THE ABNORMAL PERSONALITY

A TEXTBOOK

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To

M. L. W.

PREFACE

My purpose in this book is to write about abnormal people in a way that will be valuable and interesting to students new to the subject. This purpose has guided the many decisions, particularly as regards what to put in and what to leave out, that go with writing a textbook. A first course in abnormal psychology is not intended to train specialists. Its goal is more general: it should provide the student with the opportunity to whet his interest, expand his horizons, register a certain body of new facts, and relate what he learns to the rest of his knowledge about mankind. The value of a course in abnormal psychology is not, in my opinion, limited to those who plan to become professional workers with abnormal people. I have tried to present the subject in such a way as to emphasize its usefulness to all students of human nature.

At one time the field of abnormal psychology was a literal embodiment of its name. It included everything that met the two criteria of belonging in psychology and deviating from the norm. Fortunately the development of a coherent subject-matter has not been strangled by the logical implications of the name. I do not, therefore, regard it as an innovation when I state that this book is about people who are maladjusted, neurotic, delinquent, psychotic, brain-injured, or in some other way disordered in their personal reactions to life and circumstance. Its theme is *disordered personalities,* and in order to complete the exposition of that theme I have omitted some of the older topics of abnormal psychology such as genius, superior capacities, mental retardation, and abnormalities in restricted part-functions such as hearing and sight. One further step could have been taken: that of omitting disorders such as general paresis, epilepsy, and brain injury which depend heavily on gross somatic dysfunction. Such a step can be defended on logical but not on educational grounds. We shall never, I believe, help students to see through the dualism of mind and body and to achieve psychosomatic unity in their thinking unless we familiarize them with the whole range of ways in which personality becomes disordered.

I have tried the experiment of writing two introductory chapters, one historical and the other clinical. This reflects my desire to

set the subject-matter in a broad perspective and at the same time to anchor it in concrete fact. Throughout this book the case histories are printed in the same type as the rest of the material. They form an intrinsic part of the exposition and are used recurrently to illustrate various points. Following the two introductions comes a block of six chapters designed to set forth the topics of maladjustment and neurosis. My plan for describing maladjustments is to give an account of normal psychological development, showing at each point how development can go astray. The description of neuroses I have tried to systematize around the concepts of anxiety and defense. These two concepts are first taken up in their simplest forms, then in their more far-reaching effects on personality as a whole, finally in their relation to neurotic symptom formation. I have allotted a good deal of space to psychotherapy, which is, after all, both the means whereby most of our knowledge about neurosis has been obtained and the proving ground for whatever theories we develop.

The two chapters on psychotherapy complete the more purely psychological or developmental part of the work. With delinquency and psychopathic personality one's thinking necessarily becomes more eclectic. Social and economic conditions obtrude themselves more forcibly; cerebral pathology presents itself as a plausible hypothesis in some cases; the special effects of alcohol on the nervous system complicate the picture in others. With the psychosomatic disorders one faces the elusive question of somatic compliance, and I have used this chapter as a bridge to those disorders in which somatic dysfunction, especially in the central nervous system, can be considered the primary factor. In my opinion it is sound didactic practice to introduce the effects of injuries and abnormal conditions in the brain before taking up the major psychoses, especially the so-called functional psychoses. Only when he has studied both psychogenesis and somatogenesis can the student evaluate their subtle interplay in a disorder such as schizophrenia. In the final chapter the problem of disordered personalities is allowed to expand to its full social dimensions. Treatment, care, and prevention call for social effort and social organization. I have sought to show some of the lines, both professional and nonprofessional, along which this effort can be expended.

I asked four friends to help me by reading all or part of the manuscript: Dr. Silvan S. Tomkins, Dr. Kenneth Diven, Dr. Eugenia Hanfmann, and Dr. Erich Lindemann. They proved themselves friends indeed not only to me but to readers of this book whom they

spared many errors and ill-considered statements. To Eugenia Hanfmann I am further grateful for carrying added teaching burdens during my semester's leave of absence, and I am particularly indebted to Dr. Stanley G. Estes who served as acting director of the Psychological Clinic while I was away. The index is the work of Mrs. Pauline B. Hahn, who kindly offered her services for this exacting task. My most direct and constant helper was my wife, Margaret L. White, who lent a hand at innumerable points and who told me whenever she thought that either common sense or intuitive wisdom was being neglected.

ROBERT W. WHITE

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February 15, 1948

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THE ABNORMAL PERSONALITY

CHAPTER 1

HISTORICAL INTRODUCTION: ORIGINS OF ABNORMAL PSYCHOLOGY

Abnormal psychology is a relatively new field of study. Fifty years ago it was considered a remote province of knowledge, explored only by a few specialists, and it played a distinctly minor part in man's thinking about his own nature. Today it contributes richly to the training of those professional workers, especially psychiatrists, psychologists, social workers, teachers, and ministers, whose duties bring them in frequent contact with troubled people. More than this, it occupies a respected place among general college courses, for it is capable of making a highly significant contribution to all thinking about man's problems and man's quest for a better way of life. Abnormal personalities are not mysteriously set apart from the normal. Their various peculiarities represent exaggerations of what is to be found in every human being. They are therefore well suited to enlarge our understanding of the whole process of personal adjustment. If we know what can go wrong in human development, we are the wiser in making it go right.

When we set ourselves to examine the field of abnormal psychology we can proceed in two ways. We can look into the history of the subject and discover how it came to be what it is today. This method offers distinct advantages over an immediate plunge into facts and current problems. Science generally advances in a disorderly fashion. At any given moment the greatest activity occurs at three or four isolated points, the location of which is determined by temporary urgency, by newly discovered techniques, or even by fashion. It is easy to get lost in the details and preoccupations of current research, and the best protection against doing so is to anchor our study firmly in the framework of history. By turning up the facts in the same order in which they confronted past investigators one can better appreciate the really basic difficulties which tend to impede understanding, and one can more readily keep the whole subject in place in the larger context of human affairs. On the other hand we could begin our study in a quite different way: by making a clinical survey of the facts which constitute the subject-matter of

abnormal psychology. We could examine a series of cases illustrating the kinds of things we shall be studying in more systematic form throughout the book. The clinical method has the advantage of realistic vividness and of proceeding in the right direction from fact to theory. The advantages of each method are in fact so great that in this book we shall try the experiment of using them both. This chapter contains an *historical introduction* to abnormal psychology; the next one will provide a *clinical introduction.*

The Subject-Matter of Abnormal Psychology

At the present time the province of abnormal psychology can be roughly described as the study of *disordered personal reactions* to life and its circumstances. When we say *disordered* we have in mind people whose lives in some way go astray, so that they find themselves frustrated, unhappy, anxious, baffled in their deepest desires, misfits in their society; or, in the most serious instances, people who get so badly out of touch with surrounding life that we call them insane. When we say that the disorder lies in *personal reactions* we intend to limit the field more closely by excluding what may be called the external reasons for frustration and sorrow. Accidents, bereavements, ill health, war and other disasters, unemployment and poverty, lack of opportunities, unfair social barriers, and a hundred other external circumstances may stand in the way of happy and effective living. These obstacles are tremendously important, but it is not the task of psychology to study them in their own right. They are already claimed for other fields of knowledge such as medicine, public health, and especially the various social sciences. To all such circumstances, however, the individual makes a personal reaction. Even to a disease affecting his own body each person reacts in a way that is peculiar to himself. It is at this point, where the personal reaction begins, that we cross into the province of psychology, and we reach the sub-province of abnormal psychology when we concentrate on disorders in the personal reaction.

To illustrate what has just been said let us take the example of unemployment. A man may become unemployed through no fault of his own, purely as a result of economic forces over which he has no control. This external circumstance evokes in him some kind of personal reaction. The professional task of the social scientist is to understand the economic forces which brought about the unemployment; that of the psychologist begins with the personal reaction.

Unemployed people react to their misfortune in a variety of ways. Many of these ways it would not occur to us to call disordered or abnormal. Unhappiness and discouragement, indignation and bitterness, seem well justified by the circumstances. Attempts to understand the situation and to change it by organized action seem well adapted to the problem as it stands. Certain people, however, behave in more extreme and peculiar ways. One man may take the blame entirely upon himself, declaring that his misfortune is a well-deserved punishment for his own sin and worthlessness. Another may believe that his former employers formed a conspiracy to throw him out of work and are even now trying to poison his food and take his life. A third may become extremely shy, hiding from his neighbors even when they too are unemployed, convinced that everyone holds him in contempt because he is no longer able to support his family. Still another may decide to shoot the President: this indeed is no fanciful example, for in 1932 a hungry unemployed man fired at the President-elect at a public gathering and killed another public official who was standing near by. These people, we say, are taking life in a very peculiar fashion. Their personal reactions are so little warranted by external circumstance, or so poorly designed to achieve desired results, that we cannot avoid considering them disordered. Factors within themselves are contributing disproportionately to their behavior. Abnormal psychology is the study of these disordered and disproportionate personal reactions.

Many expressions are in use to indicate all or part of the subject-matter contained within this general idea: behavior disorders, mental disorders, neuropsychiatric disabilities, psychological disorders, emotional disorders, maladjustments, nervous disorders, disorders of personality. Most of these terms have overlapping meanings; such value as they may possess will become apparent as we proceed.

Evolution of Attitudes Toward Disordered People

Only in quite recent years have the milder varieties of maladjustment come under scientific scrutiny. If people were unhappy and irritable, if they were unduly boastful and self-centered, if they did not get along well with their family and friends, if they frittered away their time or took to drink and dissipation, their behavior was censured as a sign of moral inferiority. Their deviations from acceptable behavior were felt to lie within the realm of volition. It was up to them to heed wiser counsels, choose nobler ideals, and

mend their ways. This attitude toward the milder forms of disorder has changed so recently, and indeed still prevails so widely, that we have little to learn from searching its earlier history.

Quite the opposite is the case with the severer forms of mental affliction. Here we can observe a distinct evolution of attitudes in Western society from medieval to modern times. Insanity is described in some of the earliest scientific writings. The insane, with their obvious unfitness to take care of themselves and their inconvenience and occasional danger to others, have always managed to establish some kind of claim on public attention. The early history of abnormal psychology is thus the history of attempts to understand insanity.

For the most part this history is a discouraging tale of isolated observations which never grew into a body of tested knowledge. The Greek physician Hippocrates, somewhere around 460 B.C., did his best to bring insanity into the fold of medicine by pronouncing it a disease of the brain and treating it like other diseases. In the writings of the great medical men from Galen in the second century to Weyer in the sixteenth, and of the great observers of human nature such as Vives and Montaigne, one finds many shrewd observations on the nature of insanity, much sympathy for the lot of its victims, and a disposition to seek humane methods to restore tranquillity of mind. Indeed the history of mental disorders reveals many surprising anticipations of what we now like to regard as modern attitudes and modern discoveries. But these prophetic voices of the past cried in the wilderness of an unenlightened, unconcerned public opinion. They were all but powerless to effect the social change upon which any systematic study of the insane was dependent.

One fact overshadows all others: there were no real hospitals for the mentally ill until the very end of the eighteenth century. There were no organized institutions to embody the humane feelings of those few enlightened minds which recognized the nature of mental disorders. This meant that there was no proper opportunity to build up an adequate knowledge of the subject, no chance to accumulate hospital records and compare large numbers of cases. Science could advance but little until suitable institutions were created, and institutions could not be created until public opinion was ready to support them. It was no accident that mental hospitals came simultaneously with the American and French Revolutions. They sprang from the same growing sense of human dignity and social responsibility.

The Insane as Social Outcasts.—Before the establishment of hospitals the mentally disordered were treated as outcasts and hardly distinguished from criminals. The community felt responsible for them only to the extent of preventing them from troubling their fellow men. Some of the less troublesome wandered about the countryside, begging and stealing their food and finding shelter in barns and pigsties. Others were thrown into prison where, side by side with criminals, they lived amid revolting filth, often chained, always at the mercy of their keepers. In 1785 a French physician described the situation as follows:

> Thousands of deranged are locked up in prisons without anyone's thinking of administering the slightest remedy; the half-deranged are mixed with the completely insane, the furious with the quiet; some are in chains, others are free in the prison; finally, unless nature comes to their rescue and cures them, the term of their misery is that of their mortal days, and unfortunately in the meantime the illness but increases instead of diminishing.[1]

Even those rare physicians who interested themselves in lunatics recommended severe and violent treatment. According to one medical authority of the seventeenth century:

> Discipline, threats, fetters, and blows are needed as much as medical treatment. Truly nothing is more necessary and more effective for the recovery of these people than forcing them to respect and fear intimidation. By this method, the mind, held back by restraint, is induced to give up its arrogance and wild ideas and it soon becomes meek and orderly. This is why maniacs often recover much sooner if they are treated with torture and torments in a hovel instead of with medicaments.[2]

Toward the end of the eighteenth century and even during the nineteenth there were many physicians who advocated harsh discipline for excited patients. Even the great American pioneer in psychiatry, Benjamin Rush, who in other respects advanced the cause of humane treatment, described in 1812 "terrifying modes of punishment" for refractory patients, recommending "pouring cold water under the sleeve, so that it may descend into the armpits and down the trunk of the body," or, if this failed, deprivation of food and threats of death.[3]

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[1] Colombier, J., 1785, quoted by Zilboorg, G. & Henry, G. W., *A History of Medical Psychology*, New York, W. W. Norton & Co., 1941, p. 316.
[2] Willis, T., *ibid.*, p. 261.
[3] Rush, B., *Medical Inquiries and Observations upon the Diseases of the Mind*, Philadelphia, Kimber & Richardson, 1812, p. 180.

Hard as was the lot of the insane a century and a half ago, it had nevertheless undoubtedly been worse in earlier times. In the Middle Ages, and indeed in all but the most enlightened periods of human history, it was generally believed that the insane were possessed by evil spirits. Some malignant demon was supposed to be inhabiting the body of the victim or to be directing his lunatic behavior from without. During the fifteenth and sixteenth centuries this general belief reached its extreme development in the institution of witchcraft, borrowed undoubtedly from primitive pagan sources but by this time thoroughly absorbed into Christian theology. What gave to the witchcraft trials their peculiar ferocity was the belief that the accused person had surrendered body and soul to the devil and made a solemn pact to do his evil work. For someone to be possessed was thus not merely a personal misfortune; it put the whole community in great moral danger. Witches, great numbers of whom would now be classed as psychologically disordered persons, were hunted, captured, tried in court, sometimes tortured to obtain confessions, and if found guilty were publicly burned. Such happenings were not at all uncommon.

> Judges were called upon to pass sentence on witches in great numbers. A French judge boasted that he had burned 800 women in 16 years on the bench; 600 were burned during the administration of a bishop in Bamberg. The Inquisition, originally started by the Church of Rome, was carried along by Protestant Churches in Great Britain and Germany. In Protestant Geneva 500 persons were burned in the year 1515. Other countries, where there were Catholic jurists, boasted of as many burnings. In Treves, 7,000 were reported burned during a period of several years.[4]

The Insane as Sick People: Pinel's Reforms.—It was thus a step forward when the notion of demon possession gave place to the notion that the lunatic was merely a public nuisance to be kept out of the way. As we have seen, however, the benefits were at first not very great; the mentally disordered were still outcasts and were still subject to brutal inconsideration. This was the situation which toward the close of the eighteenth century at last began to stir the public conscience. As is usually the case, reform was in the air and cannot properly be attributed to a single individual. But the figure of Philippe Pinel (1745–1826) stands out above his contemporaries, and his experiences well illustrate the social movement that was under way. Pinel was a physician and scholar who lived most of his

[4] Bromberg, W., *The Mind of Man: the Story of Man's Conquest of Mental Illness*, New York, Harper & Bros., 1937, p. 61.

life in Paris, who gradually centered his interest on mental disorders, and who found a golden opportunity to carry out his progressive ideas when in the first years of the Revolution he was made physician-in-chief at the Bicêtre, a hospital chiefly populated by the mentally deranged. His progressive ideas sprang from a rare sympathy for the insane and a persistent, discerning attempt to understand them. "The mentally sick," Pinel declared, "far from being guilty people deserving of punishment, are sick people whose miserable state deserves all the consideration that is due to suffering humanity. One should try with the most simple methods to restore their reason." [5]

Pinel's first step was to remove the chains and fetters with which most of the patients were bound. This required permission from the Commune, and the president came in person to talk with the patients and assure himself that no political enemies were concealed among them. Greeted by shouts and the clanking of chains, his attempts at conversation answered only by curses and execrations, the president is reported to have asked Pinel, "Citizen, are you mad yourself, that you would unchain such beasts?" To this Pinel replied, "It is my conviction that these mentally ill are intractable only because they are deprived of fresh air and of their liberty." [6] Permission was granted, and Pinel proceeded with his experiment. While in some cases no great benefits resulted, there were numerous instances in which patients hitherto considered dangerous and completely unmanageable became calm and reasonable when released from restraint and treated with kindness. Some who had been incarcerated half a lifetime were shortly discharged from the hospital with their health restored. But above all Pinel showed beyond any doubt that a large mental hospital could be safely and beneficially conducted with a minimum of mechanical restraint.

This was Pinel's most dramatic action, but it was only the beginning of the reforms which laid a foundation for the psychiatry of the future. Soon after the experiments at the Bicêtre he was transferred to the larger Salpêtrière hospital where he applied himself to a huge task of reorganization. He began to train attendants so that they should be something better than guards, and he tried to give the patients the benefit of comfort and a healthful routine. Of enduring importance was his introduction of the psychiatric case history and the systematic keeping of records. This arose from his habit of observing patients closely and taking careful notes. Before

[5] Quoted by Zilboorg & Henry, *op. cit.*, pp. 323–324.
[6] Semelaigne, R., *Les grands aliénistes français*, Paris, 1930, Vol. 1, p. 41.

his time it often happened that no one remembered when or for what cause a patient had entered the hospital. Obviously it was impossible to build up a sound knowledge of mental disorders until Pinel's custom of making records became an established practice. It was only in a well-regulated hospital, moreover, that methods of treatment could be properly explored, different methods compared, and results followed and verified. Pinel himself completed in 1801 a treatise on the nature and treatment of mental disorders, based largely on his own hospital experience. In the introduction he portrays the new role of the physician as he himself enacted it.

> The habit of living constantly in the midst of the insane, of studying their habits, their different personalities, the objects of their pleasures or their dislikes, the advantage of following the course of their alienation day and night during the various seasons of the year, the art of directing them without effort and sparing them excitement and grumbling, the gift of being able to assume at the right time a tone of kindness or of authority, of being able to subdue them by force if methods of kindness fail, the constant picture of all the phenomena of mental alienation, and finally the functions of supervision itself—the combination of all these must give an intelligent and zealous man an immense number of facts and minute details usually lacking in the narrow-minded physician unless he has taken a special interest during fleeting visits to asylums.[1]

This was indeed the dawn of a new day both for the mentally disordered and for man's whole understanding of his own nature.

The ideas behind Pinel's reforms began to spread slowly through the Western world. At last the public mind was beginning to be ready to receive them. In England William Tuke, a wealthy Quaker merchant, founded in 1796 the York Retreat where amidst quiet country surroundings kind and gentle methods of treatment were put into effect. Yet it was another fifty years before the policy of non-restraint became established in England, and even later in other countries. Naturally it was slow work to secure reforms which entailed greater expense, but it is surprising to realize the force of opposition within the medical profession itself. When Gardiner Hill, around 1840, was fighting to promote the policy of non-restraint and demonstrating in his own Lincoln Asylum that the plan really worked, other British medical men pronounced it the "wild scheme of a philanthropic visionary," indeed "a breaking of the sixth commandment," and asserted that "restraint forms the

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[1] Pinel, P., *Traité Médico-philosophique sur l'alienation mentale*, Paris, J. A. Brosson, 1801, p. 15.

very basis on which the sound treatment of lunatics is founded." [8] Not until 1857 could it be reported that non-restraint was generally accepted in British hospitals.

The Insane as Public Charges: State Hospitals.—To provide a sufficient number of hospitals for the mentally disordered was itself a major crusade. Here the contribution of the United States was particularly noteworthy. Several hospitals were opened early in the nineteenth century to embody the new humane principles: the Friends' Asylum at Philadelphia in 1817, McLean Hospital in Massachusetts in 1818, Bloomingdale in New York in 1822, and the Hartford Retreat in 1824. By 1840 there were fourteen mental hospitals in the United States capable of accommodating altogether something like 2,500 patients. But the census of the same year showed over 17,000 insane, of whom scarcely more than 5,000 were supported as public charges.[9] The great mass of the mentally ill were still without benefit of treatment, public support, or proper accommodations. The correction of this state of affairs was one of the many reform movements which spread through the country toward the middle of the last century. It was set in motion largely by Dorothea L. Dix, a Massachusetts schoolteacher who on her own initiative began to investigate the almshouses, jails, and private homes where the pauper insane were kept. In 1843 she presented to the Massachusetts legislature a memorial describing in detail what she had seen: insane persons "confined in cages, closets, cellars, stalls, pens . . . chained, naked, beaten with rods, and lashed into obedience." [10] The success of her petition marked the beginning of a long, remarkably effective career. Miss Dix personally investigated conditions throughout the United States, presenting reports and arguing with state legislators, until she had become the chief moving force in the founding or enlarging of more than thirty state hospitals. She afterwards extended her activities to Scotland and England, and her tours of inspection in most of the countries of Europe carried her influence still farther afield. Few people today remember how much the modern system of state hospitals owes to this indomitable worker. Her influence was in no small measure responsible for the trend revealed in the following figures. In 1840 the mental hospitals of the United States housed 2,561 patients, this being 14 per cent of the estimated number of insane in the country. Half a

[8] Bromberg, W., *op. cit.*, p. 105.
[9] Deutsch, A., *The Mentally Ill in America*, Garden City, N. Y., Doubleday, Doran & Co., 1937, p. 232.
[10] Dix, D. L., *Memorial in Behalf of the Pauper Insane and Idiots in Jails and Poorhouses Throughout the Commonwealth*, Boston, Monroe & Francis, 1843, p. 4.

century later, in 1890, the mental hospitals housed 74,028 patients, this being 69 per cent of the insane in the country.[11] The neglected lunatic of previous centuries at last stood a good chance of finding proper shelter, food, and medical attention.

The Mental Hygiene Movement.—By 1900 the care of mental patients had greatly improved, but there was still much to be accomplished. A vivid picture of conditions in that year can be found in the autobiography of Clifford W. Beers, who later inaugurated the mental hygiene movement. As a young man of twenty-four, recently graduated from college, Beers became depressed, attempted suicide, and for the next two years saw the inside of three different mental hospitals from the point of view of a patient. After returning to health he wrote the story of his illness in *A Mind That Found Itself* (1908), a book destined to achieve a tremendous influence toward the understanding of mental disorders. Beers admitted that he was a difficult patient. During the latter part of his illness he was elated, arrogant, dictatorial, doubtless exceedingly irritating to those in charge, and inclined at times to create rather violent scenes. Considering this, and comparing his treatment with what was meted out in earlier centuries, his care was a model of patience and forbearance, yet he was choked and thrown to the floor, kicked and spat upon, kept lightly clad in a cold cell, bound painfully tight in a strait jacket, and treated with childish displays of temper by the attendants, as when his holiday dinner was snatched away because he dallied over it. It is perhaps not surprising that the attendants displayed shortcomings; *the first training school for mental nurses in this country* was then not quite twenty years old, and the practice of hiring untrained guards was still widespread. On the doctors' part, what we miss is not so much a lack of humanity as a lack of insight and of that attitude which makes it possible not to be irritated by the patient's refractory behavior. In small and useless ways Beers was thwarted and thereby infuriated. His clothes were withheld, he was denied pencil and paper, and once he was even forbidden to collect some harmless corncobs that happened to strike his fancy. Moreover, there was practically no attempt to study his mental processes or to understand how the illness came about. "It was upon the gradual but sure improvement in my physical condition," Beers wrote, "that the doctors were relying for my eventual return to normality." [12]

[11] Deutsch, A., *op. cit.*, p. 232.
[12] Beers, C. W., *A Mind That Found Itself*, Garden City, N. Y., Doubleday, Doran & Co., 1931, p. 73.

Beers and his book became the agents of another forward stride in reform. In 1909 Beers established the National Committee for Mental Hygiene, later expanded to international dimensions, having in view three main purposes. (1) One of the chief aims was to alter the widespread popular belief that mental disorders were incurable and that they carried a stigma of disgrace. Much progress has been made in changing public opinion on this score, although it is still true that many people, willing enough to admit a bodily ailment, vigorously deny that any peculiarity in themselves or their relatives could be of mental origin. There still lies ahead a large task of public enlightenment on this subject. (2) Another aim of the mental hygiene movement was to encourage the early recognition and prevention of mental disorders. Around 1922 this purpose became embodied in *child guidance clinics* designed to study and treat problems of behavior before they grew to more serious proportions. Here again much has been accomplished, but a vast amount remains to be done before this essential health service becomes available to all children. (3) The third goal of mental hygiene was to improve those conditions in mental hospitals which Beers' own experiences brought so clearly into the open. While it is probably true that many hospitals today function no better than those in which Beers was confined, nevertheless the best mental institutions can claim a decisive advance over those of 1900. Improvement of resources is noteworthy, whether they be medical techniques, psychological examinations, or the chance for diversions and interesting occupations. Equally important are the greater patience and skill of the thoroughly trained attendants who know how to avoid petty squabbles and who treat the patients with real consideration. Most promising of all, however, is the changing attitude of the doctors: they make a serious attempt to understand each patient as an individual and to treat him as such.

The care and treatment of the insane is a task for highly trained specialists: psychiatrists and psychiatrically trained nurses and attendants. The conduct of child guidance and mental hygiene clinics is an equally specialized task shared by the professions of medicine, psychology, and social work. At first glance it might appear, particularly when we confine ourselves to the severer mental afflictions, that the whole business of mental health belongs in the hands of specialists and is of no concern to the ordinary citizen. Quite the opposite is the case; it is by no means too emphatic to say that "from the standpoint of prevalence, as well as economic loss, the problem of mental disease is without question one of the major

issues facing medical science and political organization as well as all modern society." [13] None of the goals of the mental hygiene movement can be achieved without active support by the ordinary citizen. He alone can sustain a climate of public opinion that is favorable to the proper treatment of disordered people. If disorders are to be promptly recognized as psychological problems, rather than forms of moral disgrace, it will be because the ordinary citizens in the community are acting as the bearers of this enlightenment. If maladjusted children are to find help at guidance clinics, it will be because the citizens are supporting such institutions. If mentally disturbed patients are to be cared for in up-to-date hospitals with opportunities for abundant individual attention, it will be because the voters have favored appropriations far larger than those now made for state mental institutions. Today in the United States we have between five and six hundred mental hospitals, a state of affairs that would doubtless have seemed to Pinel, Tuke, and Miss Dix like a dream come true. Yet there is scarcely a hospital which does not justly complain of overcrowding and understaffing. We have not yet fully solved the economic and social problem of making these hospitals function at the high level necessary to make an effective application of our present scientific knowledge. There is work here for the citizen as well as the specialist.

Mental Disorders Conceived as Diseases of the Brain

In the early stages of scientific study progress consists largely in ordering and classifying the facts. Not until this preliminary step has been accomplished is it possible to develop hypotheses and put them to any kind of crucial test. Because of the absence of hospitals, records, and facilities for observation, the study of mental disorders lingered long in the first stage. During the twenty-three centuries from Hippocrates to Pinel there were thousands of attempts to make a satisfactory classification. But Pinel himself, when writing his treatise in 1801, felt that the time was not yet ripe for sharp distinctions and clearly defined categories. He preserved only the little that was common to the earlier attempts and contented himself with distinguishing four large groups: mania, melancholia, dementia, and idiocy.

Difficulties in Classifying Mental Disorders.—With the establishment of hospitals and the taking of systematic records, a wealth

[13] Landis, C. & Page, J. D., *Modern Society and Mental Disease*, New York, Farrar & Rinehart, 1938, p. 26.

of facts began to accumulate. Examples of insanity, at least, became available in large numbers. To understand this rich experience, to arrange and organize the facts in some intelligible fashion, became for the curious scientist an increasingly urgent problem. But the difficulties proved at once to be enormous. "Mental disease," Pinel remarked, "appears greatly to tax the attention of good observers because it presents itself to us as a mixture of incoherence and confusion." [14] By their very nature the phenomena seemed to defy understanding. Moreover, the really good observer was likely to be baffled by the wide range of individual differences. "When one has seen many insane people," wrote one of Pinel's contemporaries, "one can recognize that there are as many differences among them as there are personalities among individuals whose minds are healthy. It is therefore really difficult to make up classes of diseases which would not prove fictitious." [15]

These were real difficulties, but by all odds the greatest problem arose out of the nature of symptoms. As we view them today, symptoms such as delusions and hallucinations, failure of memory, depressed or excited moods, are merely the surface phenomena of disordered behavior. They can be, and they have been, classified in various ways. Some of the most barren pages in the literature of science are those devoted to the classification of symptoms arranged according to the mental functions supposedly affected or by some similar purely logical scheme. Because symptoms are surface phenomena their logical classification corresponds scarcely at all to the logic of the underlying disorders. It is a good deal like classifying books according to the material and color of their bindings rather than by what is discussed inside. It is necessary in every case to go behind the symptoms if we are to understand the nature of a patient's trouble. In addition, symptoms do not fit together, even on the surface, in such a way as to provide an intelligible classification. Delusions and hallucinations, for example, appear under the most widely different circumstances and in the greatest variety of combinations with other symptoms: in connection with excitement, with depression, and with dementia; accompanied by paralysis or without it; following extreme alcoholic intoxication; in the delirious states resulting from high fever or acute infection; and sometimes virtually alone. Clearly it is necessary to penetrate beneath superficial phenomena if we are to arrive at the underlying and essential factors responsible for abnormal behavior.

[14] Pinel, P., *op. cit.*, p. 1.
[15] Fodéré, *Traité du Délire*, Paris, 1817, quoted by Zilboorg & Henry, *op. cit.*, p. 392

The Somatogenic Hypothesis.—About the middle of the nineteenth century there was a strong revival of Hippocrates' original belief that mental disorders were diseases of the brain. Underlying and essential factors were to be looked for in conditions affecting the central nervous system. This way of looking at the problem was strictly in accord with the general outlook of medical science which constantly sought to establish the bodily conditions and tissue changes responsible for illness. Because it looks for the *genesis* of the trouble in the body or *soma,* this theory is commonly called the *somatogenic hypothesis.* Representative of the trend toward somatogenesis was the German psychiatrist Griesinger (1817–1868) who recognized no distinction between neurology and psychology and who considered a diagnosis valid only when it specified a physiological cause. In France the same tendency was illustrated by Magnan (1835–1916) who gave his most careful attention to disorders associated with very obvious bodily conditions such as alcoholic intoxication, paralysis, and the changes accompanying childbirth. In 1857 a major treatise was published by the French psychiatrist Morel (1809–1873) whose thinking was organized around the theory of degeneration: briefly stated, that mental disease was the result of hereditary neural weakness. These workers and many others who accepted their premises believed that when the brain and the human constitution revealed their secrets the riddles of mental disorder would be solved.

But to make the brain and the human constitution reveal their secrets soon proved to be a long campaign. Only the gross anatomical divisions of the nervous system—cerebral hemispheres, cerebellum, medulla oblongata, spinal cord, and peripheral nerves—were known in the first half of the nineteenth century. More precise localization of functions began only in 1861 with Broca's discovery of a center controlling speech. The mapping of cortical areas was accomplished between 1870 and 1900, but is still a matter of some dispute. Of similarly recent date is our knowledge of microscopic structure. Not until 1889 did improved microscopy disclose the existence of the synapse, thereby showing that each nerve cell and its fibers formed an anatomically separate unit. Thus before 1900 only the very grossest abnormalities of brain structure could have been perceived. Griesinger, Magnan, Morel, and their followers had little sound knowledge at their disposal. Their confidence in somatogenesis was based more on faith than on facts, and was reasoned out by analogy with the rest of medical practice.

Notwithstanding these difficulties, the somatogenic hypothesis

was a great advance in the understanding of mental disorders. It demanded a search for essential causes rather than a preoccupation with surface phenomena. It called upon methods long used with success in the study of bodily ailments. There was a long-standing tradition, recognized even by Hippocrates, that each separate disease had a characteristic *beginning,* a typical *course,* and a typical *outcome.* Each disease, furthermore, was represented not by a single symptom but by a typical pattern of symptoms or *symptom-complex,* which might vary in detail from one case to another yet still signify a common underlying disorder. If one could show that certain symptoms frequently occurred together, that they made their first appearance in some fairly regular way, that they ran a typical course which led to a typical outcome, then one was probably well on the way toward isolating a specific disease produced by a specific condition of the brain. Let us examine this method in action, choosing what is probably its greatest triumph in the field of behavior disorders.

The Discovery of General Paresis.—One of the most creditable chapters in the modern history of medicine was the discovery of general paresis. This disorder, alternatively called *dementia paralytica* or *general paralysis,* was first clearly described in 1798 by Haslam, who noticed among patients at the Bethlehem Hospital a frequent association of delusions of grandeur, dementia, and progressive paralysis. Haslam was unable to carry his observations further than this; he simply recognized a common association of symptoms, a *symptom-complex,* and thus set apart certain patients from the undifferentiated mass of the insane. He characterized these patients as follows.

