense. There can only be protection of the patient and of society through hospital admission and every possible therapeutic measure exercised in the care of the patient.

Admission to hospital often takes place against the will of the patient and therefore the psychiatrist finds himself in a different relation to his patient than other doctors. He tries to make this difference as negligible as possible by deliberately emphasising his purely medical approach to the patient, but the latter in many cases is quite convinced that he is well and resists these medical efforts.

Outside hospital we must consider particularly the *danger of suicide* and the *extent to which the patient is dangerous to others*. On this chiefly but also on the home conditions and the possibilities of care depends the decision whether the patient is to remain at home or be brought into hospital and whether an open or closed unit is the more suitable. If the patient remains at home the relatives have to be informed and guided.

Within the hospital, methods of *physical treatment* take place which aim at cure: the above-mentioned treatment of General Paralysis and schizophrenia—also the treatment of organic disorders. But the scope of treatment possibilities is not large. Where a direct cure is impossible the doctor creates *in an indirect way* the best possible conditions and very often his activity is limited to friendly human care. We can class the various measures as follows:

1. On admission the doctor is already thinking of the *social situation* of the patient and considers what steps ought to be taken on behalf of the patient himself and his family.¹

2. With the *acute states*, particularly excitement, he tries to ease the patient's condition by sedatives. Prolonged bed-rest, various medicines, continuous baths, have all shown their value. Removal of all stimuli reduces the symptoms of the acute phase. But there is no proof that there is any speeding up of cure by all these indirect measures. Pathological reactions however are perhaps abbreviated by transplantation into another milieu.

3. In *chronic mental states* we have to salvage as much as possible of the patients' psychic life so far as this can be affected by environmental influences. In former times the patients were fettered and locked up and severe dementias, animal-like changes and grotesque states were induced which do not occur if the sensible patient is given some opportunity to exercise his remaining psychic functions.² In our times patients are given work extensively, mostly of an agricultural or manual kind; colonies are founded where those end-states that have no place in ordinary society can find a bearable and useful existence. These patients move as it were normally within the limits of their psychic possibilities and no longer get into those extreme states which used to be seen in

¹ Gruhle, 'Die sozialen Aufgaben des Psychiaters', *Z. Neur.*, vol. 13, p. 287. Roemer, *Psychiatr. neur. Wschr.*, vol. 22 (1921), nr. 45/46.

² Dees, 'Arbeitstherapie', *Allg. Z. Psychiatr.*, vol. 68 (1911), p. 116. H. Simon, *Aktive Krankenbehandlung in der Irrenanstalt* (Berlin, 1929). Also, *Allg. Z. Psychiatr.*, vols. 87, 97, 90, pp. 69 and 245. Carl Schneider, *Behandlung und Verhütung der Geisteskrankheiten* (Berlin, 1939):

earlier times and for the layman make up the picture of insanity. Schüle said: 'The distinction of the mental hospital lies not in curing the curable but in the provision of mentally stimulating and encouraging care for the incurable.' Where work is at all possible it must be considered of outstanding importance. It has been said: Work provides an aim in the world and helps to give a feeling of responsibility; it strengthens self-confidence and channels the patients' restlessness along well-ordered lines; it creates necessary inhibitions and protects him from sinking down into his own moods (Nitsche).

4. Klaesi contrived certain special measures—and skilfully applied them—to make patients who had been long isolated and neglected more accessible, resolve their fixed attitudes and change what was apparently an unchangeable end-state. The important thing is to give the patient something new as a stimulus. He could resolve catatonic blocking by startling situations and he also had success with *continuous narcosis*.¹

With mental patients in the strict sense intensive psychotherapy is not possible. We have to confine ourselves to kindly treatment of the patients and to such arts as have been so exemplarily developed by Klaesi. At the same time it is important to know that in acute psychoses which seem quite inaccessible and shut up in themselves there is sometimes an exceptional sensitivity and awareness of nuance whereas in countless other cases the indifference of the patients is so great that any apparent psychic contact is deceptive and any attempt at a friendly approach is futile—and here psychotherapy would be ridiculous.

5. The *time for discharge* often presents a difficult problem. In schizophrenia early discharge sometimes has a surprisingly good result.² But this can scarcely be determined beforehand. Recovering melancholias are particularly dangerous. The patients are apparently healthy, cultivate a deliberately cheerful mien and press for discharge in order that once they are outside hospital they may commit suicide.

6. Therapeutic educational measures³ and general care and training are brought to bear on the mentally subnormal, those suffering from personality-disorder and the generally derelict.

The *hospital institution* is a world on its own. Its 'atmosphere' is determined by the attitudes of management and the doctors and the traditional opinions held. The institutional milieu creates a particular world. The order which prevails determines the picture which the disorders assume. There is a vast difference between the old rural institutions with an occasional duty visit from a doctor, and where farm work was the rule and patients were left to their own private worlds, and the giant modern hygienic establishments which in spite of all the cleanliness and polish scarcely leave any psychic space free for

¹ Klaesi, 'Über die therapeutische Anwendung der "Dauernarkose" mittels Somnifens bei Schizophrenie', *Z. Neur.*, vol. 74, p. 557

² Bleuler, 'Frühe Entlassungen', *Psychiatr. neur. Wschr.* (1905), vol. 1.

³ Heller, *Heilpädagogik* (Leipzig, 1904).

the patient himself. There is an effective difference between those institutions where the mass of patients are left in idleness and those where some form of work is given to almost every patient. It would be interesting to have some concrete description of these institutional worlds and a collection of patients' remarks as to the effect of the institution on them.

There always remains the basic fact of *compulsion*. One has to master the danger which arises from a number of violent, restless and irresponsible patients. In the older days this was achieved by fetters and locking-up and other measures more reminiscent of the torture-chamber than a hospital. A great step forward was made when Pinel 'freed the mad from their chains'. But the development of institutional treatment in the nineteenth century, though it did indeed do away with this repulsive picture, still saw the place of chains taken by scopolamine injections and continuous baths, and the barred cots and solitary confinement could not be dispensed with entirely. The old clutter of torturing instruments could be thrown away and the spirit of the institution underwent change but the basic principle of compulsion could not be done away with.