> Speech is defective, the corners of the mouth are drawn down, the arms and legs are more or less deprived of their voluntary movements, and in the majority of patients memory is materially weakened. These patients as a rule fail to recognize their condition. So weak that they can hardly keep on their legs, they still maintain they are extremely strong and capable of the greatest deeds.[16]

A few years later, in 1805, a French physician, Esquirol, who later succeeded Pinel at the Salpêtrière, observed that patients having this symptom-complex never recovered; deterioration and paralysis progressed fairly rapidly to a fatal outcome. Esquirol thus called attention to a typical *course* and a typical *outcome.* It is worth

[16] Haslam, J., *Observations on Insanity,* London, F. & C. Rivington, 1798, p. 259.

noticing that such observations, necessarily extending over a period of time, could scarcely have been made except under the conditions of hospital care and record keeping which Pinel had but lately established in Paris.

As experience increased, so that reliance could be placed upon statistics, it became clear that general paresis occurred in men about three times as often as in women. The *time of onset* was found to be rarely earlier than the age of thirty or later than fifty. The *mode of onset* proved particularly baffling. Attempts to reconstruct the patient's history generally showed an insidious beginning marked at first by barely perceptible abnormalities of behavior. Only after a period of time did this behavior come to be sharply at variance with the patient's previous mode of living.

Details of the paretic symptom-complex were slowly added as methods of examination improved. The technique of examining reflexes developed steadily during the nineteenth century. Applied to patients who showed the paretic symptom-complex it brought to light two important abnormalities present in a majority, though not in all, of the cases. One of these abnormalities, named after its discoverer the Argyll-Robertson pupil, consisted of a failure of the pupillary reflex to light, the reaction of accommodation, however, being retained. The other was a pronounced exaggeration of the "knee jerk" or patellar tendon reflex. Since these alterations in reflexes were not found in every case they were less valuable as diagnostic signs than the manifestations of paralysis and the mental symptoms. But they pointed rather strongly to some primary disorder in the nervous system.

The identification of this organic disorder proceeded slowly at first, handicapped by the prevailing ignorance of brain structure and brain function. In the first half of the century post-mortem examination of paretic brains showed something to be wrong with the tissue. Various writers spoke of irritation, inflammation, and degeneration, these being hardly more than guesses. Around 1860 improved microscopy revealed an excessive growth of connective tissue in the cortical substance together with a widespread destruction of nervous tissue. The cause of these changes still eluded observation, and the next forward step came with the help not of the microscope but of the case history. In 1894 Fournier showed from various statistical studies that a history of syphilis was obtained in 65 per cent of paretics, as compared with 10 per cent in other mental illnesses. He offered the hypothesis that general paresis had its origin in syphilitic infection which, even though apparently cured, had in some way invaded the tissues of the brain.

At first it seemed a weakness in this theory that histories of syphilis were not obtained in all cases of general paresis. In answer to this objection it was pointed out that correct histories of previous syphilis are by no means easily obtained; patients have strong motives for concealing the indiscreet sexual adventures that led to infection. A bold experiment by Krafft-Ebing in 1897 greatly strengthened the theory of syphilitic origin. Nine paretic patients who denied previous infection were inoculated with the syphilitic virus. None of them developed syphilis. This surprising immunity constituted proof that the patients, despite their denials, had once been infected and had subsequently recovered. Further evidence accumulated during the next fifteen years as a result of newly discovered laboratory methods for recognizing syphilis. The blood and the cerebrospinal fluid of syphilitics can be made to show highly characteristic chemical reactions, and these reactions were now demonstrated with great regularity in paretic patients.

The final step, sufficient to dispel any lingering doubts about the origin of the disorder, came with the discovery of the syphilitic infectious agent in the brain tissue of paretic patients. This infectious agent, a minute organism known as *Treponema pallidum*, was not identified as the cause of syphilis itself until 1905, but the search for it in nervous tissue proceeded thereafter without delay. In 1913 Noguchi and Moore found *Treponema pallidum* in the nerve-cell layers of the paretic cortex, thus at last accounting for the tissue destruction recognized but not explained nearly a century earlier. The essential cause of general paresis now stood fully revealed, and the way was opened for preventive measures and for research on methods of treatment.

This is the kind of story of which medical science is rightly proud. Careful observation, patient research to which hundreds of workers contributed, the constant development of more refined techniques which carried the investigation forward in unexpected ways, led at last to the discovery of underlying causes and thus to the possibility of prevention and treatment. Zilboorg weighs the accomplishment in the following words:

> It proved a blessing for hundreds of thousands of unfortunates suffering from a syphilitic infection which had not been properly cured and which had become invisible for a period of years, only to reappear in the form of a devastating disease of the brain and spinal cord—a disease which was destructive to the whole personality of the individual and was invariably fatal. Studies in serology and empirical therapeutic efforts, stimulated and made possible by the discovery of the nature of general paralysis and of its cause, had finally reduced substantially the

number of fatal outcomes, increased the number of recoveries, and, what is most important, led to rational preventive measures which at least in some countries (Scandinavia) almost entirely eliminated general paralysis as a disease.[17]

Similar stories could be told for other varieties of disorder, notably those connected with senile changes and those dependent upon metabolic deficiencies. But since it is our purpose here to sample the main trends and grasp the persistent problems, rather than to set forth an exhaustive history, we can be satisfied with the example of general paresis, postponing until Chapter 13 a systematic consideration of the somatogenic disorders.

Kraepelin's Outlook on Mental Disorder.—The culmination of the idea that mental disorders are physical diseases, analogous in every respect to ailments that have no mental symptoms, occurred in the work of Emil Kraepelin (1855–1926), the German psychiatrist whose great textbook, passing through eight editions from 1883 to 1913, stamped its impression deeply on subsequent psychiatric thinking. Building on the observations of predecessors as well as his own, he tried to accomplish for all mental disorders what was being done so brilliantly with general paresis. He tried to achieve a sifting, sorting, and grouping of mentally disordered patients in order to bring out the typical symptom-complexes and the typical patterns of onset, course, and outcome which distinguished one disease from another. If patients could be properly classified according to certain regularities in the symptoms and course of their illness, if one could thus correctly name and distinguish the different disease entities, then the energies of research could be bent toward finding the specific bodily condition responsible for each disease.

Kraepelin brought to this task a genius for combination and classification. His work was carried out in large hospitals, with large numbers of patients, and with extensive hospital records—a proper culmination of Pinel's reforms. He was in tune with the objective scientific trend of his times. The work of Pasteur and Lister had prepared the way for the understanding and mastery of infectious diseases. Remarkable triumphs in clinical medicine were occurring all around him; within a short space of time a great many varieties of bodily disease had been isolated and clearly defined. The growing resources of the physiological laboratory were constantly at his disposal and he followed with keen interest all developments along this line. As a result his conception of the possible

[17] Zilboorg, G. & Henry, G. W., *A History of Medical Psychology*, *op. cit.*, p. 399.

bodily aspect of mental disorder was far richer than the original notion of a defect or injury in the brain. In addition to gross destruction of nervous tissue, such as occurred in general paresis, he was aware of the possible effects of metabolic changes, improper bodily economy, and disorders of the endocrine glands.

Thus oriented and equipped, Kraepelin studied large quantities of case histories. He examined not only the story of each illness and its course while the patient was in the hospital but also the history of the patient's previous life, and he followed the histories of patients who were discharged from the hospital. In this way he was able to establish regularities concerning the symptoms and course of disease. Discounting individual variations, he sorted out what was common to numerous cases and arrived at classifications. Working along these lines, he came to the conclusion that in addition to the entities already recognized there were two major mental diseases: *manic-depressive psychosis* and *dementia praecox* (now generally called *schizophrenia*). In forming the first of these two disease entities he drew together the excited, elated conditions (mania) and the melancholy, depressed states (depression), showing that in many cases these moods succeeded each other in the same patient. As had been done with paresis, he here isolated a symptom-complex having a typical beginning, course, and outcome. The symptom-complex was centered around abrupt changes of mood and did not include signs of deterioration such as defects in gait, speech, and memory. The onset was sudden rather than gradual; the course was periodic rather than steadily progressive; the outcome was spontaneous recovery though with a strong likelihood of future recurrence. Each of these points emphasized the fundamental difference between manic-depressive psychosis and general paresis. Dementia praecox represented an even larger synthesis of previously recognized disorders. Kraepelin felt justified in making this combination because all the subvarieties, outwardly rather different, had two central features in common: they all showed an early onset and they all progressed in the direction of incurable dementia. Here was a disease that had its onset earlier than either paresis or manic-depressive psychosis. Its course was progressive rather than periodic, and its outcome was complete dementia, not including, however, paralysis and early death.

Progress in understanding these two mental disorders was urgently needed. Together they included nearly two thirds of the patients in mental hospitals, claiming nearly two thirds of the doctors' effort and time. Kraepelin postulated that manic-depressive

psychosis was caused by an irregularity in metabolic function. Because the disorder seemed to run in families he assumed that the metabolic irregularity was based on some kind of hereditary defect. In the case of dementia praecox he proposed the hypothesis that the sex glands were at fault, producing an unfavorable chemical state which affected the nervous system. He justified this guess by pointing out frequent associations between the onset of the disease and changes in sexual function: the changes of puberty, menstrual irregularities, childbirth, and the involution period. He thus applied the type of reasoning that prevailed in general medicine and searched for the causes of disorder where any physician would look for them: in tissue changes, endocrine disturbances, hereditary peculiarities; in short, in some specific derangement of the bodily economy.

It is a mistake to assume that Kraepelin was either right or wrong. Applied to general paresis his way of thinking was certainly right: this *is* a true disease entity with a clearly definable bodily cause. Applied to dementia praecox and manic-depressive psychosis it was plausible, and one could always hope that future research would uncover a specific cause. It is true that fifty years of research have not uncovered specific bodily causes for the two major psychoses. Kraepelin's speculations concerning metabolic irregularities and disturbed sex glands have not received convincing support. But it is still conceded that these two disorders may have characteristic bodily aspects and may be to some extent analogous to physical diseases.

Nevertheless it is today a term of reproach to say of any psychiatrist that he is a Kraepelinian. It implies that he is one-sidedly committed to the somatogenic point of view, that he studies his patients only with the idea of classifying them under the proper disease, and that his mind is not open to the feelings, strivings, and other personal matters which may be important in understanding the illness as a whole. As a matter of fact those psychiatrists who are still called Kraepelinian have received their training and have continued their work almost entirely in mental hospitals. Their chief field of observation is the hospitalized insane, where the somatogenic hypothesis is most likely to be applicable. The growth of another point of view and the emergence of the psychogenic hypothesis took place almost entirely outside hospital walls. As we shall now see, it was the study of neurotic patients, whose condition almost never warrants hospitalization, that led to new advances in psychological understanding.

Beginnings of Psychopathology: The Study of Hysteria

The Psychogenic Hypothesis.—In contrast to the somatogenic hypothesis, which holds that disordered personal reactions have their genesis in somatic or bodily disturbances, the psychogenic hypothesis attributes causative significance to psychological processes. We can give it a crude first statement, to be much refined in later sections of the book, by saying that disordered personal reactions occur because the patient's thoughts, feelings, and strivings are disturbed. His somatic processes, even his brain and central nervous system, may be working in an entirely normal fashion; it is the content of what he feels and imagines that throws his personal reactions into disorder. We can begin to speak of *psychopathology* at the point where ideas or some other psychological processes are held responsible for disordered behavior. Pathology means the science of disease processes; psychopathology deals with those disorders which have their origin in psychological processes rather than tissue or chemical dysfunction.

The psychogenic hypothesis won its way into modern medicine through the study of hysteria. In its early stages this study was much assisted by the use of hypnotism, which itself offered an interesting trial ground for the psychogenic point of view. Hypnotism first became widely known through the activities of an Austrian physician, Mesmer, who set up a flourishing practice in Paris shortly before the French Revolution. Hundreds of patients were cured of diverse ailments by attending Mesmer's magnetic sessions, as they were called. Mesmer's methods were highly theatrical, but they inspired serious investigation. His followers very quickly discovered all the main phenomena of hypnotism as we know them today. They showed that a hypnotized person was highly responsive to whatever was suggested. For instance, he could apparently be made to see things which were not there (positive hallucinations) or not to see things which were there (negative hallucinations). Parts of his body could be temporarily paralyzed and made insensitive to touch and pain. He could move about, answer questions, talk and think clearly, but upon awakening have no recollection of what had transpired. Some of these curious phenomena were valuable in effecting cures. If a patient complained of aches and pains, for instance, these might be made to disappear by suggestion in the hypnotic state, so that the patient would wake up magically cured, remembering nothing of the process.

By what mechanism were these striking changes produced? Mesmer explained them by supposing that an invisible fluid passed between himself and the patient, influencing the patient's body in a distinctive fashion. By analogy with the action of magnets he christened this influence *animal magnetism,* and his writings on the subject show that he considered it a strictly physical process. A commission appointed to investigate his activities made a number of careful experiments which contradicted his theory. The commissioners showed that the phenomena supposed to be produced by magnetism occurred only if the patient knew he was being magnetized, and they drew the conclusion that the demonstrable effects were obtained through "the excitement of the imagination." At that time this conclusion had the effect of discrediting Mesmer, but it was actually an alternative hypothesis for explaining the observed facts of hypnotism. One of Mesmer's pupils aptly put the question: "If Mesmer had no other secret than that he was able to make the imagination exert an effective influence upon health, would he not still be a wonder worker?" [18] A later follower, Bertrand, reasoned that hypnotism "served merely to render conspicuous and to amplify phenomena dependent upon the working of the general laws of imagination, expectant attention, and desire." [19] This was a fully psychogenic hypothesis, seeking to explain hypnotic behavior by appeal to psychological processes.

Charcot's Investigation of Hysterical Symptoms.—In 1878 a new line of investigation opened at the Salpêtrière in Paris, the hospital which many years before had been the scene of Pinel's momentous reforms. The patients who became the objects of this study were classified under *hysteria.* This disorder, recognized even by the ancients, is characterized by an amazing variety of bodily symptoms: total or partial blindness, total or partial deafness, paralysis or anaesthesia in certain areas of the body, occasionally convulsive attacks ("hysterical fits"), and not infrequently gaps and peculiarities in memory. Apart from these symptoms the patient's mind is perfectly clear; only the most severely incapacitated cases require institutional care. A small number of such cases came to the attention of J. M. Charcot who began to investigate them in detail.

Charcot was a distinguished neurologist who served as visiting physician at the Salpêtrière. He was a remarkably keen observer of visible behavior. Current methods for examining reflexes in search

[18] Quoted by Janet, P., *Psychological Healing, a Historical and Clinical Study,* trans. by E. & C. Paul, London, Allen & Unwin, 1925, Vol. I, p. 161.
[19] *Ibid.,* p. 157.

of damage to the nervous system owe a great deal to Charcot's genius. By training and long experience he favored the somatogenic hypothesis. For a long time it did not occur to him that hysteria, despite its manifold symptoms, differed from any other disease of the nervous system. Hysterical symptoms lent themselves to examination by Charcot's established methods because, apart from the fits, they mostly took the form of specific bodily ailments.

Charcot himself had never practised hypnotism, but some of his assistants at the hospital became interested in the subject and experimented with the patients. One day they showed their chief some remarkable facts. Before his eyes they demonstrated that by means of hypnotism it was possible to produce artificially all the typical bodily symptoms of hysteria, and afterwards to remove them again. By hypnotic suggestion a patient's perfectly healthy arm could be rendered paralyzed and anaesthetic; Charcot himself, examining the patient, could not tell the difference between this and a natural hysterical paralysis with anaesthesia, except that it disappeared upon further suggestion. The whole array of hysterical symptoms could be brought into and put out of existence at whatever speed and in whatever form one chose. How could the nervous system do it?

Challenged by this discovery, Charcot set to work to investigate hysterical symptoms. Clearly they were not caused by local injury to the nervous system. He tried to discover how the symptoms started, and found that the circumstances were often peculiar. One patient, for instance, was in a street accident during which, so he thought, a carriage ran over his legs. At the hospital both legs remained paralyzed for months, but as a matter of fact the carriage had not even touched the patient. A young girl stepped lightly out of bed one morning only to find her left leg paralyzed in a rigid clubfoot position. Charcot examined many such cases: the initial circumstances were never sufficient to account for the symptom. The disappearance of symptoms also occurred in a strange fashion. Sometimes a paralysis would end abruptly during a moment of emotional excitement. Sometimes it could be removed by hypnotic suggestion. Charcot discovered that Mesmer's claims were partly justified: the young girl with the clubfoot paralysis was cured after a strenuous series of hypnotic sessions.[20] Again it appeared that symptoms were capable of migration. Paralysis might shift spontaneously from one side of the body to the other. Finally Charcot was able to point out a number of critical differences whereby one could

[20] Charcot, J. M., *Œuvres Complètes*. Paris. Lecrosnier & Babé. 1890. Vol. IX, pp. 462–478.

distinguish hysterical symptoms from ones of similar form caused by local injury to the nervous system. In hysterical anaesthesias the reflexes paradoxically remained normal: the knee jerk, for instance, could be elicited just as usual from an otherwise insensitive and immobile leg. Again, even if the part stayed immobilized for years there was no muscular atrophy through disuse.

One of the most startling discoveries was that the hysterical symptom might cease to operate when the patient was inattentive or asleep. Janet, a student at the Salpêtrière whose work we shall presently consider, tells of pointing out to Charcot two young patients playing an expert game of ball in the courtyard. Both of these patients at examination showed an hysterical contraction of the visual field to a mere pin point, the whole periphery being blind, yet they could somehow use their peripheral vision when immersed in the excitement of a ball game.[21] Janet also described a man paralyzed in both legs who was addicted to walking in his sleep. He often climbed out on the roof and had to be rescued by the attendants with extreme care because his legs became totally paralyzed the moment he was awakened.[22]

Probably the most significant of Charcot's discoveries was that hysterical symptoms often made what we might call anatomical nonsense. Sometimes a patient would have a paralyzed hand with anaesthesia which stopped at the wrist, thus including roughly the area that would be covered by a glove. Such an anaesthesia is anatomically impossible in the sense that no conceivable nerve injury could produce it. The arm is supplied by three main nerve trunks extending down into the hand. Injury to any one would involve only part of the hand and would affect part of the arm as well. Injury to the center in which the three paths join would produce an anaesthesia including the whole arm and shoulder. The glove anaesthesia therefore is a perfect example of anatomical nonsense which strikes the final blow at a somatogenic hypothesis for hysteria.

How, then, does a glove anaesthesia come into existence? We can see that there is an oddly mental character to this seemingly physical symptom. The area of anaesthesia corresponds to the idea one has of the hand as an anatomical unit. The first patient's paralysis likewise corresponds to an idea he had that a carriage ran over his legs. But we must beware of jumping to the conclusion that these patients are simply putting on a conscious act. Mental origins do

[21] Janet, P., *The Major Symptoms of Hysteria*, 2nd ed., New York, The Macmillan Co., 1920, p. 198.
[22] *Ibid.*, p. 28.

not necessarily mean conscious or voluntary origins. That patients often had no conscious idea about their symptoms was testified in many ways. Sometimes examination revealed an area of anaesthesia, or perhaps even a blindness of one eye, of which up to that moment the patient had been totally unaware. The most telling fact, however, which absolved hysterical patients from conscious deception, was that sometimes the symptoms made perfect anatomical sense. There were cases, for example, clearly hysterical and curable by suggestion, in which paralysis of the entire right side was accompanied by disturbances of speech. One certainly could not suppose that in 1880 clinical patients of slight education had an idea about the location of the speech centers in the left cerebral hemisphere and the control by this hemisphere of the right side of the body.

Apart from certain speculations which we can no longer consider very instructive, Charcot left the problem at this point. Hysteria, the medical mystery, was far from solved. Most of the symptoms appeared to be strictly bodily, but they did not act at all like true organic lesions. Sometimes they assumed a correct anatomical form, but sometimes they made anatomical nonsense. They came and went in curious ways, and they could all be produced and removed again artificially by hypnotic suggestion. They were mental, yet not wholly mental; they were psychological, yet mixed up in a puzzling way with bodily processes. This was truly bewildering, but out of the bewilderment there came at last a highly significant illumination.

Janet's Study of the Mental State in Hysteria.—The next step in the process of enlightenment was taken by Charcot's student, Pierre Janet, who during the 1890's began to publish his acute observations of the mental state of hysterical patients. Janet's work illustrates the progress that sometimes comes by looking at old and familiar facts from an entirely new point of view. Before his work, the fits and the bodily symptoms had been taken as the central and characteristic phenomena of hysteria. Janet shifted the emphasis to the mental state. He listened to the patients and tried to find out what was characteristic and peculiar about their mental processes. In this way he gradually came to center his thinking around *somnambulism,* which appeared to him to be at bottom an abnormality of memory.

He began with pure cases of somnambulism, those in which a system of ideas and actions takes possession of the patient for a short period of time but afterwards appears to be forgotten. His classic example was the case of Irène, a young woman whose mem-

ory was normal except that she seemed to have forgotten the recent tragic death of her mother. Every so often she would fall into a somnambulistic state during which, oblivious to everything around her, she would act out with extraordinary vividness the harrowing scene at her mother's deathbed and her own subsequent frantic expressions of grief. No sooner was the drama finished than she would return to her normal state and go on calmly with whatever she had been doing. Janet interpreted these facts as follows.

> During the crisis itself, two opposite characteristics manifest themselves; first, a huge unfolding of all the phenomena connected with a certain delirium; second, the absence of every sensation and every memory that is not connected with that delirium. After the crisis, during the state that appears as normal, two other characteristics appear, opposite, to all appearance: the return of consciousness of sensations and normal memory, and the entire forgetfulness of all that is connected with the somnambulism. Let us remember all these notions that here seem very simple, and we shall afterwards see them unfolded in every hysterical phenomenon.
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> Things happen as if an idea, a partial system of thoughts, emancipated itself, became independent, and developed itself on its own account. The result is, on the one hand, that it develops far too much, and, on the other hand, that consciousness appears no longer to control it.[23]

The same processes can be observed in those cases technically called *hysterical fugues,* generally referred to in newspapers as cases of amnesia. Janet described several such cases, of which the following is typical. A youth of seventeen who had chosen the placid occupation of grocer's boy used to visit a public house frequented by old sailors who fired his imagination with tales of adventure at sea and in foreign lands. At home or at work he rarely thought about travel, but occasionally, after a visit to the public house, he would set forth on a journey determined to reach the sea. During these trips there was but one idea in his head: to get to the sea and sail for the enchanted lands he had heard described. Family and job were completely forgotten. One of the fugues lasted three months, during which he moved slowly toward the south of France working on canal boats. When a chance remark reminded him of his parents he suddenly "awoke," so to speak, oblivious to the last three months and supposing himself to be still in Paris.[24]

The Concept of Dissociation.—In this case, as in the previous one, a system of emancipated ideas temporarily seizes control of

[23] Janet, P., *The Major Symptoms of Hysteria, op. cit.,* pp. 36, 42.
[24] *Ibid.,* p. 53.

behavior and begets amnesia for the patient's normal existence. The emancipated system is organized in a slightly different way: with Irène it was the memories of a particularly painful experience that were set apart, whereas with the grocer's boy the desire for novelty, adventure, and manliness gave shape to the ideas underlying the fugues. But in any event the same peculiarities of memory prevail. A healthy person cannot split up his memories in this way, no matter how strong the inducement. Janet believed that this phenomenon was the central fact in hysteria, and he gave it the name of *dissociation*. The concept of dissociation was designed to account for the pathological separation or insulation between systems of ideas which normally would interpenetrate and influence each other. The special mark of this insulation was amnesia, the patient's failure in his well states to remember the sick ones or in his sick ones to remember the well. The effect of this insulation was the overdevelopment of those systems which no longer enjoyed communication with the integrated conscious self. In hysteria, Janet conceived, the personality lost some of its normal organization. Certain systems fell out of the hierarchy, so to speak, and escaped from the restraining influences of the ego. The emancipated systems provoked behavior not unlike that of a hypnotized person.

At this point one is likely to feel that Janet has changed the point of view in too radical a fashion. It is almost as if he had described a different kind of hysteria. What could he say about hysterical fits and about the bodily symptoms—paralysis, anaesthesia, sensory disturbances—that so much occupied his predecessors? He believed that these, too, were examples of dissociation. The difference lay in the kind of system that was dissociated and in the way it reacted upon behavior. Hysterical fits he regarded as aborted somnambulisms in which the dissociated system expressed itself not in ideas, words, and acts, but in the inferior form of motor storm and emotional explosion. The classical bodily symptoms represented a dissociation of neuro-muscular systems. If a patient was unable to walk it was because the organized system of images and sensations which functioned during walking had become dissociated from the rest of the personality. Charcot's patient who believed himself run over by a carriage had a dissociated idea that his legs were paralyzed, and this idea, simply because it was dissociated, became overdeveloped—like Irène's drama of grief—and actually controlled the motility of his legs. The young ball players at the Salpêtrière had dissociated a natural subsystem of the visual process, peripheral vision, while retaining foveal vision. Here Janet was dealing not so

much with systems of ideas as with natural subsystems of the neural mechanism. In this way the concept of dissociation could be made to cover all the phenomena of hysteria.

Dissociation was a purely descriptive concept. As such it was of great value in the history of abnormal psychology. Janet drew attention to a very far-reaching characteristic of hysteria: the breaking of behavior into insulated subsystems and the failure of the ego to control what was going on. His work strengthened the conviction that hysteria and the other neuroses belonged in the sphere of psychology and had to be conceived as disorders of the personality as a whole. Dissociation was not an explanatory concept. It was not designed to tell *why* personality disintegrated in the fashion described. In his *explanation* of hysteria Janet hovered between psychogenic and somatogenic theories. On the one hand, like Kraepelin he studied the patients' ideas and personal histories with a view to establishing the common element of dissociation and the diagnosis of hysteria. He believed further that these patients suffered from an hereditary weakness in their capacity to organize their experience. On the other hand he examined and repeatedly pointed out those feelings and ideas that were peculiar to the individual patient: he described the conditions that had worn the patient down, frustrated and discouraged him, thrown him into a state of exhaustion, piled up upon him until he could no longer function properly. Janet was a sensitive observer of the struggles and problems that occupied his patients' lives, but he paused on the brink of psychogenic explanations. It was left for others to discern in these very struggles and problems the effective causes of the illness.

Breuer and Freud's Discovery of Abreaction.—The most unsatisfactory feature of Janet's theory was that it failed to explain individual symptoms. How does the hysterical symptom get selected and placed? Sometimes we feel that the symptom bears a sensible relation to strivings which we can readily understand. Irène, for instance, forgets her mother's death—that and nothing else—because the memory is extremely painful to her. More often, and especially when the symptoms take a crude bodily form, there is no apparent logic in the locality chosen. The clubfoot paralysis of Charcot's patient, starting when she stepped out of bed, seems almost like a chance phenomenon, and this impression is even stronger when a patient has a rapidly changing succession of bodily symptoms or a great many at one time. To make sense out of such a jargon of symptoms seems as hopeless as making sense out of the ravings of a

lunatic. But both things can be done. The man who opened the door upon hysterical symptom formation was a Viennese physician, Joseph Breuer, who shortly enlisted the collaboration of a younger colleague, Sigmund Freud (1856–1939).

Between 1880 and 1882 Breuer had under treatment a curious and difficult case of hysteria. The patient, a girl in her early twenties, was bedridden for several months with a long array of symptoms. Both legs and the right arm were paralyzed, sight and hearing were greatly impaired, the neck muscles were uncomfortably contracted, and there was a persistent nervous cough, occasional nausea, and periodic difficulty with speech. One could scarcely imagine a more senseless jargon of symptoms. Besides all these afflictions of the body there were frequent alterations of mental state: confusions and a dreamy condition which Breuer called "absence." It was the sympathetic observation of these mental states that gave Breuer his first clues concerning the symptoms and his first success in alleviating them. During her periods of "absence" the girl often mumbled to herself as if her thoughts were busy. Breuer took note of her words and later, after inducing an hypnotic state, repeatedly gave them back to her. In this way she was led to reveal the fantasies that occupied her in her dreamy states. When she had unburdened herself of these fantasies she felt relieved, and awakened from the hypnosis temporarily much improved.

Almost by accident Breuer had hit upon a means of temporary cure, but the effects lasted only for a few hours. Presently he discovered that under certain rather special circumstances a symptom might be permanently removed. If during hypnosis the patient could remember the situation in which the symptom began, and if the accompanying emotion was freely and fully expressed, the symptom would disappear for good. Breuer discovered that the patient's eye trouble had its origin during a long and painful period of her life when she was helping to nurse her father through his protracted last illness. One evening she was sitting near his bed, worried and tearful, when he awoke from a nap and asked her what time it was. Her tears kept her from quickly seeing the clock, but she exerted her eye muscles desperately to clear her vision so that she could reply without revealing her distressed condition. When the patient not only recalled this forgotten incident but also experienced again fully the emotion she had so forcibly suppressed, her visual symptoms permanently disappeared.[25] A similar origin and cure was

[25] Breuer, J. & Freud, S., *Studies in Hysteria*, trans. by A. A. Brill, New York & Washington, Nervous & Mental Disease Publishing Co., 1936, pp. 26, 27.

found for all her symptoms. The paralysis of her right arm, for instance, had its roots in an occasion when she herself dozed off at her father's bedside and had a nightmare; a huge black snake was attacking her father and she tried in vain to fend it off with her right arm. She awoke terrified, freed her arm which was over the back of the chair and perhaps "asleep," and hastily suppressed her feelings lest her father perceive her fear. The removal of this, like the other symptoms, was not a matter of a single hypnotic recall. The incident had been elaborated in many fantasies, and Breuer had to work steadily back along this chain before the patient recalled the original nightmare and gave full vent to her original terror.

In the course of time this patient was completely cured. The process was always the same: recovery during hypnosis of some drastic incident in which emotion had been suppressed, full and dramatic expression of the emotion, permanent disappearance of the symptom that had been laid down on that occasion. The method of cure, it will be noticed, differs greatly from the earlier use of hypnotism. There is no attempt to suggest that the symptoms vanish. The central fact in the cure was the release of suppressed emotion, and the part played by hypnosis was merely that of rendering recall and emotional expression more easy. The release of suppressed emotion—of "strangulated affect"—was the core of Breuer's discovery, and received the name of *abreaction*.

The theory of abreaction which Breuer and Freud together worked out begins with a consideration of the normal process of memory. When an experience gives rise to strong feeling the normal response is to give outlet to this feeling in deeds, words, or emotional expressions such as laughter or weeping. When this occurs the memory of the experience mingles freely in the stream of thoughts and other memories, is checked and balanced by them, goes into perspective, and sinks gradually in the direction of complete forgetting. The feeling-laden experiences which underlie hysterical symptoms take a very different course. They seem to retain surprising freshness and suffer no fading, but they are not connected with other ideas and are barely if at all conscious in normal states. Thus far the account runs parallel to Janet's: the memories are dissociated from the ego and therefore suffer an overdevelopment, as in the case of Irène's grief-laden drama. Part of the curative procedure consists of bringing the dissociated memories back into communication with the ego, this too being similar to the work of Janet who cured Irène of her somnambulisms by repeatedly making her talk about her mother's illness and death. But there is one crucial difference between Janet's understanding of such a case and the

theory of abreaction offered by Breuer and Freud. The very name *abreaction* implies that the crux of the cure is the letting out of pent-up emotion. This in turn means that the reason for the peculiar behavior of certain memories, the cause of their original dissociation or separation from the ego, was the patient's initial failure to express the emotion that he felt. Reviewing this case some years later, Freud set forth the theory in the following words.

> It is especially to be noted that Breuer's patient in almost all pathogenic situations had to suppress a strong excitement, instead of giving vent to it by appropriate words or deeds. While she was seated by her father's sick bed, she was careful to betray nothing of her anxiety and her painful depression to the patient. When later she reproduced the same scene before the physician, the emotion which she had suppressed on the occurrence of the scene burst out with especial strength, as though it had been pent up all along. We are forced to the conclusion that the patient fell ill because the emotion developed in the pathogenic situation was prevented from escaping normally, and that the essence of the sickness lies in the fact that these imprisoned emotions undergo a series of abnormal changes. In part they are preserved as a lasting charge and as a source of constant disturbance in psychical life; in part they undergo a change into unusual bodily innervations and inhibitions which present themselves as the physical symptoms of the case.
>
> You see that we are in a fair way to arrive at a purely psychological theory of hysteria, in which we assign the first rank to the affective processes.[28]

It was in thus assigning first rank to the affective processes that Breuer and Freud made their noteworthy departure from the position reached by the French psychiatrists. Instead of emphasizing a very generalized state of weakness which allowed ideas, memories, and neuromuscular systems to fall out of synthesis, they worked out a specific dynamic explanation for each symptom and related it to the individual strivings of the patient. Even today hysterical symptom formation is not fully understood, but Breuer and Freud were moving in the right direction. They showed that hysterical symptoms were intelligible when one thought of them as expressions, however distorted, of the patient's struggle with conflicting impulses.

Freud's Basic Discoveries

After his study of the Breuer case it seemed clear to Freud that hysteria could be cured by the release of pent-up emotion. The therapeutic problem was to secure abreaction so that the energy of

[28] Freud, S., "The Origin and Development of Psychoanalysis," in J. Van Teslaar, ed., *An Outline of Psychoanalysis*, New York, Modern Library, 1924, pp. 30, 31.

strangulated feelings might come to normal expression instead of "spilling over" into bodily symptoms. Abreaction, however, could not take place without recall of the original pathogenic situations, and these seemed often to be completely forgotten. In the Breuer case it was necessary to enlist the aid of hypnosis in order to bring forward the crucial memories. It looked as if hypnotism would become the chief tool of the newly discovered treatment.

Freud began to put these ideas into practice with his neurotic patients. Almost at once he ran into serious practical difficulties. Many patients proved insusceptible to hypnosis. Even though apparently eager to do so, they could not enter an hypnotic state of sufficient depth to increase their recall of pathogenic experiences. Furthermore, with those patients who responded well to hypnotism the treatment did not always progress smoothly. Success depended upon an unbroken friendly relation between doctor and patient, the most brilliant results being obliterated whenever this relation was even slightly beclouded. That Freud noticed this problem so early in his work with hypnotism shows us the nature and direction of his peculiar genius. Almost the opposite of Charcot, whose gift was the minute observation of visible behavior, he was attuned with rare sensitivity to catch the emotional and personal meaning behind the patient's utterances, to follow, so to speak, the *emotional logic* within the thoughts and actions described to him in the consulting room. Hypnotism had been practiced for a century with only the most superficial attention to its character as a personal relationship. Realizing the importance of this feature, Freud felt that hypnotic methods were likely to be uncertain and fragile, so he looked elsewhere for a technique of abreaction.

He first turned to direct suggestion and persuasion. He urged patients to recall more and more, and he used the trick of suggesting that an important memory would emerge at the moment when he laid his hand on the patient's brow. The trick did not work more than a few times, and both patient and physician merely became exhausted by the attempt to bring up memories voluntarily. Clearly it was necessary to find a better method.

The Method of Free Association.—Baffled in his attempts to capture significant memories by active means, Freud turned to a method in which both patient and physician adopted a passive attitude. Instead of requiring the patient to talk about some particular subject, Freud asked him "to abandon himself to a process of *free association*, i.e., to say whatever came into his head, while ceasing

to give any conscious direction to his thoughts."[27] He was told that he must report all that occurred to him, resisting any temptation to choose among his thoughts. His only obligation was to communicate everything in the order of its occurrence and to make no attempt to supervise the course of his associations in the interests of logic, decency, or conventionality. In order to make this relaxed attitude easier, Freud carried over the practice, derived from his hypnotic methods, of having the patient lie on a couch, he himself sitting out of range of the patient's vision.

This is the method of free association. Freud's simple discovery proved to be one of the really momentous events in the history of abnormal psychology. He had discovered a way in which people could gradually reveal their real feelings, even the feelings which at first were concealed from themselves. In the end free association proved to be far more than a technique for releasing imprisoned emotions. It gave an entirely new insight into the nature of neurosis and it made a significant contribution to our whole conception of human nature and human strivings. When we first hear about free association it is hard to believe that a device so simple could be the means of such important contributions to knowledge. Nothing could seem easier than to abandon oneself to the spontaneous drift of one's thoughts, but how is this going to cure neurosis or illuminate human nature?

In order to understand free association we must bear in mind that two conditions are present which do not ordinarily prevail when we abandon ourselves to revery. (1) In the first place, all the associations have to be communicated to a listener. The reveries have to be made public, which at once brings into play all of one's desires to make sense, to be logical, and to put up a good front. Under these circumstances it is by no means an easy matter to tell everything that drifts through one's head. Patients may require weeks and even months of practice before they can really abandon themselves to free association. (2) In the second place, the patient is suffering from a neurosis and has come to the physician in order to be cured. This circumstance dominates the whole situation and exerts an influence upon the course of the associations even when the patient makes no conscious attempt to control them. Freud probably put the matter too strongly when he claimed that nothing will occur to the patient that is not somehow related to his neurosis. But the therapeutic purpose is always present and constitutes the most consistent factor influencing the train of thought. It was per-

[27] Freud, S., *The Problem of Lay-Analyses*, New York, Brentano's, 1927, p. 254.

haps unfortunate to call this process "*free* association." It is free from many conventional restraints, but it is not free in the sense of being an idle wandering of fancy. Freud himself declared that "free association is not really free." It was dominated by the therapeutic situation, and its course was further determined by those forces in the patient which contributed to making him neurotic. Thus it offered a hitherto unsuspected opportunity to observe those forces in action.

Resistance and Repression.—The adoption of free association led to Freud's next discovery. His patients found it impossible to obey the fundamental rule of telling everything.

> The patient tries in every way to escape its requirements. First he will declare that he cannot think of anything, then that so much comes to his mind that it is impossible to seize on anything definite. Then we discover with no slight displeasure that he has yielded to this or that critical objection, for he betrays himself by the long pauses which he allows to occur in his speaking. He then confesses that he really cannot bring himself to this, that he is ashamed to; he prefers to let this motive get the upper hand over his promise. He may say that he did think of something but that it concerns someone else and is for that reason exempt. Or he says that what he just thought of is really too trivial, too stupid, and too foolish. I surely could not have meant that he should take such thoughts into account. Thus it goes, with untold variations, in the face of which we continually reiterate that "telling everything" really means telling everything.[23]

If driven from these simpler tactics the patients found more complicated ways of resisting the fundamental rule. They might embark upon elaborate arguments about the theory and soundness of the procedure. They might show an eager curiosity to be instructed in such a way that they might practice it alone in the privacy of their own rooms. They might even begin to act out toward the physician various anxious and hostile feelings set off by the task of associating. In countless ways Freud's patients showed a strong resistance against telling everything. The task is by no means as easy as it sounds.

Resistance does not go on forever. In the course of time a patient, perhaps after hours of circling around the topic, becomes able to bring forth some of the memories and feelings which underlie his illness. This material may have reached his own consciousness some time before he could bring himself to tell it to the phy-

[23] Freud, S., *A General Introduction to Psychoanalysis*, New York, Boni & Liveright, 1920, pp. 249, 250.

sician. More commonly he is himself ignorant of the crucial matters and is even more astonished than the doctor when they at last return to his mind. The situation is indeed a curious one: it seems as if the patient actively resisted his own cure. It was on this observed fact of resistance that Freud based his theory of repression. Strong forces evidently prevented the patient from remembering certain emotionally charged experiences. Freud reasoned that these same forces, which now opposed the entry of the forgotten ideas into consciousness, must have been responsible for their original banishment. He called this original process *repression,* and considered it to be attested by the observed facts of resistance.

Freud next asked himself why such a process should occur. He came to the conclusion that repression was a device whereby the personality is protected from unbearable pain. In all his cases it appeared, after the forgotten material had been recovered, that in the original situation a wish had been aroused which conflicted sharply with the person's other desires, especially with his "ethical, aesthetic, and personal pretensions." The appearance of such a wish in consciousness created sharp and painful conflict which was solved by repression. The ideas which were the bearers of the wish were ejected from consciousness, for practical purposes forgotten, although such forgetting was very different from the ordinary fading of neutral memories. Painful conflict was avoided, but at a cost. The wish itself could never be wiped out in this way; blocked from direct expression, it discharged itself instead into the various symptoms of hysteria. When the physician tried to call up the repressed memories in order to withdraw the energy of the wish from symptom formation he was met by the full force of the ethical, aesthetic, and personal pretensions which originally found the wish intolerable.

Repression is not an observed fact. Like Janet's dissociation it is a hypothetical concept designed to explain the observed facts. No one is ever present to witness the original act of repression. The evidence comes at first from the patient's resistance against admitting repugnant thoughts when they begin to emerge during free association; only later is the hypothesis of repression confirmed by the actual recall of some shocking fantasy. All of Freud's discoveries were based on facts observed while his patients gave free associations: resistance, followed by the emergence of memories and thoughts of which the patient had been unaware. Repression was a hypothesis designed to explain the temporary inaccessibility of these memories.

Janet's concept of dissociation was devised to explain similar

facts. Like Freud, Janet had been impressed by the breaking up of the hysteric's memories and the separation of certain thoughts and functions from conscious control. But Janet interpreted this fission in mental life as a sign of weakness, a lowering of mental force which permitted the integrated personality to fall to pieces, so to speak. Freud, on the contrary, believed that the dissociated memories were actively forced out of consciousness—repressed—because they were painful and repugnant to the rest of the personality. Dissociation implies no more than a generalized weakness in the processes of integration. Repression implies acute mental conflict. Repression thus represents a forward step in the building of a more dynamic psychology in which motives and strivings take a prominent place.

The Importance of Sexual Strivings.—What are the wishes that conflict so violently with ethical, aesthetic, and personal pretensions that they fall under the ban of repression? What kind of strivings are so repugnant to the personality that they must be denied recognition, yet so strong that they take their revenge by precipitating a neurosis? Freud asked himself these questions, and as he listened to his patients he felt that he was discovering the answers.

Freud's practice was not confined to cases of hysteria. He saw all kinds of "nervous invalids," including those who suffered from obsessions and compulsions, those who complained of anxiety attacks and morbid fears, and those whose trouble was a constant feeling of fatigue and exhaustion. It was from some of the latter patients rather than from the hysterics that he obtained his first clues about the troublesome wishes. Particularly in those cases where fatigue was the chief complaint—the variety of neurosis called *neurasthenia*—he found grave disturbances in the patient's current sexual life. In his own words: "The more I enquired into such disturbances (bearing in mind that all men conceal the truth in these matters) and the more adept I became at persisting in my interrogations in spite of denials at the beginning, the more regularly did pathogenic factors from sexual life disclose themselves, until there seemed to me little to prevent the assumption of their general occurrence." [29] This much he obtained from direct inquiry, but the use of hypnosis and later of free association presently led to discoveries far more startling. In patients with all varieties of neurosis, including hysteria and the obsessive-compulsive states, the same

[29] Freud, S., *Collected Papers*, trans. by J. Rivière, London, International Psychoanalytic Press, 1924, Vol. 1, p. 273.

thing happened again and again: the associations led back into the patient's past until "experiences were finally reached which belonged to his infancy and concerned his sexual life; and this was so even when an ordinary emotion, not of a sexual kind, had led to the outbreak of the disease. Without taking into account these sexual traumas of childhood it was impossible to explain the symptoms, comprehend their determination, or prevent their return. After this, the unique significance of sexual experiences in the aetiology of the psychoneuroses seemed incontestably established." [30]

The words just quoted were written in 1905, the same year in which Freud produced his monograph, *Three Contributions to the Theory of Sex*. In 1905 the ideas advanced in this monograph were considered extremely radical and were quite generally met by shocked repugnance. During the nineteenth century there had grown up a peculiarly secretive and rejective attitude toward the sexual need. People acted as if the sexual need first came into existence at puberty, at which time it suddenly prompted boys to fall in love with girls and girls to fall in love with boys. The function of morality was to suppress this development until age and circumstances were suitable for marriage. This strange delusion about human nature began to crumble rapidly during the third decade of the present century, and it seems likely that Freud's work had no small share in loosening its foundations and precipitating its downfall. The claims to which Freud was led by the free associations and recollections of his patients can be summarized in the following statements. (1) The sexual need is active in infancy and to a lesser extent throughout childhood. (2) It is more diffuse in its nature than the adult need, consisting of a variety of "partial impulses" not strongly dominated by genital excitation, showing itself in such actions as thumbsucking, display of the naked body, inquisitiveness about the bodies of others, masturbation, pleasures connected with anal excretion or retention, and anything else that yielded pleasurable stimulation of sensitive or erogenous zones of the body. (3) The sexual need is not innately attached to any particular objects, the choice being accomplished by learning; in childhood, therefore, members of the family and playmates of either sex may become its objects. (4) It is subject to an active campaign of adult disapproval which tends to encourage repression. (5) The childhood history of sexual experiences, fantasies, and repressions exerts a powerful effect on sexual behavior following the strengthening of the urge at puberty. Both the meth-

[30] *Ibid.*, p. 275.

ods of satisfaction and the object choices must be revised if the person is going to advance to a normal adult sexual life.

After reaching these conclusions Freud was prepared to revise the theory developed in his work with Breuer. Neurosis, he now asserted, arose specifically from a strangulation of the sex need, not from the mere fact that emotion was suppressed. When a neurosis broke out in an adult the sequence of events seemed to be somewhat as follows. The precipitating factor was failure to obtain expression for the sexual need and its attendant emotions. This failure might result from external obstacles, but Freud was more impressed by the action of internal obstacles. Internal obstacles existed when there had been such a wholesale repression of childhood sexual impulses that the individual, even after growing up, could not tolerate any part of his sexual nature. The sexual urge, however, is too strong to be permanently obstructed in this fashion. Denied its adult form of expression, it tended to provoke a continuing animation in fantasy and desire of those forms of sexual behavior that had yielded gratification in childhood. For the adult this could obviously be no solution. The persisting of infantile "partial impulses," which by all adult standards could only be regarded as perverse, evoked strenuous repression on the part of the patient's ethical, aesthetic, and personal pretensions—of his *ego-instincts*, as Freud now decided to call them. Out of this conflict between the ego-instincts and the renewed elements of infantile sexuality neurosis with its symptoms was born.

Transference.—If neurosis occurs because a conflict between the ego-instincts and the sexual needs has been solved by repression of the latter, the goal of treatment may be described as the lifting of the repression. Freud said that the usefulness of his new method, which he called from the start *psychoanalysis*, lay in "replacing the unconscious by the conscious." When this could be accomplished, he added, "we do away with suppressions, we remove conditions of symptom formation and transform a pathogenic into a normal conflict which can be decided in some way or other." [81] Obviously it was impossible to abolish repression by merely telling the patient that he was repressing something and guessing as to what it might be. Treatment by psychoanalysis consisted rather in long, slow, persevering sessions of free association in the course of which resistances manifested themselves and could be pointed out to the patient. In applying this method Freud soon found himself con-

[81] Freud, S., *General Introduction, op. cit.*, p. 375.

fronted by another unexpected fact: the patient, instead of attending strictly to his own conflicts, began to manifest a variety of personal feelings toward the physician. Usually the earliest signs would be an interest in the doctor's affairs, but before long the character of the feeling would betray itself more clearly in cordiality, expressions of gratitude, enthusiasm for the treatment, and an eagerness to accept every interpretation. Freud described as follows the manifestations of this attitude outside the treatment:

> At home the patient never tires of praising the physician, of prizing advantages which he constantly discovers. "He adores you, he trusts you blindly, everything you say is a revelation to him," the relatives say. Here and there one of the chorus observes more keenly and remarks, "It is a positive bore to hear him talk, he speaks only of you; you are his only subject of conversation." [83]

This behavior could only be understood as the expression of an intense affection for the doctor. In the early days of psychoanalysis, when the discoveries concerning sex were still very shocking to many people, Freud was often charged with making his patients fall in love with him. As a matter of fact Freud was at first much disturbed by these manifestations which seemed likely to interfere seriously with the business of therapy. Fortunately he did not discontinue his observations and he was soon rewarded by a more penetrating insight into the patients' strange behavior. He found, in the first place, that the affectionate relation developed in every case, that it did so without encouragement on his part, and that it occurred even under the most grotesque circumstances, as when the patient was an elderly woman. In the second place he quickly observed that affection was not the only feeling which cropped up spontaneously in the course of treatment. Sooner or later there would be feelings of an opposite character, hostile and angry, displaying themselves in a multitude of criticisms and in a stubborn intensification of all resistances. Convinced that all these feelings had little or nothing to do with the actual situation or with the behavior and personality of the doctor, Freud christened the newly discovered phenomenon *transference,* distinguishing the affectionate from the hostile variety by designating them *positive* and *negative transference.*

If we limit ourselves to the barest facts, transference refers to the emotional attitudes displayed toward the physician during the course of psychoanalytic treatment. Freud was adding an element

[83] Freud, S., *General Introduction, op. cit.,* p. 380.

of interpretation when he said that these attitudes were transferred from the past. But there was a good deal of justification for his belief that they could not be explained by the current situation in the consulting room. The patient talked of intimate things, but the doctor said very little, received the patient's talk in an impersonal fashion, ventured no personal remarks on his own account, and even sat out of sight, thus altogether offering a minimum of impressions which could be used as the basis for affectionate or hostile feelings. There was sharp disparity between the patient's often stormy passions and the self-effacing, professional attitude of the analyst. Furthermore, the patient's attitudes quickly revealed their childhood origins in such tell-tale signs as the whining voice of a demanding child or the terrified guilt of a child that has offended and angered its parents. Thus Freud assumed that he was being made the object of feelings repeated or carried over (transferred) from earlier relationships.

Undoubtedly the phenomenon of transference occurs in all kinds of human relationship and in forms of psychotherapy other than psychoanalysis. Perhaps Freud's discovery of transference was less remarkable than his discovery that instead of interfering with treatment it could be made an instrument of progress. He was the first to utilize it consciously and purposefully to increase the patient's insight and to extend the patient's mastery over his own impulses and feelings. It proved to be of distinct service as a means of lifting repressions and restoring memories centered around infantile sexuality. The patient could be shown that the emotional attitudes which he experienced during treatment were transferred from past relationships; the very vividness of the current experiences made it easier to recall their origins in childhood. Let us suppose, for instance, that as a small child the patient was caught by his father in some childish sexual misdemeanor, and was so badly frightened that he repressed the whole incident. In the course of free association he relates a sexual fantasy of some kind and then becomes violently terrified of the physician. The patient himself cannot help being impressed both by the force and vividness of his transferred emotion and by its irrational and inappropriate quality. Recall of the crucial early experience is greatly speeded by this virtual repetition in the doctor's office.

The Influence of Unconscious Motives.—As we have seen, Freud's understanding of human behavior centered around motivation. He was acutely sensitive to the subtle action of strivings and

wishes in the things his patients told him, and he learned to look for motives, especially a conflict of motives, behind even the most casual bits of behavior. It was on this account that his thinking departed so widely from that of his immediate predecessor, Charcot, and took a course so different from his contemporary, Janet. We can express this difference by saying that Freud built up a *dynamic* psychology, by which we mean that he thought of human behavior as being most fully understood when one grasped the motives—the strivings or wishes—that lay behind each act.

But the most radical feature of Freud's thinking was not merely his insistence upon motivation. It was his claim that people are often *not aware* of their motivation; that a great deal of behavior is motivated *unconsciously*. This followed directly from his concept of repression: it was always *unacceptable strivings* that succumbed to repression and that painfully re-entered consciousness when resistances were overcome during psychoanalytic treatment. Freud collected a great deal of evidence to show that repressed wishes, banished from conscious recognition, exert a significant influence upon behavior. Probably his ideas would have met with opposition on this point even if he had never said a word about sex. We like to think of ourselves as being fully aware of our own motives; it is unsettling to learn that we may be pushed around, so to speak, by motives which are not known to us. The moment we start to think about other people, however, we can hardly fail to realize that all of us at heart subscribe to the notion of unconscious motivation. Surely our relatives, our friends, our roommates would not behave in such foolish and irritating ways unless they were propelled by unconscious, irrational motives, and we are apt to stick to this belief no matter how vehemently they deny such motives in themselves.

Freud certainly did not discover unconscious motivation. It has been known to wise people in all times. But Freud greatly enlarged our understanding of the way unconscious motives come to expression and influence the course of behavior. He showed that they could express themselves in neurotic symptoms, and he devoted some of his most detailed studies to the analysis of unconscious motivation in dreams. These studies will concern us later, but for illustration we shall glance at another phase of his work. Freud devoted considerable attention to analyzing various kinds of mistakes, not only in his patients but in himself and his friends as well. Often he was able to show that what looked like a chance error, scarcely worthy of notice, made perfectly good sense as the intrusion of an unconscious motive. He came to believe that mistakes in reading

and writing, slips of the tongue, inadvertent actions, and forgetting of names and intentions very often occurred as expressions of unconscious motivation. These matters seemed so unimportant that no one had bothered to study them before; they were rather casually set down to minor slips in the machinery of behavior. But poets and other sensitive observers had long been aware of some such possibility as Freud now pointed out. In *The Merchant of Venice,* for instance, when Portia has completely lost her heart to Bassanio but is under the strictest obligation to conceal this fact, Shakespeare makes her tongue slip as follows:

> One half of me is yours, the other half yours,
> Mine own, I would say.

Many similar examples could be combed from literature, but most of us, if we stop to think of it, are already convinced that certain errors contain a measure of unconscious motivation. When a boy has to explain why he missed a date, his girl listens with little patience to stories of empty gas tanks or late streetcars. She adheres firmly to the theory of unconscious motivation, and Freud certainly would have agreed with her. He noticed that when his patients were in a phase of positive transference they tended to arrive on time, if not early, for their appointments. During periods of negative transference they came late and even "forgot" their appointments.

In his analysis of errors Freud did not insist that the unconscious motives were necessarily of an infantile sexual character. He claimed only that some motive existed and that this motive must be first suppressed before it could have the curious effect of interfering with what the person intended to do or say. Studying slips of the tongue, for instance, he found examples in which the speaker was aware of the whole process: he thought of saying something, thought it would be best not to say it, then made a slip of the tongue which turned his words into nonsense. But if consciously suppressed intentions could intrude themselves in this fashion, it seemed likely that repressed sexual wishes would sometimes influence behavior in the same way. Freud felt that this possibility was demonstrated in those cases wherein a patient made some error, at first vehemently denied that it reflected a wish, then in a later stage of treatment revealed precisely the wish that might appropriately have given rise to the error.

In this section of our historical survey we have been dealing mainly with Freud's discoveries, not with his theories. We have been concerned with *facts of observation,* almost all of which came to light during the process of free association: resistance, the gradual

emergence of forgotten memories and wishes, the prominence of sexual wishes dating even to early childhood, the intrusion of feelings and attitudes directed toward the physician. We have dealt also with various *concepts* designed to make these facts intelligible: repression, the conflict of ego-instincts and sexual instincts, infantile sexuality, transference, the sexual theory of neurosis, and the concept of unconscious motivation used to explain such diverse observed phenomena as symptom formation, errors, and dreams. The core of his contribution was the giving of a central place to motivation. In contrast to Kraepelin, who looked for what was common to large numbers of patients in order to discover the general characteristics of their disease, he gave his attention to personal problems in all their individuality. Unlike Janet, who perceived frustrations merely as the last straws that broke down a weak nervous constitution, he traced in detail the conflict of motives and worked out the internal drama of opposing forces. Listening quietly to free associations for hours on end, he perceived his patients not as examples of brain diseases, not as victims of hereditary nervous weakness, but as troubled human beings whose strivings, hopes, fears, daydreams, and intimate feelings were mixing them up and destroying their health and happiness. The vicissitudes of motivation, and especially unconscious motivation, gave the clue to understanding the neuroses. This was the central insight needed to establish the *psychogenic hypothesis* on a sound basis.

Expansion of the Field

It is not unfair to say that the main developments in psychopathology during the first thirty or thirty-five years of the present century represent a combination of criticism and expansion of Freud's basic discoveries. In some of these developments Freud himself participated, for he continued in active work right up to his death in 1939, from time to time revising his earlier thinking. Considerable progress was also made by workers who accepted his most fundamental contentions and used the psychoanalytic method of treatment but who somehow observed things differently so that they arrived at divergent ideas, especially concerning the character of the motives and conflicts responsible for neurosis. One of the earliest and most important workers to diverge in this way from Freud was Alfred Adler, whose contribution we shall briefly examine.

Adler's Study of the Striving for Superiority.—Alfred Adler (1870–1937) belonged originally to Freud's group and used Freud's methods in the treatment of neurotic patients. But as he listened

to free associations his attention began to be caught by a different theme. Instead of sexual fantasies and derivatives of the sexual life of childhood, he noticed everywhere the subtle workings of a striving to dominate, degrade, and triumph over others. He found the ruling motive in neurosis to be the striving for superiority.

Obviously it is not true that neurotic patients are more domineering and assertive than other people. On the whole the opposite is nearer the truth. The neurotic striving for superiority worked by indirect and subtle means. Instead of asserting what they wanted, Adler's patients had developed neurotic symptoms which excused them from struggling directly with the world but allowed them through *illness* to dominate the immediate household. Through symptom formation they acquired the privileges accorded to invalids and forced other people to serve them. A patient, for example, might develop a morbid fear of going alone on the streets, thus forcing some member of the household to go with him whenever he went out. A similar motive could be read in the headaches, fatigues, even in the hysterical paralyses which put the patient to bed and obliged everyone to wait upon him. Why did these patients resort to such devious means for asserting their wills? Adler became convinced that at heart they felt inferior, weak, and inadequate: they suffered from deep *feelings of inferiority* and their illness was an attempt at *compensation.*

In looking for the source of inferiority feelings, Adler, like Freud, turned his attention to childhood. In the recollections of his patients he found an infantile striving for power just as Freud had found an infantile sexuality. If a child was made to feel inferior on account of his looks, for instance, or his capacities or his achievements, he would attempt to compensate for the felt shortcomings by proving himself in one way or another superior. He might strive for superiority along the very lines in which he felt inferior: for example, becoming an athlete after early failures in games. He might deflect the aim a little, substituting strength in school politics, for instance, for an unattainable physical strength. He might abandon altogether the activities in which he was inferior but struggle for distinction along some other line, like the frail child who, kicked around on the playground, throws his energy into getting the highest school marks. Such compensations may be entirely successful, but there are many times when they necessarily fail. The average person who harbors an inferiority complex and who struggles for compensation will find himself continually frustrated. The schoolboy is miserable unless he gets the highest marks, but try as he

may he perhaps always comes out somewhere in the middle of the class. At first he overcompensates, tries so hard that he gets nervous and exhausted and cannot even do his best work. The next solution is neurosis: he falls ill, develops symptoms, stays at home, dominates his parents, and becomes the center of attention in the household. In such a fashion Adler explained the neuroses.

> Every neurosis can be understood as an attempt to free oneself from a feeling of inferiority in order to gain a feeling of superiority. The path of neurosis does not lead in the direction of social functioning, nor does it aim at solving given life-problems, but finds an outlet for itself in a small family circle, thus achieving the isolation of the patient. The exemptions and privileges of illness and suffering give the patient a substitute for his original hazardous goal of superiority.[33]

On the surface it seems as if Freud and Adler had observed selectively and concentrated their attention on quite different strivings. Actually the difference is not so much in what was observed; it was rather in the immediate inferences drawn from the observations. If we stay close to the facts and speak only of manifest strivings we shall have to agree that there are many kinds of motives. But this does not settle the problem; assumptions and concepts must be introduced in order to make a patient's behavior fully intelligible. Freud and Adler diverged at this point. Freud had shown that neurotic behavior became intelligible when one worked out the full history, from earliest childhood, of the patient's sexual strivings and assumed the persistent action of unconscious sexual motives. Adler now showed that a similar intelligibility could be reached by seizing the element of inferiority and compensation in each act of the patient and assuming the persistent working of an unconscious, or at least unnoticed, striving for superiority. When in a later chapter we study motivation systematically we shall find it possible to utilize the better elements in both conceptions. Adler made an enduring contribution to our understanding of motivation.

Neurosis in the First World War.—We have traced in some detail the development of psychopathology from Charcot to Freud and Adler. In 1914 this work was barely known to the medical profession at large. Psychiatrists were schooled in the tradition of Kraepelin, trained mostly in mental hospitals, and thus knew rela-

[33] Adler, A., *The Practice and Theory of Individual Psychology*, New York, Harcourt, Brace & Co., 1929, p. 23.

tively little about the neuroses and about the theories growing up around them. When the First World War broke out, the medical services of all countries were forced to recognize the widespread occurrence of neurotic breakdown under the stress of combat. Neuroses were found to be very common among military personnel. At first it was natural to look for organic causes. The word "shell-shock" came into common use, expressing the hypothesis that breakdown occurred because of subtle injury to the central nervous system caused by the concussion effects of violent explosions. Very soon this hypothesis was realized to be practically worthless: the majority of breakdowns occurred with no history of near-by explosion, often long before the man had reached the front lines, sometimes while he was still in training in safe locations. Out of sheer necessity the medical services were forced to take account of neurosis and of psychogenic factors behind breakdown.

In reports of war neuroses it is possible to find the counterpart of nearly every symptom or symptom-complex described in earlier writings on neurosis. All the symptoms of hysteria as described by Charcot and Janet reappeared among soldiers. Earlier we considered Janet's *monoideic somnambulism*, represented in the dramatic case of Irène. Identical symptoms occurred many times in soldiers who had passed through harrowing battle scenes and subsequently, except for brief periods of reliving, forgotten all about them. There were instances of *hysterical fugue*, comparable to Janet's case of the grocer's boy, in which men under the stress of battle or threat of danger wandered off sometimes on long journeys with a complete loss of personal identity. *Hysterical deafness, blindness, tremor,* and *paralysis* happened often, taking forms identical with civilian hysteria. Charcot, it will be recalled, had a patient whose left leg was paralyzed in a rigid clubfoot position as a consequence of stepping out of bed. Charcot cured this patient after many weeks of strenuous hypnotic suggestion, but he never found out what lay back of the illness and could think of no better explanation than a constitutional weakness of the nervous system. A French soldier in 1915 had an identical clubfoot paralysis, but under different and rather more transparent conditions. His foot was injured during training so that he was laid up for a month. As the injury healed there was no corresponding return of flexibility and mobility to the foot and leg. Complete paralysis persisted for six months until at last the patient fell into the hands of a medical officer who suspected its hysterical character. In one sitting the paralysis was removed by strong suggestions coupled with the passing of mild elec-

trical currents through the leg.[84] Charcot's assumption of constitutional inferiority was entirely superfluous in such a case. It was merely necessary to discern the unconscious motivation—the wish to be excused from duty and danger because of illness—in order to understand this instance of hysterical paralysis.

The parallel between war neuroses and those of civilian life was by no means confined to hysteria. *Compulsive* and *obsessive states,* though somewhat less common, were not unknown under war conditions. *Anxiety states, phobias, fatigued states,* and various ailments affecting the circulatory and digestive systems were very common. Equally important was the finding that no new forms of neurosis and no wholly new patterns of symptoms made their appearance under the stress of war. It was clear that *war neuroses did not differ fundamentally from the neuroses of civil life.* Because of their relatively rapid development and simpler character they greatly hastened the understanding of neurosis in general.

The neuroses of war still further enlarged and greatly clarified what was known about motivation. Repeatedly it was discovered that even in cases where some violent incident precipitated the illness there was a long preceding history of conflict and anxiety. Collapse under battle stress occurred typically in men for whom this stress came as a "last straw" or climax to mounting irritability and anxiety. Such cases could be well described by applying Freud's concepts of conflict, repression, and the reappearance of the repressed strivings in the form of symptoms. The repressing motives corresponded closely to his notion of ego-instincts, in this case the man's sense of duty and self-respect. But certainly nothing was gained by trying to reason that the repressed motives were in every case of an infantile sexual character. Adler's concepts could also be employed, especially the idea of the patient's attempting to escape through illness his hazardous responsibilities. But nothing was gained by claiming that in every case his motive was to achieve the superiority as an invalid that he could not win as a fighting man. The neuroses of war depended on a different problem of motivation. The conflict in most cases was between sense of duty and fear of death.

Anxiety as the Central Problem of Neurosis.—It was natural that theories of motivation and conflict should thus branch out indiscriminately in various directions. Once the step had been taken of

[84] Roussy, G. & Thermitte, J., *Shell Shock: or the Psychoneuroses of War,* London. University of London Press, 1918, p. 21.

recognizing that personal strivings could produce results as important and troublesome as neurosis, the whole vast field of human motivation suddenly stood open for scientific study. Each investigator set forth in his own direction, and most of them turned up valuable new facts concerning the devious and complex action of human strivings.

For a while the fascination of untangling unconscious motives absorbed every worker's attention. But presently, and especially after the First World War, it became clear that something was missing in the problem of neurosis. Conflicts of motives occur in most people's lives. The psychoanalysts made a strong case that unconscious motives and unconscious conflicts act even in the lives of healthy, efficient individuals. It was necessary to find a specific point of difference between normal conflicts satisfactorily solved and neurotic conflicts solved only in the uneconomical and painful fashion of crippling symptom formation. In order to deal with this problem, attention was turned more and more to those forces in personality which Freud had called ego-instincts and which now began to be called simply the *ego*. With this shift of emphasis, interest became centered on the *defensive activities* performed by the ego in order to protect itself from pain or harm. Freud had originally conceived of repression as a means of avoiding pain. In 1921 he published an important work, *Inhibition, Symptom and Anxiety*,[88] in which he further developed this point of view. Repression, he concluded, is but one of several *defense mechanisms* directed against the emergence of unbearable impulses. What is it that makes impulses unbearable? They are unbearable when their emergence is felt as a threat and gives rise to *anxiety*. Freud arrived in this way at a much-needed simplification. Neurosis is not merely an attempt to solve conflicts among motives, conscious or unconscious. It is the outcome of *an attempt to avoid anxiety*, accomplished by the application of various rather desperate and unsuitable defense mechanisms such as repression.

Freud was led to this conclusion chiefly by a reconsideration of his civilian patients, but in thus giving the central place to anxiety and defense he brought his thinking into line with the inescapable conclusions which others had drawn from the war neuroses. The avoidance of danger was obviously a major motive in war. Involuntary defense mechanisms and the involuntary production of symptoms showed themselves with convincing simplicity. The anxiety

[88] Translated by H. A. Bunker with the title, *The Problem of Anxiety*, New York, W. W. Norton & Co., 1936.

theory could be applied with equal propriety to the sort of patient described by Adler. If feelings of inferiority were so severe and painful that they created unbearable anxiety, then the patient was driven into overcompensation—into excessive and irrational strivings for superiority—as a means of defense against anxiety. The new emphasis on anxiety thus gave unity to the divergent trends that had developed in considering the problem of neurosis.