The atmosphere of a modern disturbed ward in a clinic has been described by the following poem, the work of an encephalitic woman in 1924 and reported by H. Dörer in 1939:

Pale light streams down from the ceiling
On pale faces pearled with sweat,
Mirrored in shining brass-knobs
It turns the shutters into garmented ghosts
Half-finished phrases, muttering and groans,
Brief cries, shouts of rage, mocking calls,
And out of this gruesome chaos of sounds now and then
Comes the voice of a sister who can still console.

§ 3. PROGNOSIS

The prediction as to what will become of the patient has practical importance. His environment wants to know this in order to adjust to it. Nowhere in the world and therefore not in psychiatry is it possible to predict concretely and accurately what the outcome will be in the individual case. But one is sometimes in the position to make predictions that have some practical importance and have an overwhelming probability. Such predictions are based on our knowledge of special psychiatry. The more analogous case-histories there are at one's disposal, the more weight these predictions will have. There are some general points in regard to prognosis as follows:

(a) *Danger to life*

The first question is whether the patient has some cerebral disease which

can be detected from physical and neurological symptoms. The prognosis is then determined by this physical illness. In the case of General Paralysis, death follows on an average after about 5 years, often earlier and sometimes much later. Nowadays General Paralysis can be brought to a halt by therapy (malaria fever) although there can be no reversal of the previous damage.

If we are dealing with a *symptomatic psychosis* the prognosis also depends on the physical illness, the infection, poisoning, etc.

In the case of the *acute psychoses* it is generally true to say that they lead to death if there are physical illnesses as well, heart disease in particular. The exertions of the excited state, the worsening of physical illness in depressive conditions, are pertinent here. Sometimes death occurs owing to the acute psychosis itself (in the schizophrenic group). On section the cause of death cannot be found though there may be some cerebral swelling or some preceding excessive loss of weight that has been observed.

The prognosis of all *melancholic states* depends on the risk of suicide. The risk is only abolished by conscientious institutional care.

(b) *Curable or incurable*

Where there is no prognosis of death as a result of the illness we want to know if the patient will recover or whether he is incurable or whether he is likely to relapse after recovery.

Among the non-neurological disorders we have distinguished the large groups of processes and of manic-depressive psychoses. The processes by their very nature are incurable, the previous state is never restored no matter how far the acute phenomena recede. There always remains a residue of lasting change. In principle the manic-depressive psychoses are recoverable. The previous personality can always be restored but sometimes this difference in the *direction* taken by the illness means very little in fact for the individual case. Schizophrenic patients are sometimes restored to such an extent that they are thought quite well for all practical purposes even after quite severely acute psychoses. Manic-depressive patients on the other hand can fall ill so often that they never really come out of their illness and are in constant need of institutional care. Bleuler therefore differentiated aptly between *ultimate prognosis* (*Richtungsprognose*) and *short-term prognosis* (*Streckenprognose*). Even though we may be able to say which way the illness tends we still cannot say how far it will proceed in this direction and at what speed. Kraepelin's psychiatry formerly made the practical mistake of conceiving the ultimate prognosis straightforwardly as hopeless so that the actual course came as a surprise, a mistake which appeared all the greater when a benign cyclothymia happened to be wrongly diagnosed as a hebephrenia.

Usually *acute psychoses* last from several months to half a year and often for a whole year. With longer duration the prognosis always gets progressively worse. Yet there are cases which remain ill a very long time and still get well. In particular the involutional melancholias can, according to Dreyfus, recover

even after ten years. In individual cases there are surprising late recoveries¹ sometimes in the climacterium, sometimes in conjunction with severe physical disorders (erysipelis and other infections of every kind).

As regards the *prognosis for schizophrenia* there are a whole series of indications. For the acute psychoses it is said that if bodyweight increases regularly and, in the case of women, menstruation recommences without any marked improvement in the psychic behaviour, this means a transition into a chronic incurable state.

Mauz has put forward a series of impressive prognostic statements.² He calls 'schizophrenic catastrophe' the severe, final disintegration 2 to 3 years after the onset of the illness. This only takes place in 15 per cent of schizophrenic admissions, almost all of these between the ages of 16 and 25 years. Pyknic bodybuild excludes this catastrophe, asthenic bodybuild increases the chances. Almost all severe deteriorations appear at the latest 3 to 4 years after onset (98 per cent). Final disintegration is usually reached with the third thrust of the illness. If this is not so one need hardly expect any severe deterioration. Briner³ found the best prospect of a good remission in agitated catatonics (but a third of these died during an acute attack); the worst prospect was for paranoid cases.

Prognoses for *hysteria* and *neurosis* indicates the probability of improvement in later life. Kraepelin analysed the age of his hysterics at the beginning of treatment as follows:

Age (years):	-10	-15	-20	-25	-30	-35	-40	-45	-50
Percentage in treatment:	0·9%	12·1%	36·8%	23·9%	12·1%	6·3%	4·4%	1·9%	2·1%

From this it emerges that few cases enter treatment in the higher age-groups. As hysterical patients almost always return to ordinary life Kraepelin concludes that hysterical disorders settle down to a large extent at a more advanced age and in any case call for institutional treatment in very small numbers.

§ 4. THE HISTORY OF PSYCHOPATHOLOGY AS A SCIENCE

We do not wish to discuss the history of treatment for the insane nor the history of institutions, nor of those personalities who have played a leading part, nor yet of clinical practice itself,⁴ but we want to speak a little of the history of psychiatry as a science, the relevant concept-formation and the

¹ Cp. Kreuser, *Allg. Z. Psychiatr.*, vol. 69, p. 449; vol. 57, pp. 543, 571. Sigel, *Allg. Z. Psychiatr.*, vol. 62, p. 325.

² Fr. Mauz, *Die Prognose der Endogenen Psychosen* (Leipzig, 1930).

³ Briner, 'Über die Art und Häufigkeit der Remissionen bei Schizophrenie', *Z. Neur.*, vol. 162 (1938), p. 582.