Extension to Other Varieties of Disorder.—Our historical survey began and was occupied for some time with the severer forms of disordered behavior, the insanities or, as they are now called, the psychoses. Then we turned to the neuroses and followed a chain of investigations from Charcot's initial study of hysterical symptoms to the anxiety theory of neurosis. We are now almost prepared to abandon the historical order and begin a systematic survey of the field of abnormal psychology, but there is one recent trend that must be pointed out before we can draw the boundaries of the province before us. The notion of disordered personal reactions can no longer be restricted to the *psychoses* and *neuroses*. The skilled observer has become accustomed to look for analogous facts in an increasingly wide range of human problems. Failure in school work, for example, was until recently attributed either to inadequate mental equipment or to faulty methods of study. Both of these handicaps may be important, but sometimes it comes out that the student's effort has been blocked by disordered personal reactions arising out of his relation to family, friends, and teachers. Perhaps he wastes hours brooding over social failures, sex, or the unjust actions of teachers and parents, or perhaps he dashes from one thing to another in an attempt to forget these problems. Thus a large number of personal *maladjustments*, not severe enough to be called neuroses, today belong properly in the field of abnormal psychology. Furthermore, the whole realm of *delinquency and criminal behavior* is now seen to require psychological as well as sociological investigation. Chronic alcoholism, to take one example, can be conceived as a disordered personal reaction in which alcohol is used to relieve frustration and anxiety. In regard to delinquency, both psychogenic and somatogenic explanations are applicable: certain kinds of unruly and unstable behavior are probably related to definite disorders in the nervous system as well as to problems in the sphere of motivation. Finally, there is a growing perception of the presence of emotional problems behind many of the complaints heard by physicians. Chronic fatigue, nervous indigestion, headaches, high blood pressure,

diffuse aches and pains, general tension, and "nervousness" sometimes turn out to have their roots in the patient's economy of happiness rather than in his bodily economy. This field of study, currently called *psychosomatic disorders,* involves a subtle interplay between somatogenic and psychogenic factors and bids fair to be the area in which the long antagonism between these two points of view can finally be reconciled.

SUGGESTIONS FOR FURTHER READING

The history of psychiatry and abnormal psychology is surveyed in detail by G. Zilboorg & G. W. Henry, *A History of Medical Psychology* (New York, W. W. Norton & Co., 1941). This thorough history begins with the earliest known ideas about medical psychology; the topics covered in the foregoing chapter are discussed in Chs. 8–11, 13, 14. A less scholarly but informative and entertaining account is given by W. Bromberg, *The Mind of Man: The Story of Man's Conquest of Mental Illness* (New York, Harper & Bros., 1937): see especially Chs. 6–14. Students who wish to examine the care and treatment of mentally disordered persons as an aspect of American social history, and to see the intimate relation between general social progress and progress within a single scientific specialty, will find profit in A. Deutsch, *The Mentally Ill in America* (Garden City, N. Y., Doubleday, Doran & Co., 1937). Clifford Beers' autobiography, *A Mind That Found Itself* (Longmans, Green & Co., 1908; now published by Doubleday, Doran & Co.), still retains its value and fascination not only as the fountainhead of the mental hygiene movement but also as a description of the mental state of a temporarily insane person.

The work of Mesmer, Janet, Freud, and Adler is briefly set forth by Clifford Allen, *Modern Discoveries in Medical Psychology* (London, Macmillan & Co., Ltd., 1937), Chs. 1, 2, 4–6. No one has ever equalled Janet in the art of clinical description; *The Major Symptoms of Hysteria* (2nd ed., New York, The Macmillan Co., 1920), while in several respects out of date, conjures up the excitement that originally surrounded the study of this neurosis when it was an outstanding medical mystery, and leaves the reader's mind full of memorable cases. Anyone interested in tracing the progress of the theory of neurosis will want to examine Breuer & Freud's *Studies in Hysteria* (New York & Washington, Nervous & Mental Disease Publishing Co., 1936), which contains the "Breuer case," along with several others, and which sets forth the theory of abreaction.

Freud's own introduction to his work is still the most satisfactory: *A General Introduction to Psychoanalysis* (New York, Boni & Liveright, 1920; now published by Garden City Publishing Co.). It is essential to read in conjunction with this book its continuation, *New Introductory Lectures in Psychoanalysis* (New York, W. W. Norton & Co., 1933), at least Chs. 1, 3, and 4, bearing in mind that these later lectures change in several respects what is set forth in the earlier, especially Chs. 24 and 25. The scientific status of Freud's methods and findings is discussed by J. F. Brown, "The Position of Psychoanalysis in the Science of Psychology" (*Journal of Abnormal and Social Psychology,* 1940, Vol. 35, pp. 29–44).

Adler's most systematic work was *The Neurotic Constitution* (New York, Dodd, Mead & Co., 1926), but the gist of his contribution and samples of his shrewd insight into human motives can be gathered from his numerous lesser works, such as *Understanding Human Nature* (New York, Greenberg, 1927). The most convenient introduction to the experience with neuroses in the First World War is the work of a group of British writers edited by E. Miller: *The Neuroses in War* (New York, The Macmillan Co., 1940).

CHAPTER 2

CLINICAL INTRODUCTION: EXAMPLES OF DISORDERED PERSONALITIES

Introduction to the Cases

In the first chapter the field of abnormal psychology was described as the study of disordered personal reactions to life and its circumstances. We shall now pursue this study by examining some representative examples of disorder. What does it mean to be psychologically disordered? How does it feel, and how does it express itself in behavior? What are the symptoms? What sense can be made out of a disorder, and how can its causes be untangled? The answers to these questions are complicated, the more so because here, as in every matter pertaining to personality, it is necessary to allow for a very wide range of individual differences. But for this very reason we shall get a fairer impression of the problems if we start with case histories rather than with lists of symptoms or theoretical formulations. Disordered reactions occur in people. It is important to look at them first in their natural habitat. Case histories, moreover, are the chief element in the foundation of fact upon which abnormal psychology is built.

The reader should be forewarned that the five cases described here will be frequently referred to in later chapters of the book. They display to advantage many of the problems and principles that will occupy us when we undertake to build up a systematic account of abnormal psychology. It will be assumed that the cases given in this chapter are well remembered, and with this in mind the reader should not only go through them but study and compare them rather carefully.

Main Varieties of Disorder.—To gather up the matters discussed at the end of the last chapter, and to provide a framework for everything that follows, we shall begin by giving a rough classification of the main varieties of disorder.

1. PSYCHOSES.—The distinguishing mark of psychosis is an almost complete loss of contact with the surrounding world. This

loss of contact is often referred to as a break or withdrawal from reality. Behavior is peculiar, speech is irrational, and the patient seems to have abandoned all effort at conformity with the world and people around him. *Psychosis* is roughly equivalent to *insanity*. The psychotic person gives scarcely any evidence of realizing that he is sick. However strange his world appears to others, it is reality to him. Naturally, psychotic patients cannot manage their lives in a way satisfactory to others, and they constitute the great majority of the inmates of mental hospitals.

It is customary to subdivide the psychoses into *organic* and *functional*. (a) In *organic psychoses* there exists some known physical or organic basis for the disorder; these are the true diseases of the brain. For convenience of study we shall include with this group all disorders of the nervous system, even those which, like epilepsy, do not generally reach the severity of a major psychosis. (b) In *functional psychoses* no physical or organic changes have been demonstrated. While it remains an open question, one which we shall discuss later on, whether subtle brain changes play a part in such cases, it is often clear that the disorder comes as the culmination of severe conflict or of lifelong poor habits of adjustment.

2. NEUROSES.—The cumbersome expression, *psychoneurosis*, is today rapidly giving place to the shorter form, *neurosis*. In the neurotic individual there is no break with reality. The patient lives in the same world as the rest of us, but he lives there uneasily and unhappily. He is the victim of inner conflicts which show themselves in anxiety, unjustified fears, obsessions and compulsions, and hysterical symptoms such as were discussed in the last chapter. He is aware that something is wrong with him, but he does not have insight into the real basis of his problems and is thus powerless to solve them. On the whole, he conforms to social demands. His inner emotional strife is taken out upon himself in the form of symptoms and a generally self-defeating way of life.

3. PSYCHOSOMATIC DISORDERS.—The third category contains those disorders, now much at the focus of psychiatric interest, in which the patient suffers from a genuine bodily ailment of some kind but in which the ailment was originally provoked, in part, at least, by chronic conflict or emotional disturbance. The patient lives with sufficient emotional stress so that his bodily economy becomes deranged and breaks down at some point. Chronic digestive disorders, ulcers, certain kinds of high blood pressure, asthma, arthritis, and skin diseases seem to have at times a substantial psychogenic cor-

ponent. The conflicts and anxieties are usually, as in neurosis, concealed from the patient's awareness; typically, he feels that he would be all right if the doctor could fix up his ailing body.

4. DELINQUENT AND PSYCHOPATHIC PERSONALITIES.—In contrast to the neurotic group, there are certain psychologically disordered persons who take out their troubles on the world either by actively violating its codes and conventions or by passively leading a disorganized, irresponsible, and useless life. Habitual criminals, ne'er-do-wells, chronic alcoholics, certain varieties of sexually abnormal people, can be included in this group. These individuals are not psychotic; their contact with reality is in no sense injured. Their underlying conflicts and emotional disturbances are, as we shall see later, somewhat similar to those of neurotics, but the outcome in behavior is sufficiently different to warrant putting them in a separate category.

5. MALADJUSTED PERSONALITIES.—There are many forms of maladjustment, less serious and less far-reaching than the four varieties of disorder just described. In order to have a place for these milder disorders, the study of which is just as profitable as that of the more serious varieties, we introduce a fifth category rather indefinitely called *maladjusted personalities*. Literally, this term might apply to any disorder, no matter how serious, but in keeping with common usage we shall reserve it for those unhappy, uneasy, poorly adapted people who have not lost contact with reality, who have not developed an array of neurotic or psychosomatic symptoms, and who have not lapsed into delinquency or an habitually disorganized way of living.

It would be impossible in practice to draw a line between a neurotic and a maladjusted individual. We think of neurosis as more severe, and this means both that its effects are more crippling and that getting over it is more difficult. Bearing in mind this last point —ease of recovery—we can tentatively make a distinction based on the quantity of anxiety that is present. If a person is maladjusted and the obstacles to adjustment lie mainly in the general slowness of the relearning process or in his failure to see what is needed, we can call him simply maladjusted. If the obstacles to adjustment include a considerable amount of anxiety controlled in non-adjustive ways, the person should be classed as neurotic. His trouble comes from an attempt to avoid anxiety, and this powerful motive stands in the way of adjustment.

The five cases selected for study in this chapter may be regarded

as roughly representative of the range of disorders. We begin with an example of adolescent maladjustment with spontaneous recovery. There are so many varieties of maladjustment that no one case can be considered typical, but the example to be described here is representative in this respect: the subject is unhappy and bewildered, at odds with himself, unable to use his capacities fully, but not so hopelessly stuck as to prevent further growth. Of our five cases, this one is the *least seriously disordered.* In the next two examples, a fairly severe neurosis and a case of persistent delinquency, the disorder is considerably more profound so that outside help proves necessary to change it for the better. Only in the last two cases, however, do we enter the realm of psychosis, where the patient's behavior is so peculiar and his talk so bizarre that we think of him as insane or out of his head. Roughly speaking, the five examples are arranged in order of severity. The last case, with irreparable damage to the nervous system, cannot possibly be cured.

The Student's Attitude Toward Abnormality.—Many students feel a certain uneasiness when they first take up the study of abnormal psychology. Sometimes they have been told that the subject is upsetting. Perhaps they anticipate that descriptions of mental disorders and emotional conflicts will disturb and even alarm them. This uneasiness is not really justified, but the reader who feels it need offer no apology. Throughout history the behavior disorders, especially the various forms of insanity, have been viewed with suspicion and dread. This attitude lies deeply embedded in our cultural tradition, and few are wholly exempt from its subtle impress.

If seen in the proper perspective, abnormal psychology is not in the least upsetting. But it is important to keep the proper perspective. The best way to do this is to have clearly in mind, at the outset, *two important facts,* easily overlooked if one plunges heedlessly into the midst of the subject-matter: (1) that abnormal psychology deals rather largely with phenomena which are simply exaggerations of normal processes, familiar to everyone in everyday life; and (2) that it puts a one-sided emphasis on breakdown and disorder in personality, there being as yet too little knowledge to draw a corresponding picture of well-balanced and constructive activities.

It is naturally disconcerting to read a case history, to recognize in it many experiences that are exactly like one's own, and then to remember suddenly that one is reading about an insane person. Yet strangely enough, it is exactly this sort of experience that the student ought to have if he is to understand the nature of disordered per-

sonal reactions. These can be understood because they are made up of the common stuff of human nature; they represent the outcome, under peculiar and trying conditions, of the person's struggle to live and satisfy his deepest needs. It is to be expected, therefore, that readers whose psychological health is flawless will find much in case histories that is familiar in their own experience. Like the patients, they are struggling to live and satisfy their deepest needs. The difference is in the outcome.

There is an experience reported so often by medical students that we might facetiously refer to it as "medical students' disease." This consists of feeling vividly in themselves all the symptoms they are studying in their textbooks: distinct palpitations when they are studying disorders of the heart, ticklings of the throat and labored breathing when they read about respiratory diseases, curious pains in the abdomen when they examine pictures of gastro-intestinal ailments. The student of abnormal psychology should not be alarmed if he, too, has numerous attacks of "medical students' disease" while reading about disordered behavior. Every type of disorder has much about it that can be duplicated in the experience of perfectly healthy people, though it occurs in healthy people with less prominence and disproportion. As a matter of fact, it is most unsatisfactory to be immune to "medical students' disease." A touch of the ailment is a sign that the reader is really opening himself to his subject, trying to grasp it and feel it rather than just reading about it.

It should never be forgotten that abnormal psychology deals with inferior and unsuccessful forms of adjustment. Because of this fact, it draws a picture which tends to exaggerate failure and helplessness at the expense of successful self-direction. People are described who seem helpless in the grip of powerful forces. They appear to be at the mercy of anxieties, conflicting drives, unconscious attitudes, or subtle damage to their nervous tissue. Their behavior seems to be compelled by forces external to their better selves, so that they cannot direct their lives toward their own most cherished goals. This helplessness is not unknown to even the most healthy people. We do not live continuously at the level of our best moments, and even the most enterprising efforts slacken here and there along the way. It is important to remember, however, that most people are not helpless. Constructive activities are possible for them so that they overcome the main difficulties in their path. A course in abnormal psychology may encourage a person to start assessing his liabilities. Reading about symptoms, anxieties, defenses, moods, and other psychological liabilities, he will find plenty

of them in himself. He should always remember that abnormal psychology does not offer a parallel opportunity for assessing his assets. There is no classification of the chief varieties of heroism, fortitude, and persistence in the face of obstacles; there are few careful case histories of magnificent behavior in shipwrecks and fires, on dangerous military missions, or under circumstances of prolonged severe stress. It is our purpose in this book to compare the abnormal with the healthy, wherever possible, but the material upon which we draw is necessarily weighted on the side of breakdown and failure. We are better informed about the weakness in personality *than about its strength.*

1. An Adolescent Maladjustment: Joseph Kidd

Our first example is a young man bearing the fictitious name of Joseph Kidd.[1] During his high-school and college years he became progressively more and more maladjusted. Most of the time he was extremely unhappy and more or less incapacitated for serious effort. He did not, however, directly seek professional advice. He was a volunteer subject for a series of personality studies being conducted at a university psychological clinic. It is likely that he volunteered for this work in the hope of increasing his self-understanding and thus mastering his own troubles, but he never entered the *status of a patient nor received treatment beyond occasional friendly* advice. The following description draws heavily upon his own account of his life, partly as he wrote it and partly as he gave it in interviews.

Present Difficulties.—At his lowest point, during his junior year at college, Joseph Kidd suffered from acute distress in all relations with people. He was bothered by severe self-consciousness, feeling always a painful uncertainty as to his standing in the opinion of others, and with this went an irresistible submissiveness designed to avoid conflict with people and win their favor. He could neither control this submissiveness nor accept it. If anyone showed him friendliness he immediately, as he put it, "began acting like his son or kid brother," but he was ashamed of this afterwards and wished that he could behave like a man. "I can't make a decision on my own and back it up," he wrote at one point; "it's always guided by some factor outside my own intellect." With his girl he was equally

[1] White, R. W., "The Personality of Joseph Kidd," *Character & Personality*, 1943, Vol. 11, pp. 183–209, 318–360.

troubled. He was completely dependent on her affection and very jealous if she so much as danced with somebody else. Realizing that he acted toward her "too much like a spoiled child, crying for my own way," he yet could not bring himself to take a more manly and independent attitude. In consequence it became increasingly clear that the girl was bored with him and did not really respect him.

Why did he not take a different attitude? He wanted to, and there was every inducement to do so, but in this respect he was not free. The pattern of his personality was such as to resist this particular change. He expected people to give him a great deal of easy appreciation; when they did not do so, he was worried and hungrily asked for it. Kidd felt that he had no personality of his own, and he tried the following rather desperate expedient:

> *I began trying to fit a personality to my make-up. I began acting* out personalities, and tried observing people and copying them. But these personalities were all short-lived because they pleased some and not others and because they didn't produce that underlying purpose of making people like me; and every time, unconsciously, I would resort to my childish attitude to make myself noticeable. Examples of these personalities are independence (but I couldn't keep it up); arrogance (but people were arrogant back at me); hatefulness (people paid no attention to me); extreme niceness (people took advantage of it, kidded me about it); humorous nature (but I was only being childish, silly); quiet and studious (but people were only passing me by and I kept feeling I was missing something). I became a daydreamer so intensively that now I find I'm daydreaming almost all the time. I became conscious of a person's approach and would become flustered, would try to make a friend of him no matter who he was, but I overdid it.

Clearly Kidd's problem was not an unusual one. It is a universal problem to develop adult independent attitudes. Everyone learns from experience how to adapt successfully to the people around him; everyone finds out gradually what roles are congenial to himself and others. Kidd's case is peculiar not in kind but in degree. It will be noticed that he was satisfied with a "personality" only if it pleased everybody; he was unwilling that anyone should fail to notice and like him. From his own description we can see that he was making a frantic search for esteem. His overwhelming motive was to make people like him, and his well-practiced method, when all else failed, was to make himself noticeable. Failure cast him into despondency and alarm. At times he lapsed into passive daydreaming, but at other times he struggled to learn new and more appropriate attitudes. Eventually, as we shall see, his struggle met with success.

Personal History.—Whenever it appears that a disorder lies in the sphere of motives and the acquired methods for satisfying them, we must look for enlightenment in the past history. Joseph Kidd was the second son of hard-working, socially ambitious parents. He was a very pretty child with blue eyes and long golden curls, far more attractive than his older and younger brothers. His delighted parents showered him with notice and praise. His early memories were crowded with scenes in which he was patted on the head, dressed up, shown off, placed in the center of attention; once the teacher stood him on her desk so that all the pupils might see his new velvet suit with lace collar. He basked happily in this warm light of admiration. The effect on his subsequent development was not so happy. For one thing, his constant exposure to the eyes and praises of other people laid the foundation for that intense self-consciousness which later harassed him. For another thing, he was receiving praise for gratuitous qualities—for good looks and fine clothes, or at best for slight accomplishments—so that he felt little incentive to work for what he got. He formed an habitual expectation of high esteem income received at no greater cost than making himself noticeable.

In school Kidd progressed well, and through the machinations of his ambitious mother he was given a double promotion from the fourth to the sixth grade. This put him in the same class as his older brother, and automatically made him the youngest and smallest of his immediate group. To keep up his popularity he fell into the role of what he called "a clown and a stooge"; he made the other boys laugh and did errands for them. Entering high school in a distant neighborhood, he found these roles no longer productive of esteem. His income in this respect was sharply lowered when he realized that his new companions were contemptuous of his childish ways. Filled with resentment at this turn of events, he began to feel that everyone was against him, so he withdrew from sports and social activities and spent his time at home listening to the radio. He experienced great shame over masturbation, which further increased his feeling of inferiority and unwillingness to mingle with others. Even his interest in studies dwindled, so that he barely passed his examinations for college.

At college he found nothing in the curriculum that awakened enduring interest. His failure to make friends soon cost him the esteem of his parents, who looked upon college as a means of social advancement and compared him unfavorably with his sociable brothers; in addition, he seriously offended his parents by espousing the theory

of evolution which they considered at variance with their religious faith. As we have seen, his girl began to withhold her esteem. He sought consolation in promiscuous sexual episodes, which gave him at least a momentary feeling that he was acceptable as a man and could get what he wanted. But when he regaled his fellow students with these proofs of his enterprise and manhood, he got much less admiration than he expected. He who had been rich was now indeed destitute of esteem.

Spontaneous Recovery.—Under these circumstances it is not surprising that his mediocre academic record went completely to pieces and that he was presently looking for a job. It was at this point that his suffering was most acute and that he fully realized the failure of the various "personalities" he had been trying to assume. After a while, however, things began to go more favorably. He took the step of leaving home to escape the now irksome parental supervision, and he parted with his girl. He found a small business position, acquitted himself well, and enjoyed the company of other young people in the office, most of whom were college graduates. It was a white-collar job which met his parents' social expectations, so that he was somewhat restored in their favor. He resumed his interest in sports and began to read instead of daydreaming. Another girl came upon the scene. Starting the relation on a better footing, he was soon the happy recipient of a fair esteem income from her. In due time he entered military service where, though not in actual combat, he made a creditable overseas record. Throughout these developments his environment was fairly kind to him, but he displayed initiative and took an active part in overcoming his difficulties. Under moderately favorable circumstances he proved capable of developing new channels for satisfying his need for esteem. It is this that distinguishes Kidd, a maladjusted personality, from the more severe psychological disorders shortly to be described.

What do we learn from this case? How did it happen that Joseph Kidd became a maladjusted, unhappy young man during his college years? How did it transpire that he worked his way back to a reasonable state of adjustment and happiness? In a rough sort of way we might say that we know already, just from reading the history up to this point. But the processes involved are of such central importance in the whole theory of adjustment and maladjustment that we cannot afford to leave our understanding of them in too rough a stage. Two points need further consideration: the part played by Kidd's *range of abilities* in determining his difficulties, and the

problem of motivation and learning involved both in his maladjustment and in his recovery from it.

Contribution of the Range of Abilities.—The range and pattern of abilities play an important though often silent part in steering the growth of personality. Assessment of abilities is rapidly becoming an essential feature of the clinical study of disordered people. There is evidence that Kidd's natural endowment contributed significantly to his maladjustment. We can best grasp this contribution by considering, in addition to the things he did, the things he did not do. There were always various possibilities besides the ones he chose. Some youngsters, for instance, would have refused to take the role of "clown and stooge," preferring to hurl themselves actively into sports, even at a disadvantage in size, and become known as "*scrappy little fellows.*" *This would require exceptional physical* endowment, and Kidd's physique, while vigorous and equal to most sports, was a trifle too sluggish for so energetic a solution. Others, in withdrawing from social participation, might have turned to craftsmanship, artistic pursuits, or mechanical interests, such as learning to build radio sets, thereby developing new interests which might ultimately return them to a position of esteem. Kidd seemed to possess no natural inclination in any of these directions; when at home he sat in a chair and merely listened to the radio. Some people who meet frustration in social life throw their energies strongly into intellectual pursuits, finding new sources of interest and new ways of displaying excellence. Why did not Kidd become interested in his college studies? Again, why did he not progressively transform the role of clown into the role of wit, so that he could have retained an acceptable position as one who contributes to laughter and merriment? These last two questions find their answer in his mental endowments which were not such as to support either solution. *In various intelligence tests he reveals little of the quick flexibility of* mind that is necessary for wit. The limit of his possible success along this line was reached in the "raising cain and acting silly" that he described in high school. The tests also show distinct limitations in reasoning, associative thinking, and power of organization, although his over-all scores are not much below the average for college students. This particular pattern of intellectual endowments may not preclude going through college, but it can scarcely lead to the development of lasting intellectual interests. General ideas and theoretical reasoning are grasped too laboriously—one might say too uncomfortably—to yield an enduring satisfaction.

When we consider the range of Kidd's abilities and temperamental peculiarities it appears that he was meant, so to speak, for social life, affectionate relations, and perhaps a modest business career. These were the lines of his natural excellence. His resources did not invite him to grow in other directions.

A Problem in Motivation and Learning.—However important the contribution of natural endowments, we may consider them secondary to Kidd's central problem, his progressive failure to find satisfaction for a compelling and all-pervasive need for affectionate esteem. It is necessary to consider how this need became so strong, how it became associated with certain action patterns or habits, why these habits eventually failed to yield satisfaction, and why it was so difficult—for a time almost impossible—to acquire new habits and establish new channels which would provide the much needed esteem. The critical point is the adolescent period when new learning for a time failed and finally succeeded. Dependent as we are on current observation and the young man's own narrative, we cannot be absolutely certain of what happened, but the following seems a likely reconstruction of the history.

During his early years Kidd enjoyed very high gratification in the form of affectionate esteem. As the center of admiring attention he became accustomed to expect a large income of appreciation from those around him and to stand out as a quite special person. His desire was thus strengthened by repeated reward. Because the praise came so easily he was not obliged to learn difficult action patterns: it was sufficient to call attention to himself and cry or whine for what he wanted. When he was promoted in school and became the youngest of his group his income of esteem was sharply threatened, but he developed two new esteem-seeking patterns, playing the "clown" and being the "stooge," and was again able to feel himself well liked. But this success was only temporary. On entering high school with its new demands he was again in the position of either having to accept a greatly diminished esteem income or finding new ways of behaving that would win his companions' liking.

To live without esteem was impossible. The esteem of others is apt to be a strong and central motive in anyone's life, and in Kidd's case the desire had been strengthened by excessive reward. When frustrated it acted like a hunger; in fact, there is a close analogy between Kidd's desperate trying out and discarding of different "personalities" and the behavior of a hungry animal in a puzzle box trying out one random action after another and quickly discarding each unrewarded response. Kidd's responses were unrewarding partly be-

cause of the impossibly high level of reward to which he had become accustomed. As a small child he had been, to borrow a phrase from the movies, the "great smash hit" of his family and neighborhood. When his school companions and his parents themselves began to treat him as if he were merely a friendly, pleasant, otherwise average boy he felt as if nobody valued him or cared for him at all. But we must bear in mind also that his attempted "personalities" probably received little actual reward because they were carried out without practiced skills and in some cases without the help of natural abilities. He was a blundering amateur at expressing arrogance and hatefulness, and he was poorly equipped to play the humorous or the quiet and studious roles. The conditions for new learning were not favorable.

A further complication in the learning process was the presence of a conflicting motive in the form of hostility. In his reports, and especially in tests of fantasy, he gave evidence of considerable anger toward people who did not esteem him. When you want people to like you and when at the same time you are angry with them, the situation is peculiarly frustrating. Efforts to win esteem are disturbed by the conflicting motive of wanting to pay off or hurt the person who is so niggardly with his appreciation. It was apparently this conflict from which Kidd at times retreated into solitude and daydreaming. Fortunately the hostility was not so strong as to prevent fairly frequent attempts at new social adjustment.

Kidd's improvement came when he again began to experience reward. His business success, his restoration to parental favor, his new and more appreciative girl friend, all rescued him from the famine of his college years and provided him with rewards sufficient to bring about the learning of more appropriately mature patterns of behavior. The process of recovery, like the process of maladjustment, thus appears in the light of a problem in motivation and learning. We can understand the case of Joseph Kidd when, making due allowance for the range of his abilities, we unravel the history of those learnings that served his need for esteem and when we work out the conditions under which new learning had to be undertaken during adolescence.

2. A Neurosis Precipitated by Combat Stress: Pearson Brack

Our second example is a young man whom we shall call Pearson Brack, a member of the United States Army Air Forces.[2] At the

[2] This case is taken from Grinker, R. R. & Spiegel, J. P., *Men Under Stress*, Blakiston, 1945, pp. 197–206. To make the cases in this chapter easier to recall, fictitious names are assigned to all of them.

time when his difficulties began he was serving as a B-25 bombardier in the Tunisian theater of operations. He was referred to his Flight Surgeon because on his tenth and eleventh bombing missions he was found to have fainted when the airplane reached an altitude of 10,000 feet. That something was wrong with him became evident to other members of the airplane crew who tried in vain to communicate with him over the interphone. Brack himself was aware only of having felt cold and sleepy and then waking up to find himself leaning on the bomb sight.

Narrow Escape from Death.—The two missions on which Brack had fainted were his first after a period of four weeks in the hospital. During his ninth mission he had sustained an injury when the airplane narrowly escaped disaster. The mission was an important one in support of ground forces which were engaged in very hard fighting. On the way to the target considerable flak and fighter opposition were encountered, but the bombers passed through without damage. Several planes flying in formation were approaching their target when without any warning Brack's plane jolted and rolled over, then began to fall. The dive seemed to go on forever. Fortunately the pilot regained control just in time to avoid crashing on the ground and was able to bring his ship back into formation and resume the mission. During the plane's fall Brack was thrown violently against the bomb sight, receiving such a heavy blow on the left side of his chest that he at once began to cough up blood. In spite of this he was able to release his bombs on the target and the mission was successfully completed.

On return to the home field Brack was sent to the hospital on account of his injury. At the end of four weeks his symptoms had disappeared and he was returned to full duty. It was on the next two missions that the fainting occurred.

Signs of Repressed Anxiety.—Because of the recent history the Flight Surgeon assumed that Brack might be suffering from some residual organic defect which caused his fainting at higher altitudes. This seemed highly improbable to the medical board which reviewed the case, and the question arose whether or not the fainting might be connected with anxiety. Fainting can result from hyperventilation, that is, rapid but shallow breathing which does not supply sufficient oxygen through the blood stream to the brain. Hyperventilation, in turn, may occur in connection with suppressed anxiety, an increase in rate of respiration being one of the normal bodily accompaniments of fear. The psychiatrist accordingly undertook to

discover whether Brack was suffering from anxiety when flying. In view of what had occurred on the ninth mission it seemed not unlikely that his confidence had been shattered. When interviewed, however, Brack denied that he felt anxious during flights. He laughed at the idea and said that he had never been afraid of anything. He was proud of his skill as a bombardier and impressed with the importance of his work. His attitude was carefree and jocular, confident and aggressive; he wanted to return to combat flying and asked only that he be assigned to a unit which would not fly above 9,000 feet. Even when shown that such an assignment was quite impracticable he continued to demand it with rather child-like insistence.

Although the interview failed to elicit a direct admission of anxiety, certain features of Brack's behavior suggested latent uneasiness. There were two such signs: his stubborn insistence on an impractical assignment, and a somewhat theatrical, overplayed impression created by his attitude of jocular confidence. It was determined to try another means of testing him, a pentothal interview. This technique, developed during the last few years, consists of placing the patient in a quiet semidarkened room and injecting sodium pentothal, a narcotic which produces a sleepy, dream-like but talkative state. In this state the patient can be reminded of previous incidents in his life which he then sometimes recalls with all the vividness of dreams, in fact of present realities. If emotion was involved in the incident, this emotion now breaks forth in all its original strength, the whole experience being lived over again with great dramatic intensity. With Brack, however, the pentothal interview produced no outburst of anxiety. He described the ninth mission in great detail, talking with various members of the crew as if he were actually there again, but he remained completely calm and unemotional. The only hint of buried fear was a sort of aside in which he urged the crew to keep on going even though he himself would surely die if they did so. From this remark one could infer a deep conviction that he would die on a mission, but after awakening from the drug Brack had not the slightest idea what his words could have meant.

Still unconvinced, the psychiatrist tried a third experiment. He accompanied Brack on a practice flight to observe his reactions while in the air. On the way to the field and during the early stages of the flight the bombardier was exceedingly talkative and full of jokes, showing a forced cheerfulness that sounded very much like whistling in the dark. His confidence lasted only until the airplane reached an

altitude of 10,000 feet. Then he began to tremble all over, his face appeared pale and drawn, and his breathing became faster and faster. He denied fear but said that he felt sleepy and shut his eyes for long moments. He was ordered to breathe slowly and deeply, by which means fainting was prevented during the fifteen minutes that the altitude was maintained. When the plane came down to 8,500 feet he became alert again, his tremor ceased, and his cheerful confidence reappeared.

It now seemed more than ever certain that Bombardier Brack was suffering from anxiety rather than organic injury. But the patient was still completely resistant to any such interpretation. The doctor might think what he pleased; he himself knew that the after effects of his injury made him faint. Under these circumstances—strong resistance and conviction of organic illness—psychological methods of treatment are clearly out of the question. The patient is not ready or able to cooperate and there is no way to force him to do so. Defending himself against the recognition of his own anxiety, he does not feel the need for help in overcoming it. The psychiatrist accordingly recommended a trial return to duty. Brack completed another mission, performing his duties efficiently over a rough target, but he returned covered with perspiration and so completely exhausted that his Flight Surgeon referred him again to the hospital. Another doctor made the diagnosis of possible heart damage. Brack was told that he should not fly again for six months, but that with proper rest his heart condition would surely clear up within that time. He was well pleased with this news. The previous forced bravado gave place to a calm cheerfulness. This time the medical board returned him to the United States for further observation and treatment.

Change of Symptoms After Return Home.—Pearson Brack left the theater of war in good spirits, but as soon as he reached home his mood began to change. Although he enjoyed his leave with his wife and child, as time went on he felt increasingly nervous and increasingly depressed. He was troubled by nightmares of falling in an airplane. He was also troubled by self-reproach because he had not been able to complete his tour of duty overseas, and it was this thought that made him feel most depressed. As his symptoms seemed to be increasing he was admitted, pale, tense, and unhappy, to a convalescent hospital where he found himself confronting the same psychiatrist, transferred in the meantime to the United States. He admitted at once that the doctor had been right about his nervousness overseas although he himself had not then recognized it.

The situation was now completely changed: no longer cheerful and confident, the patient felt the need for help and begged the doctor to make him feel the way he did before he ever went overseas. But as he could not attach any content to his anxiety it was decided to try another pentothal interview. When thoroughly sleepy he was told that he was on a bombing mission, and he began to talk as follows:

> Going up to North Italy . . . have to take evasive action—flak and fighters around—plenty of evasive action—got to have it. Well, the plane suddenly shook, pulled up back of three other ships, rolled over on its back . . . falling down . . . down . . . down . . . down . . . down we fell, falling down . . . falling down, fast, faster . . . faster . . . faster. I didn't expect it. We came out of it, but I was hurt—my chest hurt bad—my head was hurting—I was scared. Me scared! I didn't think I'd ever be scared—didn't think any man could scare me. I felt our cause was much bigger. Pilot wanted to go back, but I wouldn't let him. We had a job to do. Boys . . . our boys were having trouble on the ground—our boys, our infantry—we had to go. Every bomb had to count. If we turned back they wouldn't count. We dropped them—hit the target—smackeroo! Banzai!! Chest was hurting, spitting blood—didn't like the sight of blood.

It was now abundantly clear that Brack's fainting was the outcome of a struggle with mounting anxiety generated by his panic on the ninth mission. Brack did not realize this simply as a result of one pentothal experience. It was only after several interviews, one more of which included the use of pentothal, that he finally admitted being very scared of flying. "I know it now, but I didn't know it before," he said. "I know I'm scared of falling in an airplane. I am really worried about a lot of things and I don't like to admit it." As soon as he realized the full force of his terror it was possible for him to work toward recovery. He could be shown that his fear was a very natural reaction to the danger to which he had been exposed. He could realize that he need not feel disgraced by his failure to complete a tour of duty, that what had happened was involuntary, and that he would get over his difficulties. As he gradually grasped the full import of these things his depression disappeared and his nervousness subsided. He hoped that he would be sent back to flying so that he might finally conquer his fear.

In actual fact it was decided to assign the patient to ground duty rather than returning him to the air. The basis for this decision lay in an estimate of his ultimate strength, not so much a constitutional stability as the strength he had developed in the course of his life experience. We must admit that Brack had strength, even

though we describe his reaction as neurotic. Not everyone could have dropped bombs accurately on a target a few minutes after staring straight into the face of death and while spitting blood from a painful injury. Not everyone could have forced himself to enter a plane for another mission. If he had not been exposed to combat he might have gone through life without ever breaking down. But Brack's reaction was still not adequate, and the question of whether or not he could endure combat stress in the near future hinged on the nature of those habits of reaction acquired earlier in life which formed his present personality. The central problem in his case was his inability to admit weakness, to others or to himself. If he had become afraid of flying, why could he not simply say so instead of starting an internal, unconscious conflict that ended in fainting and depression? American airmen are thoroughly instructed about anxiety so that most of them are prepared both to feel and to admit it. Why was Brack unable to avail himself of this enlightened attitude?

Brack's case displays to advantage certain of the mechanisms that are common in neurosis, notably repression and symptom formation. It also displays the embeddedness of the neurotic reaction in the personality as a whole. To understand why he could not admit weakness we have to look into his personal history much as we did in the case of Joseph Kidd.

Repression and Symptom Formation.—Brack was terrified when the plane fell on his ninth mission. The whole basis of his confidence was shaken by the unexpected danger. But he could not admit this shortcoming in himself; something inside him required that he should take measures of defense against the weakness that had suddenly appeared. This something inside him we shall call his ego-ideal, the image of himself as a courageous, responsible man whom nobody could scare. The defensive process consisted of denying that he was afraid and strengthening his outward attitude of jocular confidence which, however, showed the effects of this extra strain by its forced and theatrical character. His denial was not simply a conscious concealment from others; the anxiety was actually repressed out of his own awareness. His behavior during treatment displayed precisely the sequence of events that led Freud to his original formulation of the concept of repression: prolonged resistance against admitting the presence of an inferior motive, final emergence of that motive into consciousness, feelings of painful humiliation at such a blow to his "ethical, aesthetic, and personal pretensions," in short, to his ego-ideal.

Brack's system of defense worked successfully so long as the anxiety did not become too acute, but when he went into the air and when the plane rose to a higher altitude the reminders of danger became too forceful and something had to break. When the physical symptoms of anxiety—trembling, palpitation, rapid breathing—became urgent, and when panic threatened to invade consciousness, there was no solution except to faint. The symptom of fainting served a definite purpose: it allowed him to preserve his ego-ideal by not recognizing his terror. Brack emerged from his faints feeling confident, assured that some organic ailment had temporarily knocked him out. Actually he was knocking himself out by still further speeding his rate of respiration until anoxia occurred. On the practice flight the symptom of fainting was blocked by the psychiatrist's commands to breathe slowly. That the symptom was produced in this way, that it served an immediate purpose, and that it afterwards served to get him out of combat, should not lead us to accuse the bombardier of voluntary deception. Like most neurotic symptoms his fainting was wrought in panic; it was a completely involuntary protective device. He did not have to faint in order to be grounded. Airmen were constantly grounded because overt anxiety rendered them unfit to perform their duties. The special achievement of this symptom was to prevent him from recognizing that he, Pearson Brack, who did not think anything could scare him, had been on the brink of panic.

We are thus dealing with a man who simply could not admit to himself that he was too scared to carry out his tour of fifty missions and that he could not meet the responsibilities imposed on him by the war. To learn how his ego-ideal assumed so uncompromising a form we need to reconstruct its history.

History of the Ego-Ideal.—The most natural starting point for a boy's ego-ideal is identification with his father. Pearson Brack's father was a drunkard. In the face of any difficulty or family problem he took refuge in alcohol. But there was a grandfather, a distinguished physician, who set a contrasting example of stable responsible living. As Pearson grew up he felt the need for his father's companionship and support; he described himself as lonesome for a father. But this need was not satisfied, and during adolescence he became more and more a "spoiled brat" who tried to get everything the easiest way without accepting responsibility. One day his grandfather took him aside and gave him a serious talk, saying that if he did not learn to work hard and take responsibility he would grow up to be just like his father. After this talk Pearson

made an abrupt change in his way of life. Though busy with high school studies he followed his grandfather's suggestion of obtaining an evening job and began to support himself. He rejected his father's example and modeled an ego-ideal after his grandfather; this entailed, besides supporting himself, an attempt to play the part of a good father toward his younger brother.

These facts were given in interviews. To understand their importance we must resort to hypothesis. For Pearson, we can assume, the statement that he would be like his father was anything but an idle threat. He had undoubtedly lived through a series of exasperating situations in which the father earned universal contempt by passing into a drunken stupor instead of helping meet the crisis. When the grandfather plainly showed him the likeness between this contemptible picture and his own "spoiled brat" adolescent behavior Pearson was suddenly and strenuously motivated to do something different. He began at once to live according to an ideal of self-sufficiency and responsibility. Apparently he was successful, and when he entered military service he expanded the ideal to include the carefree, fearless airman who completes his assignments and thus discharges his responsibility to his country. We can make the guess that failure possessed for him a peculiarly disagreeable meaning. If he could not complete his tour of duty, he was not only letting down his country and showing himself inferior to his comrades; he was also proving that he was no better than his father and would never amount to anything in any sphere of life. Failure to meet his ego-ideal meant total and final personal failure.

The uncompromising nature of Brack's ego-ideal can thus be related to the peculiar part it had played in his personal history. We may note further that the conditions under which his ego-ideal was built were not such as to give it mature strength. It was adopted suddenly, much as an actor adopts a part, but then, because the grandfather could not be around to reward him with approval, it became a burdensome duty which did not satisfy or displace those more dependent tendencies suggested by his previous disorganized behavior and by his statement that he was lonesome for a father. Under these circumstances an ego-ideal tends to produce an imitation of responsible behavior rather than becoming a firm, well-integrated structure. Even when he entered the service Brack's carefree and aggressive attitude was only an imitation of what some airmen truly feel. We can use the metaphor that his courage was brittle rather than tough; it was shattered rather than merely injured by

his harrowing experience. These considerations influenced the psychiatrist in deciding to keep Brack on ground duty even after his nervousness and depression had cleared.

The change in his symptoms after his return to the United States can probably be understood in the following way. The immediate pressure of danger was lifted, but he had to consider an ultimate return to combat. Apparently the removal of the fundamental conflict into the future relaxed the whole system of defense just enough to let anxiety creep into his dreams and into his waking behavior in the form of nervousness. This necessarily brought about depression, a feeling of self-reproach because he had not been able to perform his whole duty, and back of this a deep humiliation because, like his father, he had failed in responsible behavior. This loosening of the conflict between anxiety and his ego-ideal gave just the needed opportunity for the psychiatrist to assist his insight and give him the encouragement necessary to restore his confidence and self-respect.

3. A Persistent but Unsuccessful Criminal Career: Bert Whipley

The young man who will next occupy our attention differs in many respects from the two foregoing examples. The most important difference lies in his attitude toward society. Unlike Joseph Kidd and Pearson Brack, who struggled painfully to adapt themselves to society as they found it, this youth rebelled against social obligations and for a dozen years has conducted a losing battle with the forces of law and order. Economic circumstances played a part in shaping his criminal career, but as we look into his history we find many instances of misguided, self-defeating behavior which point to an underlying psychological disorder.

Example of a Bungled Crime.—Our subject, whom we shall call Bert Whipley, comes to professional attention because of a remarkable series of events that occurred one week end during the summer when he was twenty-three. Early one Saturday morning, having completed his sentence on several charges involving larceny of cars and burglary, he was given his release from the State Reformatory. His sister was waiting to take him home. On the way they stopped to call on a young married woman with whom they were both well acquainted. Before his imprisonment Bert and this young woman had spent considerable time together, with a rather one-sided result:

she fell in love with him, but his emotions remained somewhat confused. During his stay at the Reformatory she expressed her devotion by visits and frequent letters. On this particular Saturday she declared herself eager to leave her husband and suggested that she and Bert go together to a distant part of the country where they might both find jobs and start a new life. Bert's replies were evasive and noncommittal. After the call he and his sister drove home to join their parents and several brothers and sisters, the Whipleys being a very large family. The rest of the day was spent contentedly enough, but by evening Bert felt restless and tired of talk, so he made a solitary round of several bars. Next day, a hot summer Sunday, the whole family went to a lake to swim and did not return until late afternoon. Toward dark Bert wandered off by himself, found a car parked with the keys in it, and drove away on a main road leading out of the city.

He had gone about seven miles when he became aware of a car overtaking him and heard the challenging sound of its horn. Terrified, he put on all possible speed and swung out to pass the car ahead. He was approaching a curve around which another car suddenly burst into view. To avoid a collision Bert swerved off the road, coming to a jolting stop in a potato field. The pursuing car turned in after him and he immediately gave himself up to the men who stepped out. Almost at once he discovered that these men were not police officers, as he had supposed; they were the owners of the potato field returning to their farmhouse. But it was too late to escape. In the first breath he had admitted stealing the car, and he was turned over to the police.

This time Bert Whipley was sentenced to State Prison, but while awaiting transfer he managed to escape from the county jail, located downtown in his home city. To avoid detection before darkness fell, he slipped into a near-by moving picture theater where he sat trembling and shaking every time someone came down the aisle. Driven out by his own restlessness before dark, he made his way along the main street of the city hoping to reach a safe place where he could telephone to a friend to bring him a different suit of clothes. Caution demanded that he go by side streets and back alleys, but he wandered for half a mile along the central thoroughfare until he was picked up by the police. He received an addition to his sentence and landed in State Prison with four to six years staring him in the face.

What is the explanation of this curiously self-defeating behavior? When we consider all the circumstances it is not surprising that he turned again to crime. There was very little to induce him to "go

straight." His previous experience with job hunting consisted mainly of having doors slammed in his face, and now, stigmatized as a convict, his chances were even poorer. His home was crowded and noisy; we can already judge from his behavior on that first evening that he found it disagreeable and irritating. It was much easier, skilled as he was in burglary, to fill his pockets quickly and go far away with his devoted girl friend. Burglary was his purpose when he stole the car and began the ill-fated drive that ended in a potato field.

That he preferred such a course to the miserable prospect of job hunting is easily understood, but what are we to make of his failure to carry out his criminal program? Judged from the criminal's point of view he could hardly have made a worse mess of it. Quite without justification he assumed that a car behind him on the road was in pursuit; he lost his nerve, wrecked the stolen car, and surrendered himself to civilians who had not the slightest intention of punishing him. Later he escaped from jail but concealed his whereabouts so poorly that it was an easy matter for the police to find him. He wants to be a criminal but he virtually brings about his own punishment, an inconsistency that points to severe internal conflict.

Examination of the Patient in Prison.—Suppose we visit the prison and look first at the prisoner's record. He made his first appearance in court at the age of seven, charged with "malicious mischief"—breaking windows in a school building. At fourteen he was arrested on various charges of stealing and was sentenced to the State Reform School. When he left reform school he went to another state where he was soon in its reformatory on charges of burglary and larceny. After serving his sentence there he returned to his native state, resumed burglary and larceny, and earned himself a long sentence in the State Reformatory. During nine years, up to the age of twenty-three, he was at liberty in the community for only twenty-two months. No self-respecting criminal would have any patience with such a record. Bert Whipley must have bungled many an enterprise before the episode with which we are familiar.

When we turn to the prisoner himself we find a mild-mannered young man of rather slight build and a somewhat anxious but intelligent expression. His general intelligence, as measured by various tests, is equal to that of the average college student. Serious literary interests appear in his conversation: besides good current literature he is reading Montaigne's *Essays,* and he tells us that his favorite book is Dostoievsky's *Crime and Punishment.* We discover that he

has served as librarian at the Reformatory and that he is remarkably skilled in certain lines of craftsmanship. At any sign of interest in his work, however, he becomes self-critical and pronounces his efforts entirely worthless. This attitude of self-contempt proves to be pervasive. If we ask him about himself he quotes the opinions of the prison authorities to the effect that he is lazy, stubborn, disinclined to take courses and improve himself, unwilling even to learn a trade; and he does not seem to entertain any different opinion of his own. He tells somewhat guardedly about his various crimes, admitting that he has often been careless, thus contributing to his own capture. When he plans a burglary it never occurs to him that he might fail, but he becomes tremendously excited when carrying out his carelessly laid plans and is not unlikely to leave some tell-tale clue. Further study of Bert Whipley shows that in spite of his criminal behavior he has an unusual familiarity with feelings of guilt. In tests of imagination he produces two odd but pertinent stories. In one of these the principal character, having just completed a long prison sentence, gazes contentedly from a window which has no bars, but then in some inexplicable manner falls out the window to his death. In the other story the hero cheats on a school examination, but suffers untold torment and agony until he confesses to the authorities. When we compare these themes with Dostoievsky's *Crime and Punishment*, which describes a guilty conscience with such extraordinary detail and which culminates in a similar voluntary confession, we can hardly doubt that our subject is no stranger to the experience of guilt.

The Pattern of Contributing Causes.—How are we to understand the personality and the self-defeating existence of this young man potentially so gifted? Like anyone else he has been exposed to cultural pressures designed to encourage stable, persistent, socially acceptable behavior. He possesses good abilities, better in some respects than Joseph Kidd's or Pearson Brack's. In spite of this he has become an habitual criminal with a propensity for getting caught. Our inquiry resolves itself into two questions: (1) how did the criminal tendencies, the persistent stealing, become fixated at the expense of stable socialized living; and (2) why does he fail in his criminal enterprises, losing his cunning at the critical moment so that he practically exposes himself to capture and punishment?

As might be expected, the answers are not simple. Several factors make their contribution. Some part is played by chronic environmental stress: poverty, unemployment, poor neighborhood in-

fluences, tempestuous scenes in the home. But the crucial influences are those attributable to modes of personal adjustment acquired during childhood and adolescence. In order to understand our subject's contemptuous attitude toward society and his equally contemptuous attitude toward himself we have to examine the history of the learning process whereby these attitudes were established.

The Whipley family circle contains many examples of psychological disorder. Bert's father has recently been committed to the State Hospital on account of chronic alcoholism and some suspicion of mental disease. His uncle has been in mental hospitals several times, being finally committed for life to an institution for the criminally insane. An older brother has a record of delinquency and drunkenness. Two sisters have had severe breakdowns, requiring psychiatric treatment. A generation ago this loading of the family history with psychological disorders would have been accepted as sufficient evidence for hereditary instability. Constitutional weakness of the nervous system would have been invoked to explain Bert's delinquency. Perhaps it is true that he carries an hereditary load which makes adjustment difficult, but we are never justified in assuming such a thing merely because the family history is weighted with disorders. The presence of even one disordered person in the household creates an unusual environmental pressure for the other members. While it is possible that Bert's alcoholic father transmitted some weakness through the channels of heredity, it is certain, as we shall see, that he influenced his offspring directly and powerfully through the avenues of learning. In Bert's case the history of the learning process is largely open to observation. When we examine the atmosphere in which he grew up, and when we notice the rewards and punishments he received, the assumption of innate weakness to explain his delinquency becomes superfluous.

1. Attitudes Encouraged by the Parents.—In our two previous cases we noticed the importance of the child's relation to its parents. The influence of Bert's parents was, if anything, even more decisive. His father was in a respected line of skilled work, not only practising but teaching his skill. Rather suddenly the demand for this type of work ceased. Thwarted and angry, the father was at home a great deal, used alcohol excessively, and literally terrified the household by his outbursts of furious rage. He tried to teach Bert, but lost his temper on the spot if there was any hitch in the learning. Gradually Bert became his scapegoat, receiving torrents of sarcasm, criticism, and abuse. Everything the son tried to

do was made a subject of ridicule by the father. The mother, an easygoing housewife, tried to soften the quarrels, but her influence was small. She was indulgent to Bert when his father was not around. If he balked at household chores, she did them herself rather than make her son's lot harder. Sometimes when the parents had noisy and violent scenes, the neighbors would advise Mrs. Whipley to separate from her husband, but when he returned sober, tearfully apologizing, she always took him back. Bert grew up with a rankling sense of injustice. In front of callers Mr. Whipley posed as the ideal loving parent, but the door would hardly be closed before he turned on his family to heap them with abuse. He posed as a religious man but slandered the church in private. He was brutal to his wife but was always taken back. So far as his father was concerned, Bert could see no justice in the family world.

Throughout his childhood and early adolescence, therefore, Bert's self-respect was steadily battered down by his father's ridicule and criticism. Neither parent offered real encouragement to stable and responsible behavior. Bert was in a state of chronic suppressed anger, nursing a sense of injustice, filled with contempt for law, order, and good behavior as hypocritically preached by his father. His parents unwittingly trained him into a pattern of domestic behavior that consisted of criticizing his father whenever possible, dodging the father's anger, and coming around for a hand-out from his mother.

2. Attitudes Encouraged by Neighborhood Companions. —Meanwhile poverty brought the family into a neighborhood where Bert found many of his companions occupied with petty larceny. There were "good" boys and "bad" boys in the neighborhood, but it was among the latter that Bert began to find life most rewarding. Among these new friends he discovered a way of proving himself a "big guy" and commanding respect. He assisted two older fellows in stealing a car, in return for which he was allowed to go on a joyride which included pursuit by a police car and successful escape. He soon became an expert, organizing his own joyrides. The experience held a peculiar fascination for him because he found esteem and a sense of triumph, while at the same time hurling defiance and contempt at the symbols of law and order. He became a great fellow in a delinquent gang and his criminal career was fast established. In reform schools and jails he later met many unrepentant criminals who taught him that people who work for a living are "suckers," and who instructed him in the techniques of an

easier way to get along. At the same time he began to find a curious satisfaction with prison life. When released, he experienced distinct uneasiness and anxiety.

The factors thus far discussed explain the strength of Bert Whipley's criminal tendencies. To put the whole matter in a nutshell: he was exposed to a system of rewards and punishments which discouraged every attempt at stable, socialized behavior and which generated an unusually strong satisfaction in criminal enterprises. What is not yet explained is the failure of Bert's crimes, his frequent capture and long imprisonments, together with the self-contempt and feelings of guilt which we found prominent in his personality. If it were merely a question of frequent capture, we might suppose that, being not very stable, he went to pieces under stress and lost his cunning because of excitement. This explanation, however, would ignore his guilt feelings, his careless planning, and the almost gratuitous exposure of himself to arrest. It appears that crime and punishment have a highly personal meaning to Bert Whipley, the understanding of which takes us again into his history.

3. Catastrophic Event in Early Childhood: Death of Baby Brother.—Sometimes events in early childhood play a tremendous part in shaping personality. When Bert was four years old he was jealous of his baby brother. This situation is a peculiarly difficult one for a small child to handle. He feels anger toward his new rival and resentment against his faithless parents, but if he shows any of this hostility he only makes matters worse by antagonizing his parents. At all events Bert was sick with a contagious disease, and his parents warned him to keep away from the smaller child. While his parents were out he lured the baby into his room and played with him for some time. Soon the brother was sick, and Bert's position deteriorated: the parents paid more attention than ever to the baby. His resentment rising, Bert's next act was unequivocally hostile. When no one was looking he slipped into the baby's room and set fire to the curtains so that the room filled with smoke and the baby began to cough. Fortunately the flames did not spread, but a few days later the baby's condition grew worse and he died. Bert received no punishment for his hostile action, but he was well aware of his parents' grief. Believing that he had killed the brother, he was left with a heavy load of guilt. For months afterwards he was haunted by a voice which seemed to ring in his ears saying, "Put it out, put it out," and he would run to his mother screaming with terror. Ten years later he still sometimes

heard the voice and experienced the rising panic. Nineteen years later he related the unforgotten incident with distinct signs of distress.

This incident in early childhood appears to have left an indelible mark on Bert Whipley. It left him liable to feelings of intense worthlessness, an overwhelming sense that he ought to be punished, and these feelings tended to creep up on him precisely at those moments when his criminal tendencies were most active. However strong his present motives toward crime, each criminal act was destined to *feel* like that original act of hostility toward his brother; and, *feeling* like that, to call up the aftermath of frightful guilt. Successful crime had once caused him untold misery and terror, the terror that comes to a child who believes that his parents can never love him again. All future crimes were stamped with this personal meaning. He felt that he deserved to be punished; he almost wanted to be punished. His criminal accomplishments were regularly undermined by his feelings of guilt.

Single events in childhood do not usually have such a drastic effect. It is only when the meaning of the event is particularly catastrophic, as in this case, that it can be supposed to leave a permanent imprint. In Bert's case, moreover, the whole conflict was kept alive because of his stormy family life, the constant battering of his self-respect, and the wonderful satisfaction which he presently discovered in delinquent behavior.

Classification of the Resulting Disorder.—Whipley's behavior belongs under the heading of *delinquency,* and the official diagnosis at the prison was *psychopathic personality.* The latter label is generally applied when the following characteristics are present: habitual delinquent behavior, a marked lack of moral scruples, insensitivity to the rights of others, and a generally erratic and purposeless way of living. This state of affairs differs from *neurosis* in that the underlying difficulties, whatever they may be, display themselves in overt behavior directed against society. Instead of being felt as internal, in the form of unhappiness and symptoms of various kinds, the troublesome tendencies are turned into overt action of a delinquent or criminal sort. Whipley corresponds in several respects to the typical *psychopathic personality,* but on one point the prison diagnosis must be considered wrong. It is highly characteristic of the psychopath that he feels no guilt or remorse. In respect to the rights of others—the victims of his stealing, for example—Whipley is quite free from self-reproach, but as we have seen he is heavily weighted

with a much less appropriate feeling of guilt which originated in his early childhood. In this one respect, then, his condition resembles *neurosis* rather than *psychopathic personality.* It seems proper to say that he started with an early childhood neurosis and that his later experiences then turned him forcibly toward delinquency without entirely obliterating the effects of the earlier condition.

The reader may find this confusing, but he must be prepared for just such confusion throughout his study of abnormal personalities. We try to classify the various disorders and distinguish them so that they do not overlap. In reality, however, this proves to be impossible; there are very few pure cases which fit neatly into a single category. Several kinds of disorder can coexist in the same person, and it is always more important to understand the person than to classify the disorder. The case of Bert Whipley, with certain features of psychopathic personality and others of neurosis existing side by side, is more truly representative than any pure case. If we follow his career a little further we discover that his disorder became even more complex. After serving three years of his sentence he was released from State Prison on parole. Serious attempts were made to help him, and jobs had become readily obtainable, but in spite of this he broke down after two difficult and unhappy months and was sent to a mental hospital with symptoms of *psychosis* resembling in certain respects those of the example next to be described. At this point in our study we would stray from our purpose if we continued his history and described the attempts made to cure him. Suffice it to say that his disorder is much more serious than those of our first two examples, and that changing him into a healthy, adapted person, if possible at all, would be a long and arduous task.

4. A Functional Psychosis with Long-Standing Delusions: L. Percy King

The next example is a somewhat older man, L. Percy King, who has been a patient in a State Hospital for twenty-eight years. To his own way of thinking he has arrived at discoveries of revolutionary importance which he does not hesitate to call "the greatest psychological phenomena extant." The doctors in charge of the hospital do not put such a high estimate on his ideas and refuse to return him to circulation in the community. Infuriated by this persecution, which he considers "a state calamity and a national disgrace," King occasionally addresses to someone in the outside world a long letter detailing his experiences, outlining his system of ideas, and demand-

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ing justice and recognition. Like the hospital staff, readers of these letters find his ideas somewhat curious, but in another sense the letters are of exceptional value, for they give us in detail and with feeling the inside story of a severe psychosis.

Example of a Fully Developed Delusional System.—We shall begin by examining L. Percy King's present beliefs—his great discoveries—arrived at after years of reflection and a long sifting of his experience. He believes that all his misfortunes, including his long imprisonment at the hospital, are brought about by the activities of a group of pursuers who have been after him ever since he left his home state, thirty years ago, and took a job in New York City. These pursuers are equipped with very unusual but entirely explicable powers, which he describes as follows:

> Among these pursuers, I was later to gradually discover by deduction, were evidently some brothers and sisters who inherited from one of their parents some astounding, unheard of, utterly unbelievable occult powers. Believe it or not, some of them, besides being able to tell a person's thoughts, are also able to project their magnetic voices—commonly called "radio voices" around here—a distance of a few miles without talking loud and without apparent effort, their voices sounding from that distance as though heard through a radio head set, this being done without electrical apparatus. This unique occult power of projecting their "radio voices" for such long distances apparently seems to be due to their natural bodily electricity, of which they have a supernormal amount. The vibration of their vocal cords evidently generates wireless waves, and these vocal radio waves are caught by human ears without rectification. Thus, in connection with their mind-reading ability, they are able to carry on a conversation with a person over a mile away and out of sight, by ascertaining the person's unspoken thoughts, and then by means of their so-called "radio voices," answer these thoughts aloud audibly to the person. An uninitiated person would probably be very much startled over such phenomena. For example, what would you think if you were on a level, desolate tract of land without any vegetation or places of concealment upon it, and without a human being within miles, when you heard a mysterious, seemingly unearthly voice answer a question you were just thinking about?

Not only can the pursuers read one's thoughts and speak in answer to them, but they can also create bodily sensations in their victims. Thus it is possible for one of them to take a whiff of perfume and the victim, far away from any perfume, receives the same sensation. If some irritation causes a pursuer's skin to tickle, then

the victim's skin tickles in the same place, and when the victim scratches the spot, the feeling of relief is conveyed to the pursuer. King explains this by likening the nerves of the skin to tiny radio antennae capable of both sending and receiving sensations if one of the persons possesses unusual bodily electricity. In this two-way transmission of sensations lies the pursuers' chief means of working their malicious intentions.

> He often makes a practice of keeping persons awake nights tickling their erogenous zones. There must be a stop put to this. He must be made to refrain from tickling married women's teats and from tickling them between their legs. Parents don't want their sons and daughters tickled in such places to cause them to form bad habits. This pursuer persists in the tickling for such long times, and the tickling feels so unbelievably strong that it is enough to drive a person frantic.
>
> It feels good to certain mind-reading pursuers to have patients masturbate. This is how certain pursuers go about it to get patients to masturbate. They lie to patients, telling them sad stories, saying their property has been disposed of, that they can never go home again, that their wives are keeping fast company, that their loved ones are sick, suffering, or dead, or some other sad stories to make them cry if possible. Then certain bitches of the pursuer party make love to them, offering to sleep with them, have illicit intercourse with them, and talk it over with them about the nasty things they will do together, about unnatural sex acts, and sometimes pretend they are having coitus with male pursuers, or pretend they are being raped or other such sex story. Then, if all this fails to bring results, certain pursuers, from the distance without corporeal contact, tickle the patients between their legs and in their erogenous zones or coax them to masturbate. This sort of thing has been going on for over twenty years.
>
> Would you like to have the "radio voices" tell all your financial, social, marital, medical, physical, and sex secrets to thousands of persons a day? These mind-reading pursuers can ruin or disgrace anyone. I do not believe anyone's life is safe with some of them around! They are able to coerce anyone into doing almost anything.

One begins to wonder on what basis the pursuers select their victims. Why are they so bent on annoying hospital patients, particularly L. Percy King? In his logical fashion King, too, has pondered this question, and has arrived at the following answer, which constitutes the most startling and original feature of his great discoveries.

> With these pursuers are some helpless young women, who are either the writer's sisters, or illegitimate daughters, or both. These sisters were born at the same time he was. At birth their souls evidently

became attached to his body, as well as to their own bodies, so that some of them sense with his organs of sense instead of entirely with their own organs of sense. He never moves in any way unless one or more of them move or will him to. His breathing and heart action is synchronous at all times with that of one of them. They think with his brain as well as with their own brains. He has their emotions and personalities. If their souls were withdrawn from his body, he would be dead. Marvellously, this is actually being written by one of them. When she moves her hand to write with it, his hand moves the same way at the same time. This phenomenon is unique and unprecedented!!

The ugly motives of the pursuers now spring into a clear light. They wanted to keep the helpless young women under their control for immoral purposes, but they could not take them far from L. Percy King lest the soul connection be broken and the helpless women languish and die. In order to enter profitable business in the city where the hospital is located, the pursuers conspired to drag King with them from New York by forcing him to act in an insane fashion. This malicious plot explains most of his troubles, but it fails to account for certain features of his subsequent persecution. An additional hypothesis proves necessary.

There is also a large unconscious male person who is suspended upright by straps, framework, etc., and who is also "tied up" to the writer by the same strange "soul connection." Whatever sensation this male person is caused to feel, the writer himself feels just as strongly. By causing the closed fingers of the said male person's hand to spread apart, the writer's fingers are also thereby made to spread apart against the writer's will. By manipulating his magnetic hands near the genitals of the said male person, a pursuer is able to give both the male person and the writer involuntary erections of the penis. This has been of frequent occurrence. Such business must be stopped.

Projection and Reality Testing.—These are the ravings of a sick man. One may be tempted to dismiss them as utter nonsense, but to do so would be to throw away the evidence which upon closer scrutiny allows us to understand what is wrong with L. Percy King. The outcome of his reasoning may be completely absurd, but he is obviously attempting to reason and to make some kind of sense out of his experience. His queer ideas are not random productions as if the machinery of thought had suddenly disintegrated. If we look closely we find consistent themes and a consistent process of distortion. The patient has experienced *hallucinations*—false perceptions—such as hearing voices actually speaking to him or feeling peculiar bodily sensations. From these he has worked out *delusions*—false

beliefs—such as the machinations of the pursuers and the existence of the unconscious male person strapped in his frame. Both of these symptoms, which are common in many varieties of psychosis, show a failure in the patient's contact with reality. He does not engage in sufficient *reality testing*. He does not weigh the possibility that he might have imagined the sound of voices or that sexual desires might arise within his own body. To a remarkable extent he seems bent on assigning all initiative and all motives, all action of any kind, to forces outside himself, so that even his letter is being written by one of the helpless women, even his emotions originate in them. Here we see the consistent distortion that enters his interpretations. He uses the device of *projection* to assign to outside forces nearly everything that takes place in his mind. Unless we believe his theory about radio voices, we must assume that, when his thoughts are answered, it is by further thoughts of his own. But the patient, for some reason, cannot accept this, and his reality testing breaks down, falsifying the outside world, before the alternative of assuming responsibility for those further thoughts. Going on like this for years, he almost loses the feeling of himself as an active agent; he becomes virtually depersonalized.

Reality testing is such a fundamental process that its disturbance can only indicate some very unusual condition. Healthy people stubbornly persist in testing reality even when real events are going pretty much against them. We can best understand the nature and strength of the forces involved in King's psychosis if we go back to the time in his life, twenty-eight years ago, when reality testing first began to fail. His letter includes a vivid description of this period.

Onset and Early Stages.—One day King was taking a walk in an unfamiliar part of New York City. "Being a stranger," he writes, "I was surprised to hear someone exclaim twice: 'Shoot him!' evidently meaning me." Thinking that gangsters might have mistaken him for someone else he rushed from the spot, trying to disappear in the crowd and reach the subway. But the gangsters pursued him: "I knew they were pursuing me because I still heard their voices as close as ever, no matter how fast I walked." Back at his lodgings he told no one about his adventure "for fear they would be incredulous."

So far as we know, this was the first time that King was hallucinated. Reality testing was by no means abandoned: he himself found the experience so strange that he did not expect anyone to

believe it. His whole reaction, however, was peculiar. He instantly assumed that some overheard talk was directed menacingly at him, and he fled in such panic that there was no opportunity to test this particular bit of reality. His behavior at this point shows *exaggerated self-reference.* Shortly afterwards the same thing happened again. Among the threatening phrases he distinctly heard a woman's voice say, "You can't get away from us; we'll lay for you and get you after a while." Then he noticed that one of the unseen pursuers, "repeated my thoughts aloud, verbatim." This was the beginning of that process of projection whereby he ultimately disowned most of his own thoughts and sensations. At this stage the pursuers merely repeated his thoughts; soon they would begin to answer them and then initiate them.

King's life gradually turned into a nightmare. He noticed that whenever he entered a room someone would cough twice, then someone else, until everyone in the room had coughed twice. "I would go to the movies where one patron after another would cough twice until dozens had coughed." Reality testing was still attempted: "I would have thought everyone had colds had not each one coughed twice, and in summertime with no colds going around." How could he interpret the coughing? "Was there really an organized movement afoot against me?" Coughing and other persecutions at the office where he worked finally convinced him that this was the case, and he resigned from his job.