⁴ Kirchhoff, 'Geschichte der Psychiatrie' (in *Handbuch der Psychiatrie*, Vienna, 1912). Kraepelin, '100 Jahre Psychiatrie', *Z. Neur.*, vol. 38, p. 1197. *Deutsche Irrenärzte* (2 vols) (ed. Kirchhoff, Berlin, 1921 and 1924).

course of investigations which aim at a knowledge of psychic reality irrespective of actual practical needs.

In the natural sciences the older contributions are for the most part of purely historical interest. They are *outdated* and one can learn nothing more from them. In the humane and social studies the more important works have along with their purely historical worth a lasting value which can never be outdated. This contrast in the historical significance of a study and its present exercise is again clearly underlined in psychiatry itself. So far as the history of psychiatry is the history of scientific knowledge regarding cerebral disorders, anatomy, paralysis, etc., it is history pure and simple and of interest only for those with a particular flair for it. But in so far as it includes the development of psychopathology proper and the uncovering of former theories on phenomenology, meaningful connections, personality-types, objective manifestations of madness etc., it offers us something of permanent value. In contrast to the investigator in somatic medicine, the psychopathologist cannot do without a study of the more important performances of earlier days, aware as he is that he will learn from this what cannot be found in the newer books or at least not so well expressed. From experience he will discover that one outstanding psychiatrist will provide him with more worthwhile reading than the whole expanse of the literature. The aim of the following tentative survey, which remains incomplete, is to look at history from this point of view and mention the best works of the older psychiatrists so far as we know them.

Up to the end of the eighteenth century psychiatry is almost only of pure historical interest or philosophically stimulating, and forms part of the history of medicine.¹ The eighteenth century brings a wealth of writings² but they are all precursory although a surprising amount of knowledge has been gained.

It is a remarkable fact that in spite of centuries of civilisation the mentally ill and those who suffered from any psychic disorder were not seen as specific problems for science nor were they investigated methodically from a practical point of view. In the case of the most severe disturbances there was a resort to general measures and to therapy for individuals without the whole problem ever being taken up fully. Only over the last two hundred years has the reality of mental illness been grasped in all its gravity, as a borderland of human life which now far more than before is studied methodically from a number of aspects, followed in its philosophical significance and concretely demonstrated as a manifold of striking facts.

(a) *Scientific knowledge and practice*

Most psychopathological theories start from practice itself. All that happens

¹ See, for example, Neuburger-Pagel, *Handbuch der Geschichte der Medizin* (Jena, 1902 ff.). For the psychiatry of antiquity, see Heiberg, 'Geisteskrankheiten im klassischen Altertum', *Allg. Z. Psychiatr.*, vol. 86 (1927), p. 1.

² Heinrich Laehr, *Die Literatur der Psychiatrie, Neurologie und Psychologie im 18. Jahrhundert* (Berlin, 1895, 2nd edn.).

in the psychiatric clinic during psychotherapy and in medical consultation does not provide the entire material for our knowledge of abnormal people, but the essence of what we know finds here its full manifestation and verification. The situation in which a particular reality occurs, the aims and purposes involved in treatment and the tasks which this sets all provide the conditions for possible scientific knowledge. A frame is provided by the general outlook of the times and current prejudices which propel science in a particular direction and limit it in others. Every science has its own sociology; that is, the particular way in which investigations are conducted is determined by society and its purposes. This is so for psychopathology to a very large extent. The desire to protect and help leads to actual practice, and this alone gives rise to knowledge. Institutions of all kinds, clinics and certain, clearly defined tasks bring in their train science and scientific literature, either directly for a particular purpose or indirectly as offering a reasoned support for an activity that stands on its own merits. We only need to attend a psychiatric congress to notice how professional practice quite rightly fills the foreground even when the papers themselves are purely scientific in content and how the independent passion for knowledge itself is only a matter for the few.

1. *Psychiatry in mental hospitals and university clinics.* In previous centuries mental patients—the grossly ill, raving and dangerous—were confined along with criminals and vagrants. The purely medical point of view, aiming at possible cure and humane care, was fully realised in Europe only during the nineteenth century, although there had been a few isolated precedents in the eighteenth century. This principle ran to its extremes. It became questionable and there was need for some clearer definition of its limits. The medical knowledge of human beings in terms of the natural sciences became an absolute knowledge of man as a whole and gradually this led to all human life being included in the precincts of the natural sciences so that there was a constant widening of the circle of what could be excused because volition was impaired. In practice therapy could never become the sole procedure, and authoritarian and security measures remained in fact indispensable. Yet this principle of the medical approach and the humanising of the treatment of the insane were the only things that led to the foundation of mental hospitals and the continuous and methodical development of psychiatry.¹

Our science established itself in the nineteenth century as *institution psychiatry*. Institution doctors were its most eminent contributors. This fact gives the majority of psychiatric personalities within the first two-thirds of the century a common colouring in spite of great differences in approach. In all their writings we can detect a certain humanity, sometimes sentimental in character, an emphasis on their function to help and heal and at times a certain pastoral dignity. There is also a robust efficiency in dealing with the difficulties of managing the insane and administering an institution. These psychiatrists

¹ K. Bonhoeffer, 'Die Geschichte der Psychiatrie in der Charité im 19. Jahrhundert', *Z. Neur.*, vol. 168 (1940), p. 37.