Now he was completely miserable. Pursuers left him no peace of mind. As he sat in his lodgings, murmurings in the street below told him all too plainly that his murderers were assembling. Voices on the stairs revealed that a lynching party was creeping toward his room, so that in panic he called upon a neighbor to protect him. At last he could stand it no longer and tried to kill himself. His self-inflicted wounds proved not to be fatal, but they led to the summoning of his mother, his return home, and his commitment to the State Hospital. During the psychiatric examination he was depressed and indifferent, speaking as little as possible. Later he realized that pursuers had forced this behavior upon him so that he would be judged insane. At the time he was badly confused and much upset about one of the "radio voices."

> An effeminate, male voice called down to me from some place overhead, saying, "I am God!" I had heard this voice in New York, all the way home on the train, and now, after having traveled hundreds of miles, I still heard his voice. If he were not God, why did I hear him everywhere? If he had followed me, why?

King's break with reality reached its extreme point during this episode and during his first few months at the hospital. We have noticed that reality testing was lost only after a struggle. It gave way before a steadily mounting conviction that the world was filled with hostile forces bent on his destruction. That this conviction could overthrow a process as fundamental as reality testing means that it was backed by tremendous forces in King's personality. It must have been unwittingly chosen as an alternative to something completely unbearable. The belief that unseen pursuers are trying to persecute and kill you seems hardly a comfortable solution to inner conflict. We must regard it rather as a desperate expedient preferable only to some solution still more devastating. We have seen how King protects himself by projection, falsification of reality, and the assignment of initiative to forces outside his person. Against what is he protecting himself by these drastic devices? What are the things inside himself that he cannot bear to admit? The answer can be inferred from his letters, partly by examining his state of mind before the hallucinations began, partly by inspecting the content of his current system of delusions.

Basic Conflict Underlying the Psychosis.—For some time before his first hallucination King had felt that he was an object of criticism and contempt in the eyes of those around him. He began to notice that remarks made in his presence often had more than a casual meaning. He lists seventeen such remarks of which the following are representative.

> "I'll tell the world!" This remark insinuates that I had been in the habit of telling the world what to do, or telling the world defiantly where to go to. This remark insinuates that in my supreme arrogance I had been telling the world some of my opinions held by me to be of more importance and consequence than the opinions of all the rest of humanity put together. In connection with accompanying remarks, this remark insinuates that the world and I are at odds and that I, in my glory, am going to tell the world something it does not already know.
>
> "Ambition." This word used to be my nickname. Instead of being called by my real name, I was called "Ambition." This slur applies to my striving to make something of myself in spite of attempts to make me weaken and give up trying to progress intellectually.
>
> "How do you get that way?" I used to have that question thrown up to me nearly every day. The inference is that I am odd and queer, so the question arises as to what makes me so eccentric; in other words, how do I get that way? As though there was something wrong with me.

"He needs a woman." This is self-explanatory. It infers I am a masturbator, and that I need a woman to straighten out my sex life, but that I cannot get one.

"All he does is follow them around." This insinuates that I follow the handsome young women around, but that I am so shy, bashful, sedate, and reserved that I am afraid to approach such young ladies to make dates for petting and necking parties.

"Making a man out of him." The word "him," in this quotation, refers to me. The remark insinuates I was not a man, but someone was trying to do things to me in order to transform me into a man so that I would not "need a woman."

"Outside of that he's all right." Which means outside of some awful sin, fault, crime, I am all right.

These quotations make it clear that a tendency toward exaggerated self-reference prevailed in King's personality before he became psychotic. Perhaps he was really criticized a good deal, but from the account given it is plain that he reacted in oversensitive fashion, finding criticism even where none was intended. Such exaggerated self-reference implies that the person is unwittingly engaged in criticizing himself. There are aspects of himself for which he would feel strong contempt if he allowed himself to recognize their internal location. By projection he protects his self-esteem from an unbearable blow. He turns what is very likely a well-merited self-contempt into a senseless persecution from outside, and he feels only indignation against his persecutors. From the remarks detailed in King's letter we discover what it is that he finds so unbearably contemptible in himself: his masturbation, his lack of manliness, his failure to prove his sexual adequacy. These are painful realizations for one whose personality has been organized on the basis of high pretensions, self-forwarding ambition, and a contemptuous attitude toward others. In King's case the threat to his inflated self-esteem was intolerable. All the contempt he was accustomed to direct upon others threatened to come showering back on him if he really possessed such a grave flaw in his manhood. It was easier to believe that the world persecuted him out of sheer malice than to admit his own vulnerability.

The basic underlying conflict in King's psychosis is between his self-confidence, arrogance, and ambition on the one hand, and his effeminacy and sexual timidity on the other. It is curious to observe how the whole conflict is condensed and symbolized in the

hallucination that followed him from New York to the State Hospital: an effeminate male voice kept saying, "I am God."

Function of the Delusional System.—The theme of effeminacy is considerably elaborated in the system of delusions which King worked out during his years at the hospital. Once he adopted his central hypothesis about pursuers, he found it possible to admit the presence of masturbatory and even homosexual desires. Strictly speaking, these desires were not his own; they were implanted in his person by the electrical activities of the pursuers. Likewise, he could admit all his symptoms and eccentricities: these, too, were devices of the pursuers to insure that he would be judged insane and kept near their place of business. The pursuer theory can be looked upon as a systematic hypothesis designed to account for all his experiences, and at the same time shield his self-esteem. It involves, of course, a liberal use of projection and a slipshod testing of reality so that it never succeeds in convincing the doctors. But it achieves with some success its more personal purpose for L. Percy King. He is now far less disordered and far less distressed than he was when he entered the hospital indifferent and hopelessly confused.

In the beginning he was unable to admit his effeminacy. Now he can admit it completely, though accepting no personal responsibility. In his delusional system he becomes completely united and identified with the helpless women, having their emotions and thinking their thoughts. The unconscious male person was perhaps conceived as a symbolic expression of his own not fully awakened masculinity. These constructions permit him to indulge in many fantasies of a passive sexual nature: the pursuers satisfy their lust upon the helpless women, whose sensations are promptly transmitted to King's own body, and the pursuers use the unconscious male person as the object of homosexual attentions. But all of this, through the mechanism of projection, no longer touches the fortress of King's self-esteem. Quite the contrary, it positively enhances his self-esteem, for are not the discoveries concerning his union with the helpless women "the greatest psychological phenomena extant"? What would happen if the hospital staff stopped persecuting him and concealing his discoveries?

> When the public finds out that some of these helpless women make the writer talk, etc., and that the phenomena are without precedent, that the writer in that respect is the most wonderful person alive, that no one has ever lived like him, his photo and write-up will be published in every important newspaper and magazine on earth. These helpless women and he will receive so many tons of fan mail that the post office

will have to employ extra mail trucks to handle it. Throngs of people will crowd here on the grounds to get a peek at him, so that special police will have to be employed to keep them off the grounds. He and these helpless women will receive visits from world-famous scientists from everywhere and will receive offers to go on the air, into the movies, on the vaudeville stage, will be offered large sums to appear before psychic investigators. These helpless women will be showered with so many presents from all over the world that the presents will have to be stored in a special building. He and they would be invited to appear before the State Assembly, in special session, and will be invited to the State House. He will be pensioned for life by the State and will go home in a special train and be met at the station by a band.

From what has been said it becomes clear that L. Percy King's delusions serve a purpose and make a certain sense. This sick man is not wholly different from others. Like the healthiest person, he tries to reason and explain the things that happen to him. Like Joseph Kidd, he struggles with the problem of esteem and with his feelings of personal unworthiness. Like Pearson Brack, he cannot accept the full realization of his inferiority. Unlike all these, however, the course upon which he embarks takes him out of contact with reality and leads to psychosis. His method of defense, projection, when carried to extremes has a far more destructive effect on personality than the devices used by Kidd or Brack. King's psychiatric diagnosis is *schizophrenia, paranoid type,* one of the varieties of functional psychosis. There is little reason to suppose that he will ever recover sufficiently to leave the hospital. Certain new forms of treatment, to be discussed in Chapter 15, might have helped him in the beginning, but they had not been discovered in 1919.

To complete our understanding of the case it would be necessary to know how he came to develop the high pretensions, the ambition and the arrogance, that made him so vulnerable to anything that threatened to lower self-esteem. We would need to know whether any features of his history, or of his constitution, tended to arrest the development of masculine feelings and strengthen his passive sexual tendencies. It is a common experience for boys in early adolescence to feel that masturbation conflicts with their better selves and to wonder about their untried sexual adequacy. In King's case these problems were lifted to extraordinary intensity so that at last his sanity was shattered. The reasons for this intensity lie somewhere in the history of his personal development. But we have learned enough for our present purposes if we understand the dynamics of his psychosis in its developed form.

5. A Progressive Brain Disease: Martha Ottenby

For our fifth example, we take up the case of a woman, fifty-six years old, who suffers from a degenerative disease of the brain.[8] Martha Ottenby led a contented though rather uneventful life up to the age of fifty-four. At that point her husband and friends began to notice peculiar changes in her behavior, changes which steadily increased until it became necessary to send her to a mental hospital. She was found to have a rare brain disease for which no cure is at present known, and which is almost certain to bring about her death within a few years. In the meantime, however, she lives pleasantly enough in the hospital, unaware that her mind is disordered and that her recovery is impossible. To the student of abnormal psychology such cases offer an unusual opportunity to learn about the functions of the brain. By examining the evolution of symptoms, and by noticing the results of mental tests, we can construct a picture of the functions performed by those areas of the brain that have been injured by disease.

Nature of the Organic Disorder.—It will be easier to understand this case if we first consider the nature of the patient's brain disorder. Martha Ottenby is diagnosed as having *Pick's disease,* a quite rare degenerative disorder which has nevertheless been of especial interest to neurologists because it acts selectively on the frontal lobes of the cortex and spreads only later to other areas. The cause of this condition is as yet unknown. There is some evidence that it runs in families, but in many cases, including the present one, a search of the family history reveals no other victims. Evidence for an infectious origin is altogether lacking. The time of onset is almost always in later middle life, suggesting that Pick's disease may be connected with aging and may be conceived as a premature aging of certain parts of the cerebral cortex. At all events, when a post-mortem examination of the brain is made, there is found to be a marked atrophy of the cortex, especially of the frontal lobes. In the affected areas the gray and white matter appears shrunken and of an abnormal color. Microscopic examination reveals that many nerve cells have disappeared, while those that remain show characteristic alterations of a degenerative type. The cortex seems to be undergoing a process of decay.

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[8] This case is taken from Goldstein, K. & Katz, S., "The Psychopathology of Pick's Disease," *Archives of Neurology and Psychiatry,* 1937, Vol. 38, pp. 473–490.

While it is doubtless proper to conceive of Pick's disease in this way, we must remember that the decay goes well beyond what is normal, even in very old people. We must also remember its highly localized character, confined to the cerebral cortex and in most cases still further limited, at least in the earlier stages, to the frontal lobes. Except for her brain disorder, Martha Ottenby is anything but decayed; she is not even old for her years. Her hair is gray, but she is a plump, ruddy woman with a strong healthy pulse, satisfactory blood pressure, normal reflexes, and every indication of sound physical health. Only one physical examination gives conclusive evidence of abnormality. This is a procedure, recently developed, known as the air encephalogram. It is performed by introducing air under slight pressure into the brain cavity, then taking X-ray pictures to show how the air has distributed itself among the tissues. Martha Ottenby's air encephalogram revealed a great deal of air congregated over the frontal lobes, especially at the frontal poles, indicating that the cortical tissue was considerably shrunken in these areas. This is as decisive evidence for Pick's disease as can be obtained prior to post-mortem examination.

It is like telling a story backwards to give the final diagnosis before relating the history of the case. In the present instance, we are justified by the extra profit to be derived from studying the history and the earliest symptoms when we know the nature of the underlying brain disorder. We shall now return to chronological order and see what can be gleaned from the patient's past life.

Personal History.—Martha Ottenby was born in Sweden, where she grew up a jolly, sociable, active child of average intelligence. So far as could be ascertained, none of her grandparents, neither of her parents, and none of her five brothers and sisters, ever showed signs of mental disorder. Martha became a dressmaker at the age of twenty, and soon earned the reputation of a skillful worker. When thirty-two she came to the United States; at the late age of forty she married. This last event was not entirely happy, inasmuch as the husband shortly lost his money and ran into debt; moreover, in his discouragement he occasionally resorted to alcohol and came home badly intoxicated. To keep the household going, Martha continued her work as a dressmaker. It was hard to earn enough in this way, so that she was constantly worried about the precarious financial situation. But in spite of these difficulties, Martha's life was not without its satisfactions. Except when marred by alcoholic episodes the marriage was happy and the atmosphere of the home pleas-

ant. Martha was a neat housekeeper. She enjoyed her home and this made her able to be patient with her husband's difficulties and her own.

Earliest Symptoms.—The earliest symptom of Martha's disorder was an apparently trifling matter: on several occasions she allowed food to burn on the stove. Her husband, having been married to her for fourteen years, was astonished at these lapses from her usual domestic efficiency. It seemed as if she were growing a little forgetful, so that when she momentarily turned away from her cooking it slipped out of her mind. Before long it became apparent that in several other ways her behavior was changing. She felt tired a good deal of the time, and had to lie down often during the day. Sometimes she was bothered by mild headache. Her interest in dressmaking began to diminish; she sat at home and spent most of her time reading weekly magazines. Presently her husband noticed another curious sign of forgetfulness: Martha read the same stories over and over without any loss of interest, apparently not realizing that she had read them several times before. Her standards of physical appearance declined; the neat, trimly dressed Martha began to look "sloppy" and untidy. If her attention was called to some carelessness in her personal appearance, she would become very angry. On the whole her mood was a little sad, in noticeable contrast to her previous cheerful disposition.

At about this point in her illness her brother died. Her reaction to this loss revealed clearly that her mind was becoming disordered. She kept imagining that she saw her brother outside and would run into the street to talk with him, sometimes forgetting that she was not fully dressed. If questioned, she knew that her brother was dead, but a short time later she would again be convinced that she saw him. She told of long conversations with the brother during his last illness, all of which the husband knew could not have occurred. At times she even launched into an actual conversation just as if her brother were making a call.

Her mental confusion became increasingly obvious and difficult. She herself began to feel "all mixed up," and she was confused about the identity of people around her, though continuing to recognize her husband, her sister, and her dog. Bizarre thoughts came to her mind. Faulty perceptions occurred: she saw a strange cat across the street with legs all over its body, and she imagined that it would progress by rolling rather than by walking. At this point it was decided to take her to the hospital.

Behavior at the Hospital.—Upon arrival at the hospital, Martha's sadness increased to a point of real distress. She fancied that a cat had come along with her, had died, and now lay behind her bed. Her brother was still much on her mind. She believed that he had been in the ward and had made a disturbance there; at other times she saw him in the street and cried because he was being sent away hungry. These unhappy imaginings soon gave place to a more cheerful mood. She occupied herself with reading and without the least trace of self-consciousness would sing loudly as she read.

In the course of time she settled down to a cheerful, quiet, orderly way of life. She was generally to be found sitting on a bench, arms folded, a smiling expression on her face, attentive to what was going on around her. Visitors were greeted with smiles and friendly gestures, but no further conversation would follow unless it were prompted by the other person. She was cordial to the doctors and nurses, although unable to remember their names. When engaged in conversation she showed animated interest. The form and structure of her speech was not in the least impaired, the only difficulty being a tendency to slip into Swedish, her mother-tongue, and it seemed impossible to make her understand that the hospital staff was not familiar with this language. She spent a good deal of time knitting in the workroom, performing her work with interest and skill.

When called upon for an interview, or when given tests, Martha became uneasy. She gave quick, brief answers, waiting anxiously to see whether they met the requirements. Suitable questioning revealed various defects in her mental processes. She continued to report strange ideas, hallucinations, and delusions, chiefly centered around her brother. She was badly mixed up about her age, her recent history, when she was married, when she came to the United States, how long she had been at the hospital. She could not give her home address correctly, and stated that she lived with her children whose names she gave; these proved, however, to be the names of her brothers and sisters, for Martha had no children of her own. Along with these striking defects of memory there could be observed a marked lack of initiative. Though friendly, Martha started no conversations. She never asked for things nor began enterprises on her own account. It did not occur to her to wash herself, although she did so willingly enough if the nurse took her to the washroom. When she grew sleepy in the evening, she lay down fully dressed unless told to undress herself.

At first glance it is hard to make sense out of these mental changes. At one moment we seem to see a person hopelessly confused about the most elementary matters: her age, her address, her brother's recent death. The next moment we observe someone behaving in alert, friendly fashion, helping in the ward, knitting in the workroom, able to perform simple arithmetic problems. Just what is wrong in such a case? Is it possible to describe the mental changes in such a way as to make them intelligible?

Comparison with a Functional Psychosis.—We can begin our attempt to do so by contrasting Martha Ottenby with our previous example, L. Percy King. This will bring into prominence the differences between a functional and an organic psychosis. If there is something wrong with King's brain, it is certainly not such a gross injury as is represented in Pick's disease. King has lived with his disorder for twenty-eight years. Strange as his ideas may be, he is perfectly clear about his age, his identity, and the fact that he lives in a hospital; he reads the papers intelligently and is well informed about current world events. One might have a fairly sane and sensible conversation with him if one could keep off the topic of his pursuers. In contrast, Martha Ottenby seems hopelessly confused. It is not just that she has crazy ideas: the whole structure and machinery of her thinking seems to have disintegrated.

We arrived at an understanding of L. Percy King's delusions by working out the purposes they served in his personality. We found that his delusional system served as a defense against the recognition of unbearable inferiorities, at the same time affording him an opportunity to gratify in fantasy certain of the strivings which he otherwise condemned in himself. Thus we saw the origin of his illness in a sharp conflict of basic motives, a conflict which he was able to solve only at the cost of a break with reality. In Martha Ottenby's case, likewise, we can observe the presence of unsatisfied needs and other personal problems. In the delusion that she lived with her children there is probably the fulfillment of a wish denied in her actual life. The centering of her disordered thoughts around her dead brother points to an unusual dependence upon this brother and need for his supporting presence. Personal problems creep into her thoughts, just the way they sometimes influence a healthy person's thinking. But although these problems are discernible, we do not get the least impression that the patient became ill on their account or that her illness represents the outcome of a sort of strategy designed to solve them. In Martha's case, the illness does not seem

to constitute an adjustment of any kind. It does not have much personal meaning, and it serves no personal purpose. The disorder began in the brain tissues, not in the strategy of adjustment which the brain learns to carry out.

These two examples of psychosis serve to point up the distinction made in the first chapter between somatogenic and psychogenic explanations. The somatogenic hypothesis, as it might have been employed by Kraepelin, applies well to the case of Martha Ottenby, whose condition is the result of a disease. The examination of behavior and the analysis of mental changes has in her case the purpose of guiding the investigator to a correct diagnosis of conditions in her brain tissues. If a method of curing or preventing Pick's disease is found, it will undoubtedly have to do with chemical or metabolic conditions in the brain. The investigator can afford to overlook Martha's problems about children and about her brother except in so far as the expression of these problems displays mental deterioration. Quite the opposite is the case with L. Percy King, whose condition remains inexplicable unless one plunges into the very heart of his personal problems. It is likely, though not certain, that King's psychosis could have been averted by skillful advice and guidance during his adolescent years before the gulf between his exalted personal pretensions and sense of sexual inferiority yawned too wide to be bridged. Still more clearly, in Pearson Brack's case, one can observe that the possibility of cure depended entirely on a correct understanding of the conflict between duty and fear and the conditions that made his sense of duty so uncompromising. The somatogenic hypothesis applied in the wrong place leads to blunders such as the diagnosis of Brack as having damage to the wall of the heart. The effect of this diagnosis, had it remained unchallenged, would have been to prevent the patient from receiving the psychological treatment he needed. Equal folly results from misplaced application of the psychogenic hypothesis. The investigator hunts relentlessly for personal conflicts and fails to see the evidence for a brain condition or other bodily ailment that could be arrested or cured. The really good psychiatrist is the man equipped by training and temperament to weigh both kinds of evidence, somatic and psychological. He must be equally alert to the signs of bodily disorder and the indications of emotional disorder, no matter how obscure and elusive these signs may be. He must have outgrown the idea of controversy between somatogenic and psychogenic theories.

Reduction of Behavior to the Immediate and Concrete.—In Martha's case, we want to make intelligible the behavioral and men-

tal changes brought about by her illness. What has the destruction of frontal lobe tissue done to her? As a first attempt at analyzing the changes one is apt to inspect the record and find out what mental functions seem to be impaired. Language is undisturbed, but grave weakness is found in the sphere of memory. Loss of interest and initiative played a prominent part in the description, and there were also changes of mood with evidence of a lowered capacity to control emotional expression. Such an analysis forms a natural starting point, but we must be very careful not to treat these various mental functions as if they were separate faculties of the mind. Are we right in saying that memory, as a whole, is weakened, and that interest and initiative have declined? Let us look again at the patient's behavior, this time with a careful eye for those small details which best serve to clarify a case.

One day the patient was asked to lead the way to the workroom, situated on an upper floor of the hospital. She went directly to the door of the ward and turned to the nurse to unlock it. Given the key she opened the door, locked it behind her, returned the key to the nurse, rang for the elevator and entered it upon its arrival. When let out at the proper floor she went straight to the workroom and sat down at her usual place, asking the supervisor for her knitting. Thus far she behaved without hesitation, even with vivacity. When asked almost at once to put away her work and accompany the doctor, she became bewildered and obeyed only after much urging. At this point an experiment was made. The patient was stopped a short distance from the elevator and led a little way along a corridor. The ground plan of the various floors being identical, this corridor corresponded to the one the patient would take on her own floor to reach her sleeping room. She now walked straight along the corridor and turned into the room corresponding to her sleeping room. Naturally she was perplexed to find herself in a strange room, but the most curious outcome of the experiment was that even after being told she was on the wrong floor she could not understand how the mistake had come about and was quite unable to find her way to the proper floor.

This sample of behavior deserves our most careful attention. It is not correct to say that the patient has lost the use of her memory. She remembers the way to the workroom, remembers that the ward door is locked and that it must be locked again behind her, remembers her place in the workroom and the knitting on which she was engaged. Memory images arise appropriately when they are necessary to carry out a definite task. Similarly, once a specific task has

been instituted she shows no impairment of interest and initiative. Yet the patient would never have started for the workroom of her own accord, and when interrupted in the course of her return she became completely disoriented as to the different floors. In practice she could follow the complicated route perfectly well, but when asked to describe it—to think of it in the abstract—she became altogether confused. She seems to fail when it is necessary to deal with experience abstractly, in her mind, without immediate perceptual promptings.

The hint that we get by examining this piece of behavior can be strengthened by looking at some other samples. Martha is asked about the season of the year, but she cannot tell what season it is. When the form of inquiry is changed to whether it is warm or cold, she answers that it is warm, referring, however, to the temperature of the room. Only when she looks out the window and sees snow does she decide that it is a cold season and agrees that it must be winter. She is given a test performed in the following manner: the experimenter makes a little design by laying small sticks on the table, then breaks it up and asks her to reproduce the design. Martha succeeds or fails in this test, not according to the complexity of the pattern or the number of sticks used, but according to the possibility of perceiving the design as a concrete and familiar object. Thus she succeeds in reproducing designs which remind her of a flag, a roof, a window, a house, and even a letter of the alphabet, but she fails even with quite simple designs when they do not resemble an object.

When we consider the various peculiarities of Martha Ottenby's behavior, it appears that she performs with relative success in concrete situations or when dealing with immediate impressions. Her trouble seems to come in dealing with any kind of abstraction. She is unable to stand apart from the immediate properties of the situation or to resist the behavior which it invites. She reproduces designs when they remind her of concrete objects, but not when they seem like abstract figures. She reacts correctly to the temperature of the room and to the sight of snow outside, but has a struggle to relate these facts to the relatively abstract idea of winter. She finds her way successfully, but cannot tell anyone how she did it and is hopelessly lost if the sequence of her actions is interrupted. What strikes us most about Martha's behavior is its *immediacy* and *specificity*. It is governed by concrete impressions and present circumstances, by sight of corridor and snow, by the impression that somebody walking on the street is her brother. These immediate impressions exert such a powerful force on the patient that she

cannot resist them or detach herself from their influence. It can be shown, by questioning, that she knows her brother is dead: she has not forgotten this fact. Yet when she sees someone who resembles him she surrenders so fully to this impression that for the moment she does forget not only that he is dead but that she herself is not properly dressed to run out on the street. This is what is meant by saying that her behavior is reduced to an immediate and concrete level. She has not lost memory, interest, initiative, or imagination as such; she has lost the power to use these processes in other than wholly concrete situations.

We thus learn a great deal from Martha Ottenby, even though it is impossible to cure her. As students of the brain we learn that there is probably an intimate relation between the frontal lobes and the capacity to transcend the immediate and the concrete. As students of mental processes, we obtain an enriched picture of what is meant by such transcendence. Even in commonplace acts it is necessary to detach oneself from immediate experiences, whether they arise from outside or from one's own thoughts. When we see a person who reminds us vividly of a former friend, we detach ourselves from the immediate force of this impression long enough to remember whether the friend is alive or dead, where we were accustomed to see him, whether it is at all likely that he might now be here. It is also often necessary to give an account of one's actions "in the abstract," that is, while not actually performing them. We can tell someone how to get from one place to another, without ourselves actually traversing the route. We can return to an interrupted task, picture it as a whole, and continue from where we left off, without having to go back to the beginning. These accomplishments seem commonplace enough, but Martha Ottenby's plight serves to remind us of their importance. Transcendence of the immediate and concrete seems to depend upon an intact cerebral cortex.

Retrospect on the Examples

In this clinical survey we have examined five representative examples of disordered behavior. We have seen five very different personalities, and we have looked at a wide range both of symptoms and of underlying difficulties. The examples represent most of the main varieties of disorder. Joseph Kidd, who suffered from a shy self-consciousness that injured all social relationships, is an instance of *maladjusted personality* capable of spontaneous recovery. Pearson Brack tended to faint on military duty and later experienced

considerable anxiety and depressed feelings, a pattern of symptoms which places him in the category of *neurosis*. Bert Whipley, given to criminal behavior with a compulsion to get punished, is probably best classified as a *delinquent personality*, although there were features of neurosis in his case. The other two cases exemplify *psychosis*. The *functional* variety is seen in L. Percy King, who has organized for himself a fantastic system of delusions and hallucinations, but whose mental processes in other respects seem not very badly impaired. *Organic psychosis* is illustrated by Martha Ottenby, the victim of a degenerative disease of the brain tissues which leads to a marked reduction in her capacity to behave in other than concrete and immediate ways.

The diversity of symptoms, considered by themselves, could hardly be more striking. Symptoms, however, are surface phenomena, the outward manifestations of some underlying condition of disorder. The diversity of symptoms teaches us merely that underlying disorders can find their way to expression through almost any channel: bodily processes, such as fainting; moods, such as depression; social attitudes, such as shyness or brash self-confidence; cognitive processes, such as recognition of people or orientation in time and space; intellectual processes, as in the evolution of a delusional system.

The diversity is scarcely less great when we turn from symptoms to underlying difficulties. Our fifth case depended on deterioration of tissues in the brain. In the first example we were able to trace the contributing influence of the presumably innate range of abilities. We gave a greater share of attention to difficulties having their origin in conflict, anxiety, and defense—to psychogenic disorders. Joseph Kidd could be understood by untangling the history of his need for esteem and noticing the drastic progressive reduction of his esteem-income with its fatal effect on the learning process. To understand Pearson Brack we were obliged to study the quite different problem of the ego-ideal and the conditions under which it functions with an excessive rigidity that invites breakdown. Both Bert Whipley and L. Percy King reminded us again of the importance of esteem, but neither the source nor the outcome of their struggles followed Kidd's pattern. The case of Whipley introduced the theme of guilt, and demonstrated the pervasive effects of chronic bad conscience. King, in contrast, arrived at a serenely clear conscience and a splendid self-esteem, but only at the cost of a fatal break with reality.

Is there any order in this diversity? Can we do more than explain single cases? Can we find out how the difficulties of life make

one person maladjusted, another neurotic, another delinquent, another psychotic, while another passes through comparable vicissitudes without impairment to his psychological health? That is the task of abnormal psychology: to bring order, system, and understanding into facts as diverse as those described in this chapter. Obviously, the possibility of curing disorders, still more of preventing them, depends upon our being able to perceive them as expressions of general lawful processes. In the chapters that follow we shall set forth whatever has been accomplished in this direction.

CHAPTER 3

THE DEVELOPMENT OF PERSONALITY

The study of single cases is likely to leave a confused impression. In the last chapter we examined five cases representing five very different varieties of disordered behavior. To some extent it proved possible to understand each case in itself, even though we could not always be sure that our inferences were correct. But the concepts that were found helpful in understanding one case often had little bearing on the next example; it was as if we had to draw upon a different series of ideas, sometimes almost a different province of knowledge, in order to understand each new instance of disordered personal reactions.

We shall now undertake to look for general lawfulness within the diverse phenomena of abnormal psychology. We need to have a relatively systematic knowledge in at least two spheres: *psychological development,* in order to understand the psychogenic aspects of disordered behavior as exemplified in cases like Joseph Kidd and Bert Whipley, and *physiological processes,* in order to understand the somatogenic aspects, for instance, disorders of the nervous system like Martha Ottenby's or disorders in which metabolic and glandular derangements play an important part. Closely related as the psychological and bodily aspects of disorder may be, we shall have to study them separately, and our starting point will be the psychological events that constitute the development of personality.

Plan of the Next Six Chapters

In order to understand any kind of abnormality it is necessary to have a clear conception of the normal. Just as the normal structure and functions of the nervous system stand as the basis for studying neurological disorders, so the normal development of personality forms a necessary point of departure for studying psychogenic disorders. The next six chapters are organized according to a plan which has as its goal the explanation of *maladjustments* and

of *neuroses,* these being the forms of disordered personal reaction in which psychogenic factors play the largest and least disputed part. The plan reflects the theoretical distinction between maladjustment and neurosis which was offered in the last chapter. We shall speak of maladjustment when the course of development has produced tendencies that prevent adjustment to present circumstances without interposing any peculiar obstacle to relearning and readjustment. We shall speak of neurosis when there is added an important problem of anxiety that rigidifies certain portions of behavior so as to prevent relearning. In the end this distinction is an arbitrary one. It cuts into the middle of a continuum ranging from maladjustments that are slight and easily rectified to those that are more severe because a lot of anxiety is bound up in them. But though the distinction may be arbitrary, it will help us a great deal in giving an orderly exposition. It will save us from having to talk about everything at once.

In this chapter and the next we shall be concerned with the normal course of psychological development. As we proceed we shall indicate how maladjustments arise out of each stage or process of growth. Thus the description of maladjustments will run alongside the account of normal development. In discussing the integration of personality (Chapter 4) we shall be confronted by the fact that a workable adjustment to life almost necessarily entails the neglect, if not suppression, of various tendencies that cannot be readily synthesized into the whole. These neglected tendencies, which sometimes become important causes of maladjustment, require investigation by the avenue of fantasy and dream (Chapter 5). Having arrived thus at some of the less rational and less volitional aspects of human behavior, we shall take time to examine hypnotism, which is not only an instructive experimental procedure in its own right but also a method for studying dreams and a valuable aid in psychotherapy. Chapter 6 will introduce the topics of anxiety and defense, thus focusing attention on the basic problem of neurosis. We shall then consider (Chapter 7) the many ramifications of neurotic conflict throughout personality: the rigidities, limitations, overreactions and underreactions that exist because the personality has become crippled in its attempts to achieve protection and safety. This will lead to a discussion of the conditions likely to bring about a neurotic breakdown with the production of outright symptoms. Finally (Chapter 8), we shall study the symptom syndromes of neurosis and try to work out a theory to account for symptom formation.

General Theory of Development

Disordered and disproportionate personal reactions represent failures to behave adjustively. The person has not succeeded in bringing about a satisfactory state of affairs between himself and the realities, physical and social, amidst which he lives. On the one hand, he has not adjusted himself to the demands and limitations imposed by reality; on the other hand, he has not found ways to change these realities so that they become more satisfactory. The concept of adjustment implies a constant interaction between the person and his environment, each making demands on the other. Sometimes adjustment is accomplished when the person yields and accepts conditions which are beyond his power to change. Sometimes it is achieved when the environment yields to the person's constructive activities. In most cases adjustment is a compromise between these two extremes and maladjustment is a failure to achieve a satisfactory compromise.

The Conditions Imposed by Reality.—When we consider the demands of reality we are likely to think first of the demand for change. Adjustment is never finished: it must go on from day to day and from period to period in a person's life. The child must adjust to changes such as weaning, feeding himself, meeting the larger world that results from locomotion. He must learn to get along with people of different ages—his parents and brothers and sisters—and then with people who are the same age and size as himself. As he goes from one school to another, and perhaps moves from one neighborhood to another, he must establish a working relationship with new and different groups. In childhood the boy is expected to be tough and strong; in adolescence he must break out in a new line and acquire the gentle arts of social charm and courtship. Presently the young man must become a good provider and a success in comparison to his fellow workers. The young married woman must turn into a good housekeeper, a friendly neighbor, and a patient practitioner of the art of bringing up children.[1] Every step calls for something new. Old ways of adjustment can never be transferred without substantial change. This is true even in a quiet and uneventful life. Neighbors come and go, friends and relatives die, changes occur in the community, and the person himself

[1] Murphy, G., Murphy, L. B. & Newcomb, T., *Experimental Social Psychology*, New York, Harper & Bros., 1937, pp. 325–327, give a more detailed account of the sequence of adjustments expected of young people in our culture.

is not the same as he grows older. Under conditions of war and social catastrophe the demand for changed adjustment will be enormously multiplied.

It is important to realize, however, that reality also imposes the opposite kind of demand and limitation: it forbids change that would be most welcome to the person. Take the case of an accountant who has never been able to imperil the security afforded by his first job: for forty-five years he goes to the same office by the same streetcar line at the same time and does the same work, returning at night to the same house with the same feelings of fatigue and left-over irritations of the day. Consider the farm wife who sets out three hearty meals a day for a family of ten, washes all the dishes in a dishpan, handles the whole family laundry including successive generations of diapers, and helps with the farm chores in her spare time. Even the fortunately situated scientist or artist, whose work is new and exciting, has to persist through weary and frustrating hours in order to reach worthwhile accomplishments. Months and years of patient investigation and grubby toil lie behind the triumphs of scientific discovery. Protracted rehearsals and endless practice lead up to the triumphs of stage and concert hall. Reality demands constant change, but it also imposes a constant demand for persistive endurance. Children find the lesson of persistence as hard as the lesson of change.

Adjustment requires a range of behavior as wide as the conditions imposed by reality. It calls for a happy combination of change and persistence. Various metaphorical expressions have been used to describe the capacity to adjust. The best of these metaphors would seem to be *flexible strength*. We are apt to call those people *rigid* who lack the element of flexibility and cannot easily change. For those who cannot endure monotonous tasks or persist through hardships, we are apt to use the epithets *weak* and *flighty*. Adjustment is possible when the person is able to act with either flexibility or strength, depending on the circumstances.

The Personal Pattern of Tendencies.—In the last chapter we saw that disordered behavior, even when it consists of such apparently focalized reactions as fainting at high altitudes or getting caught in the act of stealing an automobile, can be understood only in relation to the personality as a whole. The psychogenic causes of abnormal behavior lie distinctly in the sphere of personality. As defined by G. W. Allport, personality is "the dynamic organization within the individual of those psychophysical systems that determine

his unique adjustments to his environment." [2] This definition emphasizes individuality: each personality is the unique result of a particular history in a particular individual. It also includes the essential element of active organization. We need a single word to express what is implied in "psychophysical systems that determine adjustments." When fixed and routine, these systems are often called *habits;* when more generalized and flexible, *dispositions.* If the element of craving or desire is prominent, they are apt to be called *needs,* but if particular objects or channels of expression loom in the foreground it seems more appropriate to speak of *interests.* When the objects of interest happen to be public events or social problems, the words *attitude* or *sentiment* are usually chosen. At this point we want an inclusive single term, so we shall simply call all these things *tendencies.* A person's daily and yearly life can be described as a series of tendencies, and his personality is the more or less organized pattern of these tendencies, his *personal pattern of tendencies.*

Any theory that attempts to explain the development of personality must necessarily be a theory of motivation and a theory of learning. The personal pattern of tendencies is the outcome of a long series of learnings, and these learnings would not have occurred unless drives or motives were present to initiate activity, to be satisfied or frustrated by the results of that activity, and thus to determine, according to the law of effect, what behavior was learned. The study of disordered behavior grows directly out of the subject-matter of general psychology, which undertakes among other things to work out the theory of drives or basic motives and the nature and conditions of learning.[3]

DIFFERENTIATION AND INTEGRATION.—Man is equipped with a matrix of drives or urges to action. He is also equipped with a vast capacity to learn. These two capacities form the starting point of his psychological development. Immediately after birth the drives lead to learning and the formation of the personal pattern of tendencies is under way. The process of development involves a constant

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[2] Allport, G. W., *Personality: A Psychological Interpretation,* New York, Henry Holt & Co., 1937, p. 48.

[3] An exposition of current theories about basic drives will be found in Symonds, P. M., *The Dynamics of Human Adjustment,* New York, D. Appleton-Century Co., 1946, Ch. 2. Needs and their elaboration in behavior are discussed by Murray, H. A., *Explorations in Personality,* New York, Oxford University Press, 1938, Ch. 2. For an account of learning theory in relation to the development of personality, see Miller, N. E. & Dollard, J., *Social Learning and Imitation,* New Haven, Yale University Press, 1941, and Mowrer, O. H. & Kluckhohn, C., "Dynamic Theory of Personality," Ch. 3, in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders,* New York, The Ronald Press Co., 1944, Vol. 1.

interplay between differentiation and integration. On the one hand, the original urges become differentiated into particular channels of expression. Satisfaction is obtained in certain ways, and in connection with certain objects. These ways and these objects become the person's goals, and other ways and objects, even though they might be capable of giving satisfaction, remain of little or no interest. Thus the need for food becomes channeled into particular food preferences, types of cooking, favorite restaurants, preferred mealtime companions, and many other details peculiar to the individual. On the other hand, the differentiated tendencies become integrated into some kind of workable way of life. Endless differentiation would otherwise lead to hopeless confusion. Suppose a man's sexual need has become differentiated into the channel of going out with a different girl every few evenings; his need for love and tenderness is channeled into marriage; his desires for superiority and achievement are differentiated into building a medical practice; curiosity and adventure are organized around the goal of mountain climbing; playfulness and companionship have come to include the frequent heavy use of alcohol. To make a possible life these differentiations must be organized into a hierarchy so that certain tendencies assume superior status over others, controlling and inhibiting them as occasion may demand. The personal pattern of tendencies must be conceived as an *integrated* pattern of *differentiated* tendencies.

Chief Formative Influences.—It is highly probable that the innate strength of the different urges differs from one individual to another. The ultimate pattern of personal tendencies is thus somewhat weighted from the start by constitutional or temperamental factors. There are also presumably innate differences of ability which contribute to the weighting of one or another differentiation. Tendencies having the support of good ability will be more readily strengthened than those which can be practiced only with laborious difficulty. These two sets of influences lie within the individual; others impinge from outside. The child grows up in the midst of a culture, and more immediately in a family circle. Parental encouragement and discouragement exert an initially prominent influence on the differentiations and integrations of his tendencies. Later the rewards and punishments are given more diffusely by playmates, teachers, neighbors, and friends, by work associates and by the larger groups of which the person becomes a part. Development occurs, moreover, within a given set of physical, geographical, and economic circumstances which encourage growth in certain

directions and restrict it in other directions. The personal pattern of tendencies is significantly affected by all these influences.

The Nature of Maladjustment.—As we have seen, the conditions imposed by reality are of two sorts, demands for change and demands for persistence. Maladjustment occurs when the personal pattern of tendencies is such that a required change cannot be made or a required persistence sustained. Either the person cannot meet these demands in an adequate fashion or he meets them at the cost of suffering and unendurable frustration of his own tendencies. Adjustment implies that both the demands in the situation and the person's own tendencies achieve reasonable satisfaction.

The conditions imposed by reality may be extremely difficult. In the last chapter we had occasion to wonder whether the bombardier, Pearson Brack, would ever have shown important maladjustment had he not been exposed to the stresses of air combat and a very narrow escape from death. Nevertheless we have to speak of maladjustment whenever the demands of reality cannot ultimately be met without destruction of personal well-being.

Failure in Changing.—Maladjustments are such individual matters, and occur in so many ways, that we can scarcely hope to include them all in a logical scheme. Nevertheless it may help us to picture various possibilities if we describe some common patterns of personal tendencies that impede adjustment, beginning with those that make the person resistant to change.

It can be assumed that there is a certain amount of inertia in any learning process, especially when new behavior must be made to replace old. In new situations a person is apt to behave according to some previously practiced strategy; he may even find that he has done so automatically when he intended to be more sensible about it. A young man goes to a large college after having been an important personage in his small high school. He realizes that his new companions will not want to hear about his local triumphs, but to his consternation he hears himself proudly telling about the three-state cup won by his debating team. It takes time to change. It may take several experiences of non-reward to stop the high-school hero from sounding heroic. But he will change and become adjusted—that is, unless his personal pattern of tendencies is resistant to this particular change.

1. *One-sided development.* Resistance to change is apt to be increased when the personal pattern of tendencies has developed in

a sharply one-sided fashion. When a few tendencies are unusually strong and others correspondingly weak, relearning occurs at a disadvantage. The few strong tendencies have brought in large rewards, especially if they serve as common channels for several different motives, and their obstruction is felt as a serious loss. The weak and neglected tendencies, on the other hand, through lack of practice, have not accumulated the skills or instrumental acts necessary to make them rewarding. In order to adjust to his new life, the high-school hero will have to stop boasting and behave in a companionable fashion, sharing in the conversation and interests of his fellow students. This will not be easy if his whole soul was thrown into debating so that he thought of little else than the affairs of the debating team. In spite of excellent intentions, he will then have few differentiated interests that can be shared with others. He will lack practiced skills in the kind of participation that might awaken both his and their interest.

2. *Conflict of motives.* The difficulty of adjustment is further increased when the impetus toward change is weakened by conflicting motives. To continue our example, the debating hero may not merely have loved debating; he may have fortified his position by contempt for those who go to dances, talk about girls, play football, or just fool around. Being companionable has acquired for him the personal meaning of being stupid or inferior, and his desires to be accepted and esteemed by his fellows meet opposition from his striving for superiority. If acceptance and esteem are withheld, he will begin to feel hostile toward the others which will still further weaken his efforts toward companionship.

3. *Conflict involving anxiety.* The situation is even worse when the existing pattern of tendencies serves as a means of overcoming and controlling anxiety. If success as a debater has been heavily fed by a need to overcome anxious feelings of inferiority in relation to others, change is imbued with a quality of threat. To be put back on a footing of equality with others destroys the basis of hard-won self-respect and threatens renewed anxiety. Under these circumstances, with anxiety contributing strongly to the pattern of tendencies and resisting change, we can properly speak of neurosis rather than simple maladjustment.

Several of these obstacles to change were present in the case of Joseph Kidd (Chapter 2). Inertia was represented in the irresistible emergence of his old strategies—submissiveness and crying for attention—when his new "personalities" failed. One-sidedness was

exemplified in the fact that all his eggs were in the basket of winning affectionate esteem through appeal, clowning, and showing off, so that his attempts to get the same rewards through other "personalities" proceeded unskillfully to a frustrating conclusion. Conflict of motives was shown in his gradually increasing hostility toward those who withheld esteem, a force which tended to oppose his efforts at friendliness. For an instance of the last obstacle, conflict involving anxiety, we have to turn to Pearson Brack, for whom admitting a weakness meant a terrifying collapse of self-respect.

FAILURE IN PERSISTENCE.—Sometimes maladjustment occurs because the personal pattern of strivings is such as to resist the steady, persistent, perhaps monotonous, activity that is required to meet the existing situation. We shall describe several possibilities, some resembling the patterns resistant to change, some almost the opposite.

Just as we assumed an inertia in the relearning process, so now it is probably legitimate to suppose a restlessness, a desire for change and novelty, which offers resistance to monotonous activity quite apart from an unfavorable pattern of tendencies. Most students experience this restlessness when they enter college and have to assume the difficult responsibility of organizing their studies and getting their assignments done on time. Even when they are greatly interested in their work they will often find it painful to resist as many of the distractions and enticements around them as may be necessary to accomplish the tasks.

1. *Insufficient motivation.* It often happens that the personal pattern of tendencies has developed in such a way that no strong motives are available to support persistive action. There are several possibilities here. (a) It may be that the person has always had money and opportunity to do whatever struck his fancy. Satisfactions have come easily, and whenever the pursuit of an interest proved irksome he simply changed to another. He never gets down to work because he is always in pursuit of a new interest: he is off buying a new car, taking up color photography, collecting unusual books, or buying fancy equipment for a skiing expedition. He has many differentiated interests but they are not at all integrated into a long-range pattern favoring persistence. (b) Another possibility is a low intensity of all interests, a general apathy toward effort of any kind. This was exemplified in Bert Whipley, whose father by impatience and ridicule had killed every interest as fast as it appeared. As an adult he could barely begin a serious enterprise, and his expectation of failure was so great that he no longer believed the en-

couragement and praises of others. (c) A more common obstacle to persistence is the presence of urgent motives or urgent problems which draw heavily upon the person's energy and which cannot be channeled into the job at hand. The situation is analogous to trying to study when one's overwhelming unsatisfied need is to sleep. It is excellently shown in L. Percy King's relation to his job in New York, prior to his mental breakdown. He found it hard to apply himself to the job because he was overwhelmingly concerned with the urgent problem of reconciling self-esteem and sexual interests, a problem that received no solution through the channel of the job. So great was his preoccupation that in the end he could not keep the problem out of the job. He began to feel that his fellow workers ridiculed him and discriminated against him, so he resigned from his position.

2. *Conflict of motives.* Conflict of motives can interfere with persistence just as seriously as it interferes with change. Persistive action may have a wide variety of personal meanings. To one individual it may mean being a dull plodder like the virtuous brother to whom he has always secretly considered himself superior. To another it may mean giving in to the unwelcome authority of teachers or parents. Bert Whipley again provides an excellent illustration. Experience taught him to take sides with delinquents and criminals against the standards of law and order set forth by his hypocritical father. From them he learned that people who led honest lives and earned honest livings were contemptible "suckers." Any inducement to persistive action thereafter broke down before the motive of wanting to be something better than a "sucker."

3. *Conflict involving anxiety.* Conflicts similar to those just described can become far more serious obstacles to persistence if the motive of avoiding anxiety is strongly represented. Under certain circumstances persistive action acquires a personal meaning of such a character that it constitutes a serious threat. An actual example is the case of a young man of fine ability whose studying slowed down and came to a complete stop just before important examinations. For him high marks had come to mean beating his older brother in competition, and this, because of a childhood history of bitter fights followed by punishment, was equivalent to total loss of his parents' love. Such an example again belongs in the category of neurosis rather than simple maladjustment.

Up to this point we have sketched a general theory of development and of maladjustment. We shall now begin to fill in the

sketch by considering some of the problems of development in greater detail. Certain urges more than others contribute to maladjustment because by their very nature they easily come into conflict with cultural pressures. Their elaboration into acceptable differentiated tendencies and their integration into the personal pattern offer inherent difficulties and lead to many failures of adjustment.

Tendencies Toward Dependence and Autonomy

The small child is highly dependent upon others for the relief of discomforts and the satisfaction of needs. At the same time he is in certain respects highly autonomous, in the sense that he does not have to bother with conformity to the many regulations that will later be placed upon him. From the adult point of view he is a privileged character, served by everyone and not asked to make any sacrifices in return. As he grows older this state of affairs steadily changes. He must progressively give up his dependence to the point where he can look after himself, and then still further to the point where he can look after his children and other people for whom he may have become responsible. Likewise he must progressively sacrifice his autonomy, so that instead of doing things when and how he pleases, he acts according to the schedules and requirements that bring his behavior into relation with others. One of the most difficult and extended problems of adjustment is the sacrificing of these two kinds of privilege in order to become a responsible member of human society.

Childhood Dependence.—The child begins life in a state of virtually complete helplessness. Discomforts are removed and gratifications provided almost entirely through the actions of those who are taking care of him. Outside of restless activity and the very important act of crying there is not very much that the small baby can do about his troubles. For the first six months or more it is fair to say that his world revolves around hunger and its satisfaction. In a healthy baby hunger is the outstanding pain and its relief the outstanding satisfaction. The lips, mouth, and tongue are among the most sensitive regions of his body. Around the act of feeding cluster a great many secondary sources of pleasure: stimulation of the mouth; the pleasurable act of sucking and swallowing; being picked up and rocked and cuddled.

The child's earliest experiences of want and of gratification thus take place in connection with feeding. They also take place in con-

nection with the mother, or whoever is regularly taking care of the child. The mother becomes the first discriminated human object in the baby's world. Her behavior toward him has a lot to do with establishing a feeling of security. Depending on her attitude, the baby's world can become a place where you get what you need within a comfortingly short time and in good measure, or at the other extreme a place where you have to cry yourself black in the face for niggardly rewards.

The importance of feeding and of the mother in the infantile scheme of things can be demonstrated by considering the chief behavior problems that occur in the first year of life. According to English and Pearson[4] the symptoms all revolve around anxiety (crying, restlessness, insomnia, vomiting, and diarrhea), feeding (refusal of food, prolonged vomiting), and negativistic behavior toward the parents. These disorders result from one or more of the following causes:

> (1) The child has undergone a series of painful experiences during his feeding, (2) his need to suck for pleasure and not for nutrition has been frustrated, (3) his certainty that he can depend on his mother for the satisfaction of his needs has been destroyed because of her attitude to him, her behavior to him, or by the circumstances of her life, (4) his emotional comfort has been destroyed by wrangling in his environment.

As he develops, the infant becomes less helpless and society, mostly in the person of the mother, demands that he assume a larger share of activity in gratifying his needs. He is weaned from breast or bottle to cup, he learns to use a spoon and hold the cup, he pours from pitcher to cup, and so it goes until we find him milking the cow or earning his living so that he may pay the milkman. Progressively he replaces dependence on others with self-help. As his potentialities broaden, the trend from dependence to self-help can be observed in a multitude of activities. At first he must ask for things that are out of reach; soon he will climb on a chair that he has brought for the purpose. In another sphere he progresses from asking for pennies to earning pocket money to earning a living. In regard to entertainment he is at first dependent on others, but he becomes able to amuse himself, then perhaps to amuse his friends and his own children. Even intellectual stimulation at first comes to him from outside. Only gradually does he learn to sustain it for himself and give it to others.

[4] English, O. S. & Pearson, G. H. J., *Emotional Problems of Living*, New York, W. W. Norton & Co., 1945, p. 38.

Maladjustments Arising from Dependence.—While there are many motives that prompt a person to outgrow his childhood dependence, the process is not inherently easy. Most of its steps may be regarded as proceeding from an easier to a harder way of obtaining satisfaction. If these steps are to be taken, it is necessary that they carry rewards greater than those that may be obtained by remaining dependent. To a certain extent self-helping activities carry inherent rewards. A child is pleased with himself when he can climb up and get a cookie rather than ask his mother for it. But the more difficult acts of self-help generally require the added reward of parental praise and approval if they are to be fully learned. If dependence is perceived as babyish—something the parents don't like—and if self-help is made to mean being a big boy or girl—something the parents admire—the difficult transition can be successfully accomplished.

Maladjustment is on the way when dependent tendencies are not sufficiently outgrown. The individual can then be described as fixated in his childhood dependence. There may be certain constitutional factors—an inherent passivity, for instance—that favor fixation of dependent tendencies.[5] An important part, however, is played by the attitude of the parents toward this aspect of development. Two quite opposite attitudes can produce the result of fixating dependent tendencies: on the one hand spoiling and overprotection, on the other hand frustration and rejection. In the first case the child's dependent tendencies are given prolonged and ample gratification. Everything is done for him, so that it is never worth his while to proceed toward self-help. In the case of frustration and rejection there is insufficient rewarding of the dependent needs but at the same time no encouragement, in the form of approval, for acts of self-help. Little is done for him, and nobody cares whether he does it for himself. Under these circumstances of psychological starvation there is a strong lingering hunger for the provision of one's wants by others, together with a despair about obtaining such gratifications.

In their studies of psychological breakdown in the Air Force during the Second World War, Grinker and Spiegel show that fixated dependent tendencies constitute an outstanding liability.[6] They point out various forces in American culture, among them the growing necessity for higher education in order to achieve professional success, that tend to prolong emotional and financial dependence well

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[5] See below, pages 145–150.

[6] Grinker, R. R. & Spiegel, J. P., *Men Under Stress*, Philadelphia, Blakiston Co., 1945, esp. pp. 456–457.

into the twenties. They describe the different ways, "some subtle, some forthright, in which parents, especially mothers, attempt to bind the boys to the family bosom": urging them to live at home, continuing to provide for them, fussing over their health and warning them to run no risks. On the other side of the scale Grinker and Spiegel's case histories frequently show broken homes, alcoholism, unwanted parenthood, and all that goes to create frustration and rejection of children. Boys raised in either of these atmospheres were severely handicapped in adjusting to military life and combat stress.

An adult who has failed to outgrow childhood dependence meets constantly mounting difficulties. In his play he expects people to entertain him. In his work he wants everyone to help him and tell him how things should be done. He may even expect his parents to outlive and provide for him, or he wants his wife and perhaps his children to minister to his wants. His human relations tend to be one-sided and unsatisfactory to everyone. Furthermore, in American society with its loudly proclaimed ideal of independence and rugged individualism, he will find it increasingly difficult to establish a basis for self-respect. Unless he remains singularly blind to his own tendencies he will be painfully aware of the disparity between his passive acceptance of support and the ideal of the pioneer, the self-sufficient business man, or in general the free individual.

Neither of the two most obvious solutions of this conflict provide a basis for lasting adjustment. If the person gives in and accepts the fact that he is a *dependent adult,* he will have to endure the pain of feeling inferior. In all likelihood he will also have to endure chronic frustration because of the unwillingness of others to give him what he wants. If the person takes the opposite course and represses his dependent tendencies, adopting instead the role of a strong free hero, there is a danger that he will break under conditions of stress. This solution, called *reaction formation,* was the one arrived at by the bombardier Pearson Brack. Rather than be aware of his dependence and resemblance to his irresponsible father, he adopted the ego-ideal of strenuous self-help and self-sufficiency, extending it in military service to include the carefree, aggressive airman. Under stress, however, his reaction formation proved brittle, so that his latent weakness and yearning for support came to light.

Childhood Autonomy.—In many respects the child enjoys privileges of autonomy which he will later have to outgrow. Certain

forms of gratification can be achieved without help from anyone. Even from the time of birth he can relieve the tensions of bladder and bowel without assistance. Soon he becomes able to stimulate his own lips and sucking reflexes by putting his fingers in his mouth. As time goes on he will take pleasure in doing things his own way and in playing by himself according to his own fancies. He will learn to derive pleasurable sensations from playing with his genitals. Presently he will want to climb dangerous trees and get himself into other positions of peril. He will want to play with his electric train in his own somewhat disorganized way rather than the way his father wants to play with it. Just as every child depends on others for a substantial part of his satisfactions, so every child has other satisfactions that he can best obtain by himself. There are times when he wants to be left strictly alone.

Many of these privileges of autonomy have to be sacrificed in the interests of responsible behavior. People do not like a dependent individual who does not pull his weight in the boat, but neither do they like one so independent that he pulls on the oar only when he feels like it and does not synchronize his stroke with the other rowers. The process of socialization means giving up the childhood privileges of doing things when and how you please, regardless of others.

Parental pressure to sacrifice autonomy begins to make itself felt rather strongly during the second and third years. The child starts learning to wash his hands and brush his teeth, to keep his clothes clean, to pick up his toys, to share toys in play with other children. He is expected to observe some of the elementary rules of politeness in dealing with adults. But the earliest, and possibly the most important, pressure toward conformity is the question of bowel and bladder control. He is asked to give up his freedom and spontaneity in regard to the pleasurable and very personal bodily functions of elimination. For the convenience of others he must conform in the matter of times and places. One might say that the control of elimination is the first major step on the road toward social conformity.

It is of interest to compare the two learning situations: first, when a child is being asked to progress from dependence to self-help; second, when he is being asked to progress from autonomy to conformity. In the first case the adult has control of the means of gratification. If he wants to make the child drink from the cup rather than the bottle, he can manipulate two rewards, nourishment and approval, both of which he can attach to drinking from the cup. He is in a position to withhold the reward of a vital bodily need until

the child acts in the required way. In the second case it is the child who controls the means of gratification. The parent cannot prevent him from wetting and soiling or from refusing to perform on the toilet. The adult's bargaining position is far less advantageous. He has to make the child do something that from the child's point of view is simply less desirable than the old way. A considerably greater burden is therefore placed on the rewards of affection and approval. If the parent does not have these rewards to bestow, he will be in a weak position, and he will be tempted to make the learning process take place by using threats and invoking fear.

Maladjustments Arising from Training to Conform.—Healthy progression from childhood autonomy to an acceptable amount of adult conformity is accomplished when parents time their demands so that the child is capable of meeting them, allow for relapses and slowness in the learning process, and reward successful performances with approval and affectionate respect. Timing is important. It is foolish to expect successful bowel training before the neuro-muscular system is sufficiently matured to control the sphincters, or to expect the child to be quiet before he is capable of sustained inhibition. But the crucial feature in the learning is the attitude of the parents. When they are capable of bestowing genuine affectionate approval the child will feel that conformity to their wishes is a good bargain. This will carry him along to the point where he can realize the intrinsic advantages of behaving in such a way that he fits in with others and can share activities with them. At first he will need adult approval if he is to share his toys with another child; later he will find that he and his companion have more fun when they play together.

Maladjustment is likely to follow when the learning process deviates too widely from the course just described. Fixation of childhood autonomous tendencies can occur in two ways, analogous to those that fixate dependent tendencies. There can be spoiling, in this case generally called *indulgence,* when the parents simply do not make serious demands for conformity—when they do not have the firmness to require that the child pick up or share his toys, for instance. The effect of this laxity, however, is only to postpone the problem of conformity, leaving it to teachers and playmates who can hardly be expected to deal with it patiently. Thus the important maladjustments really spring from the second manner of fixation, analogous to the frustration and rejection mentioned before, but here better described as *coercion.* When training to conformity is

brought about by coercive methods the results are not apt to be satisfactory. Whether the child is tricked into conformity by clever parental devices, ridiculed and made to feel inferior, or threatened with painful and terrifying punishments, he feels no sense of reward for what he sacrifices. He feels that he has been exploited for his parents' benefit, and he resents it. His desire for the privileges of autonomy is by no means outgrown. If he conforms it is with resentment, and on every possible occasion he reverts to doing things exactly as he pleases, probably away from others. When sharing and socialized behavior are thus poisoned in their early stages it is very hard for him to reach the point where he can experience their intrinsic rewards.

In describing the child whose autonomous tendencies remain fixated and who views conformity with resentment, we have already anticipated what he will be like as an adult. In extreme cases he may become a professional non-conformist, doing everything in a way that obviously differs from social expectations; or he may fortify his right to do things when and how he pleases by adopting the life of a hermit. More commonly he will conform in outward ways but not with any sense of warmth or companionship. His latent autonomous tendencies will leak out in irritating ways like missing appointments or keeping everyone waiting. Major problems of adjustment await him when he accepts the full responsibilities of adult life as worker, parent, and member of the community. In some individuals, either from earliest childhood or later, the tension between coercive adult demands and autonomous inclinations is so painful that relief can be found only in *reaction formation.* Autonomous and resentful tendencies have to be repressed, and the person becomes a model of cleanliness, goodness, sharing, and all-around propriety. We have already seen that reaction formations are apt to be brittle when life becomes hard. They only look like adjustment; they are not the outcome of a willing, rewarded learning process that has made it possible to transmute and outgrow the childhood privileges of autonomy.

Sexual Tendencies

Early Childhood Sexuality.—One of Freud's most important contributions was the discovery that sexual needs are active throughout childhood. As we saw in the first chapter, Freud called attention to many aspects of child behavior that should clearly be called sexual, even when allowance is made for the fact that genital maturity and power of procreation have not been reached. The most

indisputable example is masturbation, which is universally practiced by children of both sexes, generally with increasing interest during the fourth and fifth years. Growing directly out of this is curiosity about the sexual organs and the anatomical differences between the sexes. This may lead to experimentation with other children and a quest for information from adults. Sexual excitation is undoubtedly much less differentiated from other forms of pleasant bodily stimulation than it will be after puberty when the special excitability of the genital organs reaches full development. Playing with the genitals very likely gives a pleasure that is as much like sucking the thumb, for instance, as it is like adult sexual excitation. Nevertheless we would overlook crucial problems of development if we tried to deny the presence of sexual elements in childhood behavior.

For the child to bring his sexual activities into line with adult demands is an early and difficult problem of adjustment. In spite of changes for the better, our culture is still fairly hostile toward childhood sexuality. The average parent is still misinformed about the effects of masturbation, whether it be in childhood or later. It is widely believed to produce nervousness, injury to the genitals or to reproductive capacity, physical weakening, feeble-mindedness, and insanity, although there is not a scrap of evidence for any of these contentions.[7] The average parent therefore tries to stamp out masturbation and does not hesitate to use coercion and direful threats.[8] The child's requests for sexual enlightenment are condemned as dirty and disgusting. Even parents who consider themselves unusually tolerant are apt to quail at the prospect of their young reeling off the facts of anatomy and childbirth in front of the neighbors. Society asks the child, and later the adolescent, to suppress much more of his sexuality than he is really able to suppress. He can accomplish it only if he is terrified to an extent that bodes ill for future adjustment and well-being.

In itself masturbation should be regarded as a normal and not unhealthy kind of behavior. It carries no menace to physical health or emotional adjustment. A parental attitude of tolerance toward masturbation and honest meeting of the child's sexual curiosity is thus entirely in accord with the facts. Seeds of maladjustment are being sown whenever sexual activity is linked to feelings of disgust and fear. Many people feel that unless considerable restraint is put on masturbation it will be practiced to excess and the individual will

[7] Jaques, E. H., "Miscomprehensions of Parents Concerning Child Health and Behavior," *American Journal of Orthopsychiatry*, 1942, Vol. 12, pp. 202–213.

[8] Huschka, M., "The Incidence and Character of Masturbation Threats in a Group of Problem Children," *Psychoanalytic Quarterly*, 1938, Vol. 7, pp. 338–355.

never be willing to give it up. As a matter of fact excess and fixation occur chiefly when the person is maladjusted in other spheres so that masturbation becomes the only available pleasure in a life which achieves no satisfactions elsewhere. The sexual activity in such a case is a symptom, not a cause. The real disorder is the person's failure to achieve happiness in work, play, and social relations. Joseph Kidd began to practice masturbation excessively at the point where he could no longer adjust, either socially or in athletics, to his school companions. Later he went in for a great deal of promiscuous sexual intercourse which, however, progressively lost its charm as he recovered. In retrospect he shrewdly described it as "another escape mechanism or shunt for my drives." Neither form of excess resulted in fixation. When his life as a whole became happy, his sexual needs readily adjusted themselves.

The Family Romance.—Childhood sexual feelings are probably at first associated only with the parts of the body from which they are derived. Their attachment to outside objects results from learning. From his study of the free associations and memories of neurotic patients, Freud came to the conclusion that the child's sexual feelings become attached first to members of his own family. Freud brought the matter under more direct observation when in 1909 he published the detailed case of a five-year-old boy named Hans.[9] This boy not only played with his own penis but on occasion invited his mother to do so and frequently asked to be taken into her bed and cuddled. At the same time he was afraid of his father, and when the many suppressions and disguises of this fear were untangled it proved to be directly related to the anger he supposed his father was feeling on account of his cuddling with his mother. Since then it has become a commonplace to notice that children around four and five take what looks like an erotic interest in their mothers, fathers, and siblings. The display often includes demands for an exclusive relation, with jealousy and hostility toward those who claim to share it. Freud was particularly interested in the little boy's erotic attachment to his mother. He called this the Oedipus situation, naming it from the tragedy by Sophocles in which Oedipus unwittingly kills his father and marries his mother. Freud also described the little girl's interest in her father and jealousy of her mother, which he called the Electra complex.

The importance of these erotic attachments has been vigorously

[9] Freud, S., "Analysis of a Phobia in a 5-year-old Child," *Collected Papers*, International Psycho-analytic Press, 1925, Vol. 3, pp. 149–289.

disputed. It is justly pointed out that love and sex are not the same: that the child's love for his mother, deeply grounded in the non-sexual satisfaction she has given him, might well wax strong and cause jealousy of rivals even without a trace of reinforcement from sexual needs. This criticism does not challenge the importance of affectionate relations and jealousies within the family circle. It challenges only the importance of a sexual element in these relations. It is hardly judicious, however, to fly to the opposite extreme and deny that erotic feeling can creep into parent-child and sibling relations. Sexual feeling is a natural accompaniment of affectionate relations, especially when they include caresses and other bodily contacts. The important point is that members of the family are the earliest available objects to which sexual feelings can become attached. However strong or weak it may be, the child's erotic interest rests at first within the family circle. This initial learning must all be unlearned at a later date when the sexual urge reaches maturity and the culture insists upon the incest barrier.

Sexual Tendencies in Later Childhood.—It was one of Freud's contentions that sexual excitability reaches a peak during the fourth and fifth years, then declines and rests latent until the changes of puberty. The so-called latency period now appears to be a phenomenon produced entirely by cultural pressures. It has no discoverable physiological basis, and it does not appear among primitive peoples, lower-class children in our society, or upper-class children in the permissive environment of a progressive school.[10] It is the result of ordinary upper-class and middle-class attitudes, and consists of a driving underground of sexual interests and behavior. During later childhood there is a culturally determined segregation of the sexes. Boys play with boys and girls play with girls, each group viewing the other with hostility and contempt. This arrangement collapses rather suddenly at puberty, but it has one important consequence for later sexual adjustment. Especially as the sex urge increases in the year or two before puberty, the available objects of erotic interest are almost exclusively members of the same sex. Learnings may get under way which will have to be unlearned again when the sex urge emerges more clearly into the open and the cultural ban on homosexuality is apprehended.

The Relearning Required at Puberty.—Puberty is marked by a fairly rapid series of physiological changes. Secretion of sex hor-

[10] Seward, G. H., *Sex and the Social Order*, New York, McGraw-Hill Book Co., 1946, pp. 158–162.

mones is sharply increased, the sensitivity of the genitals is heightened, and the sex urge assumes its adult form as a powerful drive that demands periodic relief of some kind. This change in itself, coupled with the appearance of the secondary sex characteristics of the body and the attainment of adult stature, represents a formidable problem of adjustment. The management of a strengthened and unruly impulse precipitates new conflicts and calls for new learning. But this is not the whole difficulty. As we have seen, sexuality already has a history, and this history has provided a highly unsuitable training for the adjustment that society now demands. Sexuality has been chiefly experienced in the form of masturbation. Insofar as it has connected itself with other people, they are people who now constitute forbidden objects: parents, siblings, friends of the same sex. On top of this, the young person is very apt to be carrying a heavy load of obstacles to new learning. If he has learned to feel that sex is a dirty, disgusting, dangerous urge, he will certainly be in conflict over its sudden strength in himself, and his new learning will take place under great disadvantage.