lived remote lives along with their patients and maintained a certain general cultural level without any particular depth. The ideas and concepts of philosophy and psychology found ready entrance, only to be applied by the psychiatrist in what was usually rather a muddled form. The result was a foundation of large-scale but confused notions and an enormous but un-systematic experience. This institution psychiatry came to an end with the Illenauer school (Schüle, Krafft-Ebing). After that there was no longer any particular scientific trend in the publications from institutions except perhaps in the case of certain personalities known only to a narrow circle. In the course of the nineteenth century scientific psychiatry passed increasingly into the hands of the psychiatrists at the *Universities* and the University clinics, and psychiatry took on a new colouring from this. Now it was carried on by people who no longer shared their whole life from morning to night with their patients. It found its way into the laboratories for brain anatomy or for experimental psychopathology; it became more cold-blooded, detailed, impersonal and less humane. It lost itself in endless particulars, measurements, statistics and findings. It lost imagination and design. But this was balanced by the advantage that it became a pure science and continued to develop into a number of fields so that the area for investigation widened enormously. If a hundred years ago psychiatry had been mainly concerned with idiots, severe dementes and the grossly insane, now it has extended the field of psychic life which it investigates to such a degree that at present it counts even the individual variations of human personality as a proper field for its research. Psychiatry has penetrated far beyond the closed institution into the consulting-room and is engaged in giving valuable help even in problems that have a social reference. Corresponding to the expansion of the field of investigation, its relationships with other sciences have also increased. Previously the psychopathologist confined himself mostly to enquiries that were purely medical and was interested in the brain and the visceral ganglia, and influenced by metaphysics, gave himself up to fruitless speculation. In later years however we find a growing relationship to psychological investigations. At first this was almost exclusively experimental psychology. After the beginning of the twentieth century we find attempts to let psychology gain not only this restricted influence on our science but a much more general influence. In the case of criminal investigations the relation to social factors became much livelier and this is still growing. We cannot yet say what is to be the relationship of university psychiatry to that of the institutions in the wake of these revolutionary changes in scientific psychiatry. The institutions themselves have changed out of recognition and administrative and technical problems have come to the fore. But in any case institution psychiatry is destined according to its means and material to make scientific contributions that can equal the famous contributions of the past in importance. The close regular life shared with the patients over long periods means that institution psychiatry alone can equip people for the production of more accurate case-histories based on lavish observation and help them to

develop an empathy which can penetrate more deeply and sympathetically into the patients' psychic connections.¹

2. *Psychotherapy.* Only through an effort to help can one see what is really there, whether one meets with resistance or success. Any such success, it is true, is highly ambiguous and lacks any clear scientific base—at least without something further. In ancient times sleeping in the Temple in Egypt and China brought healing just as much as the laying on of hands and other magical practices throughout the world. But what has been healed, how this came about and where the procedure comes to grief are all questions which demand methodical investigation if they are to be answered, and this has been attended with lasting success only in the nineteenth century. Since then we owe much of our knowledge to psychotherapeutic practice.

Retrospectively we can see that *the way in which a knowledge of hypnotism developed out of practice* in spite of its rejection by most scientists was an immensely instructive phenomenon of the nineteenth century. With the false pre-conception of the existence of a 'fluidum' which could transfer itself as animal magnetism Mesmer's theory established itself, a mistaken theory with great therapeutic effects. A pupil of Mesmer, Puyséjur, called the sleeping state induced by magnetic strokes 'somnambulism' (1884). Faria discovered that this sleep could be induced by simply fixing the gaze and using a commanding tone (1819). Briad recognised that the induced sleeping state was similar to natural sleep and thought it could be due to fatigue of the senses rather than to any 'fluidum' (1841). Liébault finally taught that sleep and hypnosis were similar in nature and that hypnosis was induced not by any magnetic 'fluidum' nor by sense-fatigue but by suggestion. Charcot considered hypnotic states as artificially induced hysteria, while Liébault and his Nancy school considered them as the deployment of a universal human mechanism. In the 'eighties hypnotism became popular (and at the same time academic science continued to despise it as charlatanism) while the Danish hypnotist, Hansen, was giving public performances. Through Forel and others it finally attained scientific recognition. The facts which he discovered have since been accepted and their number enlarged.²

Up to now psychotherapy has been a source of insights. Throughout the years from ancient times it has retained its character; that is, it has attempted to reach scientific knowledge while genuinely striving to help and under the constant risk of charlatanism and saviourism. So far it has instructed us with facts which remain unobserved by the usual medical attitude towards the psyche which prevails in somatic therapy.³

¹ It has been voiced that institution psychiatrists can no longer offer anything of scientific value, cp. for a characteristic expression of this, the controversy Dobrick v. Weber, *Psychiatr. Wschr.*, vol. 12, pp. 383, 393, 437, 465. As always the question is whether there are personalities who can tackle scientific work on their own initiative.

² E. Trömmel, *Hypnotismus und Suggestion* (Leipzig, 1919) for historical details.

³ 1926 was the first Allgemeine ärztliche Kongress für Psychotherapie. Reports appeared in Leipzig (Hirzel).

(b) *From Esquirol to Kraepelin (the nineteenth century)*

Psychiatry of the nineteenth century—the ‘old psychiatry’—which extended right into the twentieth century seems to us nowadays something whole and historically complete. It laid the foundations on which all psychopathology has stood up to the present. But as a whole it is no longer our psychiatry because certain generally accepted views which seemed obvious then are now no longer acceptable to us. But as regards the comprehensiveness of the viewpoints and the wealth of empirical discovery we have not produced anything so far of comparable value.

1. *Esquirol.* At the start of the development of scientific psychiatry there stands the pre-eminent personality of Esquirol.¹ His views and observations dominated psychiatry for a very long time. He was above all an exquisite depitor and a fine observer, a man who lived with his patients and in addition laid the basis for our customary statistics (age, sex, season, morbidity rates, etc.). He also made a series of discoveries which have never been subsequently discarded: the course of an illness through remission and intermission, the significance of bodyweight (loss of weight in the acute psychoses, gain of weight in recovery, poor prognosis where there is weight-gain without any improvement in the mental state). Esquirol was director of the large mental hospital at Charenton, near Paris.

In order to survey the later developments we will not proceed chronologically but put forward a few *opposing*—and intersecting—*tendencies*.

2. *Describers and analysers.* Throughout the history of psychiatry we find two great opposing trends. The one draws its strength from description, the other from analysis. Describers such as Esquirol, Griesinger,² Kraepelin all belong together, just as Spielmann,³ Neumann,⁴ and Wernicke⁵ form a group of famous analysers. The opposition is of course not an absolute one. Wernicke has provided us with brilliant description and Kraepelin has made many an analysis. But the opposing trends remain. The describer tries to communicate a concrete living picture to the reader with the help of ordinary language and no conceptual elaboration. There is something artistic in his method. He works with conceptions that have momentary success but which cannot be taken further in a systematic way. Thus hebephrenia was seen by Hecker and Kahlbaum and thus Kraepelin designed the character of the hysterical and Bleuler his picture of schizophrenia. The analyser does not make a picture. He presupposes that concrete observation has been made. But he does not want this universal perceptiveness with all its varying transitions in every direction;

¹ Esquirol, *Des maladie mentales* (Bernhard, Berlin, 1838) in German.

² Griesinger, *Die Pathologie und Therapie der psychischen Krankheiten* (Braunschweig, 1876, 4th edn.)

³ Spielmann, *Diagnostik der Geisteskrankheiten* (Vienna, 1855).

⁴ Neumann, *Lehrbuch der Psychiatrie* (Erlangen, 1859). *Leitfaden der Psychiatrie* (Breslau, 1883).

⁵ Wernicke, *Grundriss der Psychiatrie* (Leipzig, 1906, 2nd edn.). *Krankenvorstellungen* (Breslau, 1899).

he wants precise concepts for the abnormal psychic phenomena. He wishes to analyse the presenting picture in order to gain some definite characteristic of this individual case so as to make recognition and definition possible. He thinks rather than sees and all his seeing is immediately translated into thought. He kills the living psychic event in order to possess a collection of concepts as sharply cut as stones. All his acquisitions, therefore, are a basis for him to build further upon in a planned and systematic way. He too depends of course on a number of conceptions but he converts them into systematic connections whereas the describer presents psychic life as he sees it and creates a vivid picture of it but provides no basis on which he can build further. That is why the describer soon comes to a halt while the analyser always has his systematic aims and constantly can pose fresh questions. Descriptions can be understood directly and easily grasped by everyone, but analysis requires arduous preparation for its understanding, particularly in the case of the individual conducting it. This explains the wide success of description and the poor success of analysis. The need for *clear concepts* has emerged repeatedly in the history of psychiatry. Those who have sought for clear concepts—the only source for fruitful research—always fall back on psychology and philosophy to help them in their methodical analysis. A stupid misunderstanding of this showed in the expressed wish for a common and constant terminology, as if this would not be something simple and obvious were the matter to be named clearly present to sight and thought.

The describers are represented by many of the old institution psychiatrists, Damerow, Jessen (father and son), Zeller, etc.¹ The most brilliant and successful among them was the clinician, Griesinger. His able and evocative presentations gloss easily over the real problems. Mostly he describes and only briefly pursues certain uncomplicated ideas. He gives a vivid and comprehensive picture but makes no clear, precise analysis. Words are his building-material and infuse life into his observations but he does not link these up with well-defined concepts. The most significant members of the Illenauer school are Schüle² and Krafft-Ebing³ (who remained faithful to institutional psychiatry although he became a University teacher). Schüle writes with a certain deep feeling derived from a cultured approach and his sympathies as a doctor. He uses a wealth of images interspersed with philosophical comment. He borrows well-chosen foreign words and likes to translate his ideas into complex symbols. On the basis of some exceptional experiences, in daily contact with his patients he lovingly describes the presenting symptomatology in detail, establishing types and adding a wealth of subtle nuances, variations and transitional forms. Krafft-Ebing is much more sober and adroit. His basic approach is similar to that of Schüle.

3. *The somatic and psychic approach.* There is another polarity of approach which has gone on in changing form throughout the whole history of psychiatry; on the one hand a purely medical attitude related entirely to what was

¹ See the articles in the earlier volumes of the *Allg. Z. Psychiatr.*

² Schüle, *Handbuch der Geisteskrankheiten* (Leipzig, 1880, 2nd edn.; 1886, 3rd edn.).

³ Krafft-Ebing, *Lehrbuch der Psychiatrie* (Stuttgart, 1879; 1903, 7th edn.).

somatic; on the other a predominantly psychological approach. A hundred years ago both were still full of dogmatic constructs. The medical view built mythologies concerning the dependence of psychic phenomena on imagined physical events. The psychological view was hampered by a philosophical and moralistic framework. In the course of their development both approaches have rid themselves increasingly of this admixture of construction and philosophy and nowadays the somatic and psychic approaches stand side by side, similarly to description and analysis.

Heinroth¹ in his teaching on mental disorder as the consequence of 'sin' is entirely encased by philosophical metaphysics. Ideler² psychologically 'understood' mental illness all too well, but frequently in a trivial way. He conceived the greater part of mental disorder as 'overgrown passion' and the smaller part in contrast as of somatic aetiology. Spielmann tried a psychological analysis of psychic anomalies on the basis of Herbart's psychology. In his case the constructive elements receded rather more into the background. Hagen³ finally was an excellent critical psychologist who successfully took up certain specific problems so that some of his articles remain as fundamental contributions.

The *somatic* approach—e.g. explaining melancholia in terms of disorders of the abdominal ganglia—can be gone over quickly. Jakobi⁴ was the first psychiatrist to make the body the main subject of a critical and significant study. From his point of view the perceivable cerebral process—which has to be assumed in every case—is the 'essential matter' in mental illness and all psychic events, all types of madness and of personality are accordingly mere 'symptoms' of this. There is no state of mental illness in its own right for this point of view. There are only diseases of the brain and we only have a knowledge of mental illness in so far as we can recognise it as a symptom of brain disorder. As Jakobi knew very little about the brain he directed his observation mostly to all the other physical functions and attributed to them an excessive amount of significance for mental illness. The somatic point of view was subsequently represented by Meynert⁵ with considerable force. This investigator enriched our actual knowledge of the brain-structure but in addition created a fantastic construct of the connection of psychological symptoms with fibre-destruction, increased circulation in the cerebral blood-vessels, etc. Wernicke followed in the same tracks with his theoretical constructs which were heavily imposed on his otherwise excellent psychological analyses. It has become increasingly clear that brain-research pursues its own purely empirical way and nowadays does not allow for any of these constructs. The relationship between known cerebral changes and known psychic changes (the theory of localisation) is now a purely empirical investigation in those few fields where the question can be put with some justification, but in no way can it be made the foundation for a scientific psychopathology.

¹ Heinroth, *Lehrbuch der Störungen des Seelenlebens* (Leipzig, 1818). *Die Psychologie als Selbsterkenntnislehre* (Leipzig, 1827).

² Ideler, *Grundriss der Seelenheilkunde* (Berlin, 1835).

³ Hagen, *Studien auf dem Gebiete der ärztlichen Seelenkunde* (Erlangen, 1870). Articles in *Allg. Z. Psychiatr.* (e.g., vol. 25, p. 1).

⁴ Jakobi, *Betrachtungen über die Pathologie und Therapie der mit Irresein verbundenen Krankheiten* (Elberfeld, 1830). *Die Hauptformen der Seelenstörungen* (Leipzig, 1844).

⁵ Meynert, *Psychiatrie* (Vienna, 1884). *Klinische Vorlesungen über Psychiatrie* (Vienna, 1890).

4. *Wernicke and Kraepelin.* Half a century ago Emminghaus¹ in a comprehensive presentation reconciled the diverse psychiatric approaches and the mass of hitherto established facts. His general psychopathology is still the most useful work of reference in respect to the earlier literature. With his complete works, and those of Schüle and Krafft-Ebing, psychopathology might seem to have reached a *certain concluding stage*. We gain the impression that after this comprehensive presentation a certain mediocrity descended on scientific psychiatric circles. The established categories were comfortable and everything observed could be subsumed under them.

A new theoretical movement, however, was born from Wernicke² and Kraepelin.³ When these two appeared on the scene the traditional psychiatric world faced them with closed ranks. The new movements seemed to the representatives of the older viewpoints as mere formal changes in what they already knew, with the addition of certain untenable statements. The common assertion was that the new elements were wrong and what was right was not new. The productive performance which consisted in a deeper and more coherent apprehension of old material from fresh points of view simply appeared a reorganisation of what was already well known. But time has reversed matters. The older elements were handed on only in the form in which Wernicke and Kraepelin absorbed them. Both men have established themselves. Kraepelin's Textbook has been the best read of all psychiatric texts. His concepts set psychiatric thinking for the first time on common ground. An unlucky accident cut short Wernicke's effectiveness prematurely, for his superior brain might have brought psychiatric discussions on to a higher level. Kraepelin similarly was able to enlarge his work without any correction from his equals and it expanded over almost all the fields of psychiatry.

Wernicke was the author of a brilliantly systematic work which intellectually was perhaps one of the most significant works in psychiatry. He took his groundwork, it is true, from association-psychology and from the theory of aphasia, which he greatly enriched by his own discoveries and re-established in the form of a fresh and comprehensive theory. But he had an original, penetrating and analytical vision of his own and with its help he endowed psychopathology with a number of concepts that today we take for granted, such as power of registration, perplexity, explanatory delusions, over-valued ideas, etc., and carefully structured syndromes such as presbyophrenia, etc. What he says is almost always original and stimulating, well defined and provoking.

Kraepelin brought forward with considerable energy his idea of the disease-entity, an idea which stemmed from Kahlbaum, and for a time he gained acceptance for it. He was responsible for one of the most fruitful lines

¹ Emminghaus, *Allgemeine Psychopathologie* (Leipzig, 1878).

² Wernicke, *Grundriss der Psychiatrie* (1906, 2nd edn.).

³ Kraepelin, *Kompendium der Psychiatrie* (Leipzig, 1883)—later as *Psychiatrie* (1910 ff., 8th edn., 1927, 9th edn., vol. 1). *Allgemeine Psychiatrie*, Joh. Lange, vol. 2, *Klinische Psychiatrie* (Kraepelin), vols. 3 and 4, new impression, 8th edn.

of research, the investigation of the whole life-history of the patient. His chief service was on the basis of Wundt's performances to make experimental psychology accessible to psychopathology and in particular to have laid the foundations of pharmaco-psychology as well as the examination and analysis of the 'work-curve'. But Kraepelin's basic conceptual world remained a somatic one which in the company of the majority of doctors he held as the only important one for medicine, not only as a matter of preference but in an absolute sense. The psychological discussions in his Textbook are brilliant in parts and he succeeded with them as it were unwittingly. He himself regarded them as temporary stopgaps until experiment, microscope and test-tube permitted objective investigation.

5. *Independent individual contributions.* Comprehensive psychiatric viewpoints which have made an historical impact and are linked with important public position and long years of work in their creator can attract as well as generally embarrass. As a corrective there have been in the course of scientific development a few great individuals, outsiders, who stood out on their own and ruthlessly criticised the establishment and yet on their side made discoveries that were sometimes of the greatest importance. In this sense in the history of psychiatry, which is generally lacking in personalities of genius and where even significant personalities are rare, we must recall one man who stood outside the official line of development: *P. J. Möbius*. He was a genuinely learned individual with a broad outlook, and a keen observer with an expressly psychological approach coupled with considerable neurological experience. He noted a series of typical diseases (e.g. akinesia algera), advanced the theory of degeneration and created pathography. Above all he was an honest and effective critic. He fought against all brain-mythology and pseudo-exactness and he had a pronounced inclination for the concrete as well as a sense for what was or was not important. Intellectually however he was sometimes rather flat, with the downright certainty of the realistic physician who takes his own subjective and limited value-judgments as if they were objective and scientific; we can sense this, for example, in his pathography on Nietzsche.

6. *German and French psychiatry.* So far we have been speaking of German psychiatry. Of foreign psychiatry, French psychiatry comes next in importance for our consideration. We can perhaps best understand the difference between the two if we go back to the contrast between describers and analysers. The describer needs more vivid intuition, more powers of artistry. The analyser needs a more penetrating intellect and more critical self-reflection. It may well have something to do with these psychological preconditions that the French have greater subtlety in description while the Germans have attained a greater profundity in analysis. In spite of this, descriptive psychiatry has to a great extent prevailed in Germany also and is responsible for the historical importance of French psychiatry which owes much to Germany. Esquirol laid the foundations of descriptive psychiatry in an exemplary way and the descriptions of psychiatrists from Griesinger to Krafft-Ebing and even Kraepelin are directly

or indirectly dependent on him. Morel and Magnan¹ grasped the significance of heredity and degeneration more as an intuition than as a precise concept; they noted the types of degenerative mental disorder and by this means discovered the basic differentiation of the endogenous and exogenous psychoses. The newer French psychiatry prepared the ground broadly for the psychopathology of the neuroses (hysteria, psychasthenia, neurasthenia). Its most brilliant protagonist was Janet.²

All the great French contributors have had influence in Germany. But their effect was always to stimulate further original work. The discovery of the new approach must be attributed to the French but their customary lack of self-criticism enables them to turn the more easily grasped viewpoints into literary creations and leaves their contribution unfinished in a scientific sense. The Germans took their ideas over, cleared them of the trimmings, deepened the concepts and made investigations that could contribute in an objective way. But even so they remain indebted to the French who have to be thanked for the great revolutions in thought.

In careful formulation of concepts, minute and patient enquiry, unembroidered drawing of conclusions and general sweep of ideas the Germans came into their own. Jakobi's strictness of method, Spielmann's, Neumann's and Wernicke's subtle analyses, and Kahlbaum's conception of the 'disease-entity' as an idea owe nothing to France nor do they find any echo there.

(c) Modern psychiatry

The contemporary scene cannot be surveyed historically. But we can detect the depth of the revolution that has taken place slowly in the last few decades.

At the turn of the century we find a few significant individuals who are carriers of tradition yet also seem particularly contemporary because of their freedom from prejudice and their openness to all the possibilities. Their high level of culture and responsible criticism act like an unfailing conscience of the times. They foster the scientific attitude, the referral to experience, but encourage original thought and enquiry and let their pupils go their own way. A thoughtful scepticism prevents them from enforcing their own views but it guards against too much enthusiasm for any movement that would try to recreate the whole. Finally they have marked personalities and as such are without successors. Apart from my own teachers—Nissl and Wilmanns—I will make mention of two such individuals who are personally remote from me.

Bonhoeffer had a sure eye, an empirical closeness to detail and a sense for the essential and has provided us with a number of new insights. Much of his work will last (alcoholic psychoses, symptomatic psychoses, the clarification of what is psychogenic, etc.), and it is characteristic that he never presents the

¹ Magnan, *Psychiatrische Vorlesungen*, trans. by Möbius (Leipzig, 1891 ff.).

² Janet, 'L'automatisme psychologique. Névroses et idées fixes. L'état mental des hysteriques. Les obsessions et la psychasthénie'.

field as a whole as most of the earlier psychiatrists did. His work is imbued with a certain humility in the face of the size of the insoluble problems.

Gaupp, a pupil of Wernicke and Kraepelin, was from the start open to every trend of enquiry. He can never be known through his books alone, but one has to read his countless articles and critical reviews. With these he has accompanied the onward course of psychiatry for nearly half a century and it seems to me that his effect must have been much larger than is directly obvious. His clear, well-cultivated style and his positive criticisms that pick out everything tenable have proved beneficial. His ideas have been effective to some extent through his pupils.

The scientific events of the last forty years cannot be brought into any uniform order. About 1900 Freud's psychoanalysis began to take effect. The tenable observations and the tendency to apply oneself to the unconscious and subconscious levels found a defender in Bleuler and also a promoter. His critical penetration and its purging effect salvaged the tenable substance of Freud's teaching for the whole body of scientific psychiatry.

The great movements of biological research (genetics, endocrinology) have widened our horizons and opened up a considerable field of new facts.

Since Kretschmer's *Body-build and Character* (1921) the concept of human constitution has been remoulded.

But all these isolated references, however significant they may be, are not sufficient to characterise the present era of psychiatry. There are many new discoveries but the interest shows an unusual scatter, with increasing departmentalism and little mutual interest. The most important discoveries are being made in the somatic field and that of brain pathology. Against the anti-psychological attitude which continually rises from this we find an energetic reaction showing itself in psychological and metaphysical efforts, which in their turn often overshoot the target. No comprehensive theoretical systems prevail as absolutes but certain points of view do crop up here and there as absolutes together with their known contents. Outstanding investigators who leave their imprint on science through their pupils seem to be disappearing. It is always more difficult to keep abreast of the enormous literature of journals and books and their innumerable authors—a gigantic busyness without any informing shape. There is need for a criticism which is schooled in the total performance of past psychiatry so that facts of value may be discovered in the flood of uncultivated writing.

This lack of a prevailing viewpoint on the whole which the textbooks could validly express appears in the rather doubtful new edition of Kraepelin's Textbook, particularly in the chapter on General Psychiatry by Joh. Lange (1927). In spite of the best intentions and an extensive knowledge it proves impossible to bring all the new movements of psychopathology into the existing framework.

The new element in the situation is the general uncommittedness and the breadth of approach possible today. We can ignore all theories, every

established viewpoint and may investigate from any angle. We can resist the past and all that has traditionally been taken for granted. We can make free and bold experiment, such as the astonishing, new and effective therapy for General Paralysis and schizophrenia. What our situation lacks is the absence of any over-all view, but this is only the negative side of something quite positive. The basic question is whether any fresh dogmatic idea will arise or what will take its place. Since 1913 my own effort has been to make a contribution here through an attempt to systematise methods.

(d) *The drive to advance science and the form it takes*

Psychopathology, no more than any other science, does not move at an even pace. Insight is by no means automatic. Kant, for instance (in his Anthropology), recognised that the psychological explanation of the psychoses —‘driven mad by love’—was not a possible one and that it was wrong to imagine that what is inherited is acquired, ‘as if the victim were himself to blame’. Then apart from the misguided way taken by later psychologically orientated psychiatrists, even Esquirol’s discussions of psychological aetiology can be seen as a partially retrograde step. Progress in science is always uneven: new fields for research suddenly appear and in a short time after their conquest a frontier is reached which bars further progress. Thus the scientific situation is always changing. Now new discoveries seem to line the route waiting to be gathered in and now the rule seems to be resignation and a mere repetition of the already known.

1. *Drives and goals.* The determination to find something new and to be original is usually futile. Novelty is a gift and comes suddenly to the individual who works away tenaciously while keeping a lively spontaneity of observation and ‘continually thinking thereon’. The first requirement is always that one must absorb what has gone before. No one starts on his own entirely. We train ourselves by repeating and confirming what is known already and in doing this new things arrive for the oncoming generation, new things that only now are possible. What has gone before needs to be absorbed in its entirety so that its content can be recognised in the present case-material. In this way tradition can be deepened and widened and our own eyes opened. Coming to terms with previous investigators as if they were a unified present will always bring our knowledge as a whole to the pitch now possible for it.

The genuinely new opens up a world of facts to which access has so far been denied. It means we have discovered a usable and fruitful method. The greatest impact comes when the path of discovery is trodden for the first time. It seems almost a psychological precondition for research that with this should go a tremendous over-rating of the new.

Criticism fosters another drive; that is, the drive to be at home with all the facts and possibilities, whether traditional or immediate. We try to acquaint ourselves with the specialities of every science and understand what it is we know in our own field within the context of knowledge as a whole.

Two aims are valid here:

We want to be in *conscious possession of psychopathology as a whole at any time* in all its main features; that is, we want to be educated in our science, not simply to own a collection of facts.

We want also to embody consciously the *basic philosophical attitude* which is the background of science and its support. This requires a knowledge of our methods, discrimination in putting the question, and a knowledge of how science depends on practice and practice on motivations that lie beyond science.

2. *The origin of scientific movements.* The basic conceptions that have set science off into a new movement are usually quite obscure at first. There is an intertwining of method and theme the interweaving of which is perhaps the condition of their strength. In this way the conception can have an all-sided relationship to the facts so far reached. The claim for totality, when linked with a confusion of theory and method, may work like a spell, as with Kraepelin's 'disease-entity', Bleuler's theory of schizophrenia, Freud's psychoanalysis and Kretschmer's theory of constitution. Characteristically all these claims and our attempts to clarify them appear in several places throughout this book, and their totality has had to be broken down into its logical components.

Everything creative usually tends to be converted into an absolute. The creator, however, experiences enthusiasm and a sense of fruitfulness—not the ruin. It is his successor who pays for the enthusiasm, becomes one-idealised and sterile and acquires a vested interest in the legacy, in being right because of it and in the power that lightly-won knowledge confers.

Another type of investigator is the soberly conservative individual who keeps an open mind. He may not be very creative in the discovery of radically new knowledge and the evocation of some intellectually powerful movement, but he can contrive an atmosphere in which creativeness can flourish. The ability to see the positive elements, to exercise unprejudiced criticism and the avoidance of absolutism lends courage and strength to enquiry. He is uncompromising in regard to truthfulness and human life; his standard is a level one.

It is rare to find the creative enquirer whose capacity for discovery does not paralyse his powers of criticism but rather enhances them because his discovery is a methodical one and his knowledge of what it means keeps him modest. Fr. Nissl was such an enquirer and I owe it to him that I could see how a genuine scientist lived, thought and acted. Although he did not approve of what I did, he enabled me to work and though he opposed me passionately showed his interest and in some measure let himself be convinced, nor did he withhold recognition when I met with success. In his clinic I learnt that nothing is more important for scientific effort than the genius of a place. Where there are a few people who meet constantly and inspire each other with discussion there comes a real move forward when the Chief, through his powers of selection and good luck, finds men whose standards of mutual respect, tact and integrity are unshakeable, since these can be so easily lost where leadership is tyrannical or where there is free discussion among equals.

3. *Contemporary scientific trends.* If we compare the textbooks of the last half-century we can see what a vast and surprising change has taken place in a relatively short time with regard to general concepts and terminology. Amidst all the confusion there is always some prevailing terminology. This is partly due to the dominance of certain scientific concepts and partly to the language of the period in question and the particular interests (the descriptions of the problems and conflicts in a patient's life sound quite different in 1900 from those in 1930). Hence in psychopathology we have to distinguish knowledge that is real and lasting in the scientific sense (that is, convincingly correct, essential and weighty) from what is on the contrary only a manner of speaking, which will change with the times (changes in jargon being taken as an advance in knowledge, new word-formations mistaken for new insights). We have further to distinguish what is fundamental for a conception of man and his world (the philosophical awareness). A part of our scientific effort springs from something other than our scientific interests. Contemporary belief in science has become standard and to be successful as a physician calls for the test of one's scientific capabilities. The satisfaction of this social pressure is responsible for the production of scientific work of lower quality which is then worn as it were like a string of medals.

4. *Medicine and philosophy.* It cannot be doubted that the prevailing philosophical and theological ideas leave their imprint on the science of the time. In the first half of the nineteenth century many psychiatrists adopted the natural philosophy of Schelling with his theory of polarities and of the analogy between organic and psychic life. Spielmann emulated Herbart, and later writers submitted to materialistic and positivist philosophies. Today the whole of medicine is conscious of this dependency. Leibbrand gives a historical exposition of medical theology.¹ Schumacher² investigated the medicine of antiquity and started from the following position: every era in medicine has its own way of thinking. This is partly determined by the dominant philosophical trends of the time which affect content, form and expression. The medicine of any age can be understood only if we recognise how much it is penetrated by the philosophical heritage of its time.

However true this may be for the historical approach we must, nevertheless, emphasise again the independent status of science in itself. The true measure for scientific investigation must always be the substantial fact, valid and enduring. The question is how far philosophical preconceptions have ever led to discoveries or prevented them; and further, which times and tendencies have been characterised by a philosophical dependency—because no discoveries were made while they lasted; and finally, to what extent the everyday language of a period, the unscientific discussions, the characteristic ways of thinking and behaving, are uniform in style and how far great philosophies have determined this or represent its culmination. It is not possible to avoid a

¹ Leibbrand, *Der göttliche Stab des Äskulap* (Salzburg-Leipzig, 1939).

² Joseph Schumacher, *Antike Medizin* (Berlin, 1940).

philosophical basic attitude towards any particular science as a whole but this does not mean that one must get caught up in a particular philosophy and stay there. Once we have won some definite scientific knowledge this is independent of all philosophy. Scientific knowledge is precisely that which is independent of philosophy, opinion and world-outlooks in general. It is valid for everyone, universal and compelling. The vital thing therefore is whether our basic philosophical attitude contains the unconditioned will to get to know and therefore impels us to take the paths of science, or whether our philosophy makes conditions for our knowledge and so unfailingly inhibits or destroys any scientific advance.

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