Fortunately there are strong forces on the side of growth. One of these is the sex urge itself, which activates fantasy and inquiry even when behavior is blocked. Another is the changed attitude of society, which brings a certain pressure toward heterosexual interests. As the young person matures, remarks are made about the dates that will soon begin, and even the old convention of the chaperone contains the clear if implicit suggestion that if left alone for a moment the young people would promptly be overcome by passion. Among his age-equals the adolescent finds strong support in channeling his sexual urges toward young members of the opposite sex. From adults the encouragement is likely to be qualified and less enthusiastic. It may amount to positive discouragement when the parents are overconcerned about financial and social status, wanting economic success to precede a socially suitable marriage. On the whole, however, it is misleading to represent that the adolescent battles his way to sexual adjustment through a solid phalanx of cultural prohibitions. The adjustment is inherently difficult, and cultural pressures may be out of step with bodily development, but there are considerable forces working on the side of relearning.

Maladjustments Arising from Sexual Tendencies.—Sexual maladjustments can arise at any point in development, but the crucial point is puberty. Troubles that occur earlier are of lasting importance chiefly to the extent that they block the relearning required at puberty.

Troubles in adult life almost always go back to some failure to accomplish this relearning. When sex has been treated as a normal function, talked about without shame, left pretty much to itself or gently restrained without creating alarm, its inappropriate childhood history is readily outgrown during adolescence and the foundation is laid for good adult adjustment. When stages of the childhood history become fixated, or when the relearning after puberty is directly blocked by hostile parental attitudes, maladjustment is likely to ensue.

For the sake of a symmetrical theory we might list indulgence as one of the causes of fixation. As we saw in discussing masturbation, however, mere indulgence is rarely a cause of serious difficulty. In the childhood histories of well-adjusted people one sometimes finds that the choice of parents as erotic objects has received a certain encouragement and that homosexual crushes just before puberty have been strong. These indulgences left no harmful after-effects because there was little to prevent adolescent relearning. The outstanding cause of fixation and the blocking of development is therefore the association of sex with feelings of inferiority, shame, disgust, and especially fear. Pressures of this sort are well-nigh universal in middle-class society. They produce an equally universal reaction formation: the so-called latency period of later childhood, when sexual interests and explorations are denied and driven underground. When sexual feeling continues to be suppressed and denied because it implies something shameful and dirty, or when it is even more completely repressed because it awakens anxiety, the chances of its participating in new learning at puberty are sharply reduced.

The following excerpt from a case history illustrates some of these points. A college freshman found himself waking up in the night with terrible attacks of anxiety, the only content of which seemed to be the fear of going insane. It appeared that when he was 4 or 5 his mother tried to stop him from masturbating by telling him that he would go insane. This threat did not suffice, but it was sharply reinforced when the family happened to drive by a state hospital. The boy saw patients behind barred windows making frightening noises, while his mother explained that those people were insane, a condition worse than death. This was a real threat, being locked up and separated from your parents, and it precipitated a reaction formation. Throughout childhood and even throughout his high-school years the boy renounced sex in all its forms. He had many activities and many friends. A group of congenial boys and

girls "tore around" together, but he was careful to emphasize the "wholesome cleanness" of their relations. Arriving at college he was shocked by dormitory conversation, still more shocked to notice that his eyes tended to linger on magazine pictures of pretty girls before he hastily turned the page. He did not permit himself to masturbate, and his sole sexual outlet consisted of wet dreams from which he awakened in acute anxiety. At 5 he had been so scared that at 17, confronted by the rising strength of the sex need, he could only repeat the desperate defense of complete suppression, a defense which he could maintain during the day but not at night. He was unable to avail himself of the encouragement toward heterosexual interest offered by his classmates or even to accept the permissive attitude of a college counselor whom he consulted. During his college years he fell in love several times, but he broke off each affair with the decision that full devotion to his lifework required celibacy. His fear of sexual feeling made it almost impossible to achieve the relearning required at puberty.

The Libido Theory.—It is often said of Freud that he reduced all motivation to sex. This is not an accurate statement, but it is true that he enlarged the conception of sex and perceived erotic elements in behavior that no one had previously thought to be sexual. Freud's expanded conception of sex is embodied in the libido theory, which is still a cornerstone in the psychoanalytic theory of development. As Fenichel points out in a recent treatise, Freudians do not deny the independent existence of vital urges such as breathing, hunger, thirst, defecation, urination. But they regard these as so fixed in their aims and so little capable of variation that they play only a minor part in psychological development. Sexual urges, on the other hand, "if they cannot find gratification in their original form, have the capacity to change, to alter their objects or aims, or to submit to repression by the ego and then to make themselves apparent again in various ways and in different disguises." [11] They therefore play a significant and complex part in forming the personal pattern of tendencies.

According to the libido theory, all pleasurable stimulation of sensitive regions of the body is to be classed as erotic. Pleasurable excitation of the lips by thumbsucking, pleasurable excitation of the anal zone by passing or withholding feces, pleasurable excitation of the genitals by masturbation are all expressions of a single basic

[11] Fenichel, O., *The Psychoanalytic Theory of Neurosis*, New York, W. W. Norton & Co., 1945, pp. 55–57.

energy, the libido. It is assumed that all these manifestations have "a common chemistry as their basis," hence the conclusion that "there is but one libido which may be displaced from one erogenous zone to another." [12] Psychological development is believed to depend so centrally upon libidinal urges that it can be adequately conceptualized as a succession of *stages of libidinal organization.* The first year is the oral stage, when the mouth is the most excitable area. The second and third years form the anal stage, when libido is more readily excited in the mucous membranes of the anal region. The fourth and fifth years constitute the early genital and phallic stage, the final genital stage being reached at puberty. Many traits and tendencies in later life are looked upon as derivatives of the infantile stages of libidinal organization. Thus a dependent adult is referred to as an oral character; it is conceived that he became fixated in the oral stage and did not properly advance through the later stages of libidinal organization, or perhaps that he has regressed to the oral stage as a consequence of frustrations. Similarly, adult stubbornness and stinginess are described as anal retentive traits derived from the child's refusal to sacrifice the pleasure of retaining his stool when asked to move his bowels on schedule.

The account of development presented in this book owes much historically to the psychoanalytic school. What has been said in connection with dependent, autonomous, and sexual tendencies draws a great deal from what Freud and his followers have described under the oral, anal, and genital stages. By speaking of them as separate tendencies, however, we have avoided committing ourselves to the highly speculative theory that there is only one libido based on a single chemical process. At present there can obviously be no factual decision on this hypothesis, and some members of the psychoanalytic group have themselves begun to question its value.[13] Furthermore, in the case of dependence and autonomy, we felt it important to emphasize not so much the bodily pleasure involved as the *character of the demand for change:* on the one hand, the progress from dependence toward self-help, on the other the progress from irresponsible autonomy to responsible conformity. In regard to these two tendencies the zone that yields pleasure is of secondary importance. The primary thing is learning to renounce and restrict infantile satisfactions in the face of social pressure. The problems lie in the conditions under which this learning must take place.

[12] Fenichel, O., *op. cit.*, pp. 56, 74.

[13] Alexander, F., "Psychoanalysis Revised," *Psychoanalytic Quarterly*, 1940, Vol. 9, pp. 1–36; French, T. M., "Some Psychoanalytic Applications of the Psychological Field Concept," *Psychoanalytic Quarterly*, 1942, Vol. 11, pp. 17–32.

Aggressive Tendencies

In this book we shall use the word *aggression* with a limited meaning. It will be restricted to tendencies that aim at injury and destruction. Such tendencies are accompanied, when fully conscious, by feelings of anger and hate. In everyday speech and even in the psychological literature one frequently finds aggression confused with self-assertive behavior such as competition or dominance. While it is true that aggression can easily become fused with assertive tendencies, we shall stick closer to facts if we distinguish the two and reserve aggression specifically for man's angry, destructive, and hateful inclinations.

Nature of Aggressive Urges.—Aggression has been most successfully conceptualized as a response to frustration.[14] It is not, like sex, an internal drive that craves periodic satisfaction. It is instigated by outside events: events which prevent the attainment of some needed gratification, which restrict or interfere with free activity, or which constitute a painful injury either to the body or to the self-esteem. Without frustration there would be no aggression.

Different as they are in basic nature, aggressive and sexual urges play a not dissimilar part in psychological development. It is instructive to compare them. The same words apply to aggression that Fenichel applied to sex: aggressive urges, "if they cannot find gratification in their original form, have the capacity to change, to alter their objects or aims, or to submit to repression by the ego and then to make themselves apparent again in various ways and in different disguises." Suppose that a man's ire is aroused at work when his boss unjustly criticizes him. He says nothing, but when he gets home he kicks open the front door, yells at the dog, criticizes his wife's cooking, remembers to pay his union dues, decides to attend a political rally which is aiming to throw the incumbent party out of power, goes to bed and dreams that he knocked a heavier opponent out of the ring. The postponements and ramifications of aggression, like those of sex, are many and subtle. Nursery school teachers know the sight of angry and distressed children throwing things around, breaking toys, hitting other children, not because of anything that happened in school but because of chronic frustration

[14] Dollard, J., Doob, L. W., Miller, N. E., Mowrer, O. H. & Sears, R. R., *Frustration and Aggression*, New Haven, Yale University Press, 1939; and see the account by Symonds, P. M., *The Dynamics of Human Adjustment*, New York, D. Appleton-Century Co., 1946, Ch. 4.

at home. Adults sometimes harbor resentments and grudges for years, finally taking them out through channels far removed from the original circumstances. Aggression can wait and can transform itself in innumerable ways.

The transforming and disguising of aggression has been shown under controlled conditions in some ingenious hypnotic experiments by M. H. Erickson.[15] The subject, a deeply hypnotizable young man, was hypnotized on several occasions at a small gathering of advanced students. Each time he was given some kind of post-hypnotic suggestion designed to force his behavior into disguised forms. In the following example the suggestion embodied conflicting attitudes consisting of overt polite interest and concealed hostility.

> During hypnosis the subject was instructed that after he awakened Dr. D. would begin talking to him about some abstruse subject in which he was not at all interested, and that although he would actually be profoundly bored he would try to appear interested. He was told that he would want very much to close the conversation, that he would wish for some way of shutting off this interminable flow of words, that he would look around him in the hope of finding some distraction, and that he would feel that Dr. D. was terribly tiresome. He was then awakened, whereupon Dr. D. began the conversation. Although the subject appeared to be politely attentive, Dr. D. would occasionally say, "Perhaps you're not interested?" The subject would reply with excessive emphasis, "Oh, yes, certainly, I'm very much interested." Now and then he would interrupt Dr. D., trying to pin him down to some definite point for discussion, but each time this effort was evaded. At length the subject began glancing about the room and was noted casually to observe an open door. Finally he interrupted Dr. D., saying, "Excuse me, I feel an awful draft," and got up to close the door. As he did so he was asked what he was doing. He replied, "The air seems to be awful hot; I thought I would shut off the draft." When the hypnotist pretended not to understand and asked him what he was doing, the subject replied, "Why, I just shut the bore." His remark was then repeated by the hypnotist for the benefit of those in the audience who had not heard it. When the subject heard his statement given as "shutting the bore" he started visibly, seemed tremendously embarrassed, and with much urgency turned to Dr. D., saying, "Did I say that? I didn't mean that. I just meant I closed the door." He was very apologetic in his whole manner and bearing.

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[15] Erickson, M. H., "Experimental Demonstrations of the Psychopathology of Everyday Life," *Psychoanalytic Quarterly*, 1939, Vol. 8, pp. 338–353. Reprinted in Tomkins, S. S. (ed.), *Contemporary Psychopathology*, Cambridge, Harvard University Press, 1943, pp. 517–528.

In addition to their capacity for delay and transformation, aggression and sex are alike in the attitude they evoke from society. Aggression often becomes the object of a strenuous disciplinary campaign. The force of this campaign differs with class status: Davis and Dollard, for instance, have shown that little is done at the lowest socioeconomic levels to restrain children from fighting and venting their anger.[16] Middle- and upper-class parents, on the other hand, exert themselves energetically to suppress a tendency which they recognize as not only inconvenient in the home but dangerous to society as a whole. Some parents view aggression with so much alarm that they cannot bear to have their children play with toy soldiers or sing militant hymns or push and use their fists on the playground. They may even try to preserve such an unbroken atmosphere of sweetness and light that they frown on conversation that sounds argumentative or satirical. A substantial portion of our culture tries to suppress aggression, like sex, to an extent that makes no allowance for the nature of the basic urge.

Problem of Channeling Aggression.—When we realize that aggression springs from frustration, we can see that its arousal cannot be prevented. Frustration is inevitable and frequent. The passage from dependence to self-help and from childish autonomy to responsible conformity can hardly be accomplished without moments of severe frustration. When a person graduates from the frustrations of parental and school discipline he steps into the midst of those that arise out of his work, his family, and the social order as a whole. Aggression is bound to be aroused. This fact is the starting point in considering the problems of adjustment.

In a mature person aggression is handled by a flexible system of controls and outlets. He may lose his temper over irritating trifles, allowing himself a brief verbal outburst when the door sticks or the car will not start, but his anger readily subsides when he sees the frustration in its true proportions. He is able to control such outbursts when necessary without building up a feeling of resentment. With greater annoyances, such as unmerited criticism or infringements on his rights, his anger will be channeled into defending himself coherently and reaching an understanding. Against major and chronic frustrations his aggression will be still further channeled into constructive action, very likely in association with others, designed to lessen and remove the cause of frustration.

[16] Davis, A. & Dollard, J. *Children of Bondage*, Washington, American Council on Education, 1940.

Many people count it a great experience when they discover an effective way to combat evils instead of merely resenting them. Aggression alone is apt to be an explosive, irrational thing. Aggression channeled with other tendencies can become an important asset for civilization, as in the work of those who have been angry at man's inhumanity or at the unnecessary ravages of disease.

A flexible system of controls and outlets is most easily attained when the child begins his development in an atmosphere that is tolerant but firm on the subject of aggression. No child enjoys being in a temper. The violent force of the urge may even be quite alarming to him. In fact it can be said that there is no pleasure in aggression in itself. What we want is the removal of the frustration. Experience will readily teach us that frustrations can be better removed if anger is controlled sufficiently to permit coherent and perceptive action. One learns, for instance, that losing one's temper in an argument makes one both ridiculous and ineffective. The child is ready to feel his aggression, to admit it, to accept help in controlling it, and to appreciate that he gets better results by doing so. On this his parents and teachers can build.

Failure in adjusting aggression can come about either when no attempt is made to curb it or when the attempt is so strenuous that no outlets are left for reducing the tension. The first is probably the lesser of the two evils. Adults who, when angry, smash the furniture or punch somebody in the face are scarcely conducive to socialized living, but they are at least free from enduring malice and calculated hate. These spring more often from a pattern of personal tendencies in which childhood aggression has been too heavily suppressed, denied outlets, fixated, covered with a brittle reaction formation. The suppressive pattern entails two dangers. It may be so complete that the person can almost never express aggression or even become aware of such feelings in himself. This condemns him to a degree of internal tension and conflict which is incompatible with adjustment and even with health. On the other hand, from just such a soil spring those irrational aggressive tendencies, breaking through the reaction formation, that sometimes constitute grave social dangers. To take one example, Frenkel-Brunswick and Sanford have found that anti-Semitic sentiments are strongest in individuals whose outward behavior conforms closely to the standards of middle-class propriety. The outstanding feature of a group of strongly anti-Semitic American college women studied by them was "a restricted, narrow personality" with a strict conventional upbringing "to which there is complete surrender. Basic impulses, which

are conceived as low, destructive, and dangerous, have to be kept repressed and can find only devious expressions, as for instance in projections and 'moral indignation.' "[17] When aggression is too forcibly driven underground it either wrecks individual adjustment or comes back again in dangerous and irrational ways. An adjustive pattern of controls and outlets must be compatible with both individual health and social welfare.

Ambivalence.—One of the things that complicates human relations is the mixture of love and hate that we call ambivalence. The child's first social experiences, those taking place within the family circle, occur with people upon whom he is dependent, whom he loves, but who make demands on him which arouse aggressive feelings. His parents meet his needs and give him affection, but also move him along the road toward socialization. His siblings serve as playmates and allies, but also become rivals in relation to the parents. We have seen that the sexual character of the Oedipus complex is open to question, but there can be little doubt of its importance as a problem in ambivalence. The mother gives food and love and care, but she also is responsible for weaning, bowel and bladder training, and many other demands for self-help and conformity; in addition, she loves and cares for the other members of the family. It is thus in a relation already inherently ambivalent that the child must learn to share love. Perhaps abruptly, through the birth of a sibling or the father's return from war, perhaps gradually as he apprehends that his father and older siblings have claims on his mother equal to or greater than his own, he must learn that love has to be shared with others and cannot be an absolute monopoly. He must contend with feelings of jealousy and find out that these must be controlled if one is to retain even one's share of the mother's affection. He must learn also to make peace with the hated rivals with whom he is obliged to live and to discover the positive satisfactions that may be gained by associating with them.

The child's experiences with ambivalence in the family circle have an important influence on his affectionate relations in later life. Just as he may become fixated in childhood patterns of dependence or of autonomy, so he may become fixated in jealous, resentful, suspicious attitudes which will poison his later intimate relationships. If the inevitable frustrations in such relationships can be frankly recognized and the aggressions exposed to the light, further learning and ad-

[17] Frenkel-Brunswick, E. & Sanford R. N., "Some Personality Factors in Anti-Semitism," *Journal of Psychology*, 1945, Vol. 20, pp. 271–291.

justment generally become possible. The best practice for these important later adjustments is to have been able to make them in the childhood family circle. As we have seen throughout this chapter, fixation may occur because childhood tendencies are indulged so that there is no pressure to outgrow them. A much favored child may be allowed a monopolistic relation with one of the parents and permitted to express aggression against the other parent and the siblings. More important, however, is fixation that results from too zealously suppressing the jealousies and rivalries. If the child cannot express such feelings, if he has to pretend that they do not exist in him and that nothing but love prevails in the family circle, he is reduced to a position of peculiar helplessness. He cannot even stand up for his rights when he believes they have been violated by other members of the family. This is the situation that leads to inward boiling and to lasting resentments. It prevents the liquidation of annoyances as they arise, thus building up the resentful feeling that stands in the way of affectionate and cooperative tendencies. Repeated in later life, for instance in marriage, it produces an outwardly serene but inwardly contaminated relation. Lovers who quarrel, make up, and readjust the cause of their quarrel are more likely to stay lovers than those who sweetly avoid controversy and secretly build up resentments.[18]

Sibling Rivalry.—The problem of adjusting loves and hates within the family circle is well illustrated in the example of sibling rivalry. With the birth of a new sibling, the older child has to accept a reduction in parental attention. He witnesses the baby enjoying privileges of dependence and autonomy that he himself is in the process of outgrowing. Inevitably he feels jealousy and expresses hostility, but this does not remove the frustration nor win back the parents' love. Levy has shown that jealousy of a younger sibling can lead to all kinds of problems: night terrors, negativism, loss of acquired bowel and bladder controls, self-injuries such as head-banging, and even speech disorders. These symptoms can be relieved by allowing and encouraging the child to express his jealous anger in destructive play with dolls representing the baby and the mother.[19] The success of this method of treatment indicates that for these cases the original difficulty lay in excessive suppression. The child was

[18] The effect of childhood family relationships on the relationships of later life is well described by Flugel, J. C., *Psychoanalytic Study of the Family*, London, Hogarth Press, 1921, esp. Chs. 11–13.

[19] Levy, D. M., "Hostility Patterns in Sibling Rivalry Experiments," *American Journal of Orthopsychiatry*, 1936, Vol. 6, pp. 183–257; "Release Therapy," same journal, 1939, Vol. 9, pp. 713–736.

made to feel so guilty and fearful that he could not allow himself to express his anger, perhaps even to feel it, in direct form. As a result it overflowed in disguised and indirect ways. Sibling rivalry can be overcome if the child is made to feel that the parents still love him just as much, even though they have to fuss over the baby, and if he is given extra approval in the role of a bigger child who perhaps helps with the baby's care. In the course of time playing with the baby will prove to be fun. But these new learnings cannot take place when the child behaves outwardly as if all were well, so that the parents see no need to help him, and when he boils with an inward anger that conflicts with every impulse toward friendliness. Levy's method of play therapy awakens in many people the fear that after smashing the mother doll and baby doll the child will go home and smash the real baby and mother. This fear is based on a defective theory of learning. The smashing of the dolls, with the permission and even encouragement of the therapist, discharges the pent-up resentment and frees it from the suppressive burden of shame. Conditions favoring new learning are thus re-established. The child goes home ready to feel his aggression without shame, but also ready to respond to parental affection, accept restrictions, work out an adjustment to the new situation.

Effect of Parental Attitudes on Development

Throughout our study of the tendencies that offer special difficulties in adjustment—dependent, autonomous, sexual, and aggressive tendencies—we have gone back to the childhood situation and stressed the importance of parental attitudes. In the earliest learnings, in fact throughout childhood, the actions of the parents are of major significance. We have sketched the normal course of development and the parental attitudes likely to encourage it. This has led us to perceive that maladjustment results in large part from one of two extreme deviations in parental attitude: either an *excessive indulgence* of childhood tendencies with a minimum of emphasis on growing up, or an *excessive suppression* of these tendencies with an expectation that the child can grow up all at once rather than through the slow learnings that result in channeling and renunciation. Parental attitudes are not the only determinants of psychological development, nor are the experiences of childhood the only ones that shape the personal pattern of tendencies. But the effect of parental attitudes is sufficiently important so that we should examine some recent research on the topic.

Classification of Parental Attitudes.—In order to conduct research on the effect of parental attitudes it is necessary to place these attitudes in some kind of classification. This can be accomplished only by doing a certain violence to the facts. In most families the child is affected by two parents whose influence may or may not be equal and whose attitudes are not necessarily the same. Sometimes the picture is complicated by grandparents, an aunt or uncle, a maid or a governess. Parental attitudes may change considerably in the course of life. Joseph Kidd's parents, for example, made him a great favorite at first, but later shifted their preference to his brothers who surpassed him in social achievements. Classification has to ride roughshod over these variations, just as it has to neglect the individual peculiarities that color the attitude of any given parent. As L. B. Murphy points out, "the values of individual mothers even in a limited culture-area may vary considerably." [20] A mother who is protectively indulgent during the child's first year may change to a nervous inhibitor when he begins to toddle and explore. One mother may accept boisterous activity, but become angry at dirt or when something gets broken. Another may reserve her displeasure for thumb-sucking or bed-wetting which she considers regressive. In spite of these variations, however, it is generally possible to detect over-all consistencies in parental attitudes which justify a rough classification.[21]

In order to simplify the problem for purposes of research, Symonds proposed that parental attitudes should be laid out on two axes, one extending from *acceptance* to *rejection*, the other from *dominance* to *submission*.[22] Acceptance implies that the child is loved and receives kind and thoughtful treatment. Rejection means that the child is essentially unwanted so that love, care, and consideration are lacking in his life. By dominating parents is meant those who control with strict authority, plan the child's behavior extensively, punish or criticize him for failure to do as they desire. The opposite end of this axis, submission, offers certain difficulties. In his studies Symonds gave it a double meaning, on the one hand indulgence, on the other a sort of neglect. It leads to greater consistency if we restrict ourselves to the first meaning and consider the

[20] Murphy, L. B., "Childhood Experience in Relation to Personality Development," Ch. 21 in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders*, The Ronald Press Co., 1944, Vol. 2.

[21] Individual variation with over-all consistency is well brought out in two parallel case studies of the mother-child relation during the first five years of the child's life: Shirley, M. M., "The Impact of the Mother's Personality on the Young Child," *Smith College Studies in Social Work*, 1941, Vol. 12, pp. 15–64.

[22] Symonds, P. M., *The Psychology of Parent-Child Relationships*, New York, D. Appleton-Century Co., 1939, pp. 18–28.

second dimension as extending from *dominance* to *indulgence*. The attitude of any parent can be placed with reference to these two axes.

Acceptance-Rejection.—The importance of the acceptance-rejection variable is widely recognized. Horney, for example, makes the sweeping statement that in the childhood histories of neurotic patients "the basic evil is invariably a lack of genuine warmth and affection." [23] Baldwin, Kalhorn, and Breese, in a detailed observational study of parent-child relationships, reach the conclusion that "acceptance-rejection is the fundamental dynamic; it is the amount of acceptance which determines and delimits the other aspects of parental behavior." [24] These investigators observed a population which included among others a group of farm families and a group of college teachers and professional people whose status and background was equivalent to an upper-class urban group. As a group, the latter parents were inclined to treat the child "as an individual in his own right," an attitude which the authors call *democratic*. Such an attitude implies a high degree of acceptance and a slight tendency toward indulgence. The child's interests are placed first whenever possible, but without sacrificing discipline and restrictions. In contrast, the farm parents tended toward an attitude described as "casual," which may be considered as almost at the midpoint on both of the Symonds dimensions. "Children on a farm," these investigators comment, "are, as a rule, neither warmly and affectionately accepted nor coldly rejected and resented. Instead they are accepted in a matter of fact way, given sufficient attention to take care of their needs, but left on their own a good deal of the time." [25] This study brings out the close relation between parental attitudes and cultural background. In the small urban family of today, which has lost most of its economic and educational functions, the meaning of home to the child becomes virtually equivalent to his emotional relations with his parents. Acceptance or rejection, in particular, becomes the overwhelmingly important feature of home life. When acceptance reigns, the child may be provided with an unusually favorable atmosphere—the "democratic" attitude. When rejection prevails—a "lack of genuine warmth and affection," as with Horney's group of urban patients—the results may be serious enough to precipitate neurosis.

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[23] Horney, K., *The Neurotic Personality of Our Time*, New York, W. W. Norton & Co., 1937, p. 80.

[24] Baldwin, A. L., Kalhorn, J. & Breese, F. H., "Patterns of Parent Behavior," *Psychological Monographs*, 1945, Vol. 58, No. 3, p. 53.

[25] *Ibid.*, p. 58.

In the Symonds studies a group of rather markedly accepted children was compared with a strongly rejected group. The accepted children were found more confident, stable, and friendly, better socialized, and (depending evidently on temperamental factors) either calm and deliberate or interested and enthusiastic. In contrast, the rejected children tended to be unstable and confused, either rebellious and restless or apathetic and indifferent, and in any case poorer in application to school work.[26] Bert Whipley, the chronic delinquent described in the last chapter, was a severely rejected child, at least on his father's part, and in one way or another he exemplifies every one of these characteristics.

Recalling what has been said earlier in this chapter, it is not difficult to see why acceptance promotes healthy development and rejection defeats it. We have repeatedly seen that the child's earliest steps in learning to control and channel his babyish impulses require the reward of parental approval if they are to carry over to the point where they will be found rewarding in their own right. Without a fund of parental love the child's learning will proceed unwillingly, if at all. A loving mother, moreover, is more apt to perceive what a child is doing, sense his feelings, notice and remember the daily events of his life; in short, to follow the child's development so that she is better able to make her own actions timely and appropriate. None of these advantages is present in an atmosphere of parental rejection. As far as the child can see, he is treated inconsiderately with no respect for his real needs and interests. He is frequently frustrated and disappointed. As an object of parental indifference or hate, he is given no motive to develop toward responsible adulthood.

Dominance-Indulgence.—When children are strongly dominated, the effects are likely to show in their attitude toward authority and their power of initiative. Much depends, of course, on whether the domination is fused with acceptance or with rejection—on whether discipline is kindly or cold. Symonds compared two groups of children, one very much dominated, the other very much left to its own devices. The dominated children were found to be more strongly identified with their families, docile and shy, apt to have feelings of inferiority and to be confused and bewildered in dealing with other children or with new school work. Greater resourcefulness, independence, and successful relations with contemporaries were found in the other group, but along with this went a tendency toward ex-

[26] Symonds, *op. cit.*, Ch. 2.

cessive rebelliousness and overconfident conceit.[27] We have seen that when parental attitudes deviate either toward excessive suppression or excessive indulgence, the children are likely to run into adjustive difficulties. The subjects in Symonds' study were normal school children, but with a little exaggeration their tendencies might easily produce maladjustment.

Maternal Overprotection.—The relationships discussed in this section emerge with striking clearness in a study of maternal overprotection by Levy.[28] This investigator studied in great detail twenty cases of extreme maternal overprotection. The mother's behavior was characterized by (1) excessive contact (mother being the child's sole and constant companion even up to ages such as 12 and 16), (2) infantilization (dressing child of 8 and accompanying him to school, shining shoes for boy of 15), (3) prevention of independent behavior (helping with homework, excusing from chores, preventing the formation of friendships). Levy points out that such a situation almost constitutes a controlled experiment in parent-child relationships: the effect of maternal overprotection is to minimize other influences acting upon the child, even the influence of his father. The twenty cases were selected in such a way that they all represent a maximal degree of *acceptance*. The behavior of the mothers sprang from truly overwhelming love. But the cases break down into two sharply differentiated groups on the dimension *dominance-indulgence*. Part of the mothers were very much bent on trimming the child to a desired shape. Their offspring were docile, clean, neat, obedient, polite, diligent in school work, but so timid and submissive on the playground that their companions called them sissies and fools and their teachers considered them problems in social adjustment. In the rest of the cases the maternal attitude was so indulgent as to give what Levy calls "a luxuriant growth to infantile tendencies" with no barriers to the expression of aggression. At home these children would often break loose with slapping, kicking, throwing food on the floor, impudence, and a general high-handed tyranny. With other children they were cocky and bossy, inclined to show off, very poor at friendship and co-operation.

The twenty children were all patients at a guidance clinic, and Levy reports that efforts at therapy were rather ineffective, inasmuch as neither mother nor child really desired to change. Nevertheless

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[27] Symonds, *op. cit.*, Ch. 3.

[28] Levy, D. M., *Maternal Overprotection*, New York, Columbia University Press, 1943.

in a follow-up study several years later it was found that only four were seriously maladjusted and several were doing very well. In spite of their early handicap of either excessive domination or excessive indulgence, they had at least enjoyed the advantage of being accepted—the assurance that they were loved and esteemed by the most important person in their world.

There are various investigations of the opposite type of childhood environment, one containing a minimum of maternal contact and acceptance. Particularly noteworthy is a series of studies by Goldfarb on children reared during their first three years in the impersonal environment of an institution.[29] Even when examined a good many years later, these children show "generalized retardation and impoverishment in all aspects of personality."

In this chapter we have dealt chiefly with the early childhood aspects of development. We considered the general nature of development and maladjustment, then we examined in more detail certain tendencies that offer particular adjustive problems: tendencies toward dependence and autonomy, sexual and aggressive tendencies. With these facts in mind we looked into the effect of parental attitudes on the child's development. Before we continue our description of the development of personality it will be well to remember certain shortcomings in what we have discussed here. (1) We have described the child as if he were passive, like a piece of clay being moulded by pressures from outside. Although the account has been organized around urges, we have been concerned with their control and channeling rather than with their driving force. In reality the child is an active agent in his own destiny. (2) We have spoken as if all children were alike, their personal pattern of tendencies being the product of the parental and cultural impress. In reality they may be very different in constitution, temperament, and ability. Do overprotective mothers choose dominative or indulgent roles out of their own preference, or does the child's own docility or activity force these roles upon them? (3) We have spoken of one tendency at a time, doing scant justice to their interaction and to the integrative pattern into which they finally fall. We have still to consider how the personal pattern of tendencies becomes a pattern. All of these problems, necessarily set at one side in this chapter, will be our concern in the next.

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[29] Goldfarb, W., "Effects of Psychological Deprivation in Infancy and Subsequent Stimulation," *American Journal of Psychiatry*, 1945, Vol. 102, pp. 18–33. Contains references to five previous articles.

SUGGESTIONS FOR FURTHER READING

For a more extended description of the developmental problems of childhood, the reader is referred to O. S. English & G. H. J. Pearson, *Emotional Problems of Living: Avoiding the Neurotic Pattern* (New York, W. W. Norton & Co., 1945). Although development is divided into oral, anal, phallic, latent, and adolescent periods, the book does not suffer from rigid adherence to the original libido theory; it is a realistic and practical account of psychological development. An excellent introduction to the psychoanalytic theory of personality is to be found in Ives Hendrick, *Facts and Theories of Psychoanalysis* (2nd ed., New York, A. A. Knopf, 1939), Chs. 1–6. For the student who wishes to pursue the matter further there is Otto Fenichel's complete and scholarly work, *The Psychoanalytic Theory of Neurosis* (New York, W. W. Norton & Co., 1945), of which the first six chapters present a developmental psychology. A sharp criticism of the libido theory is given by K. Horney in *New Ways in Psychoanalysis* (New York, W. W. Norton & Co., 1939), Ch. 3.

The essay by O. H. Mowrer & C. Kluckhohn entitled "Dynamic Theory of Personality" (J. McV. Hunt, ed., *Personality and the Behavior Disorders*, New York, The Ronald Press Co., 1944, Vol. 1, Ch. 3) deserves careful study for its attempt to relate psychological development to learning theory and to cultural anthropology. A recent book by R. R. Grinker & J. P. Spiegel, *Men Under Stress* (Philadelphia, Blakiston Co., 1945) is of great interest not only for its central theme, the study of breakdown under combat stress in the Army Air Force, but for its numerous contributions to personality dynamics (see especially Chs. 2, 3, 6, 8, 15).

A great deal of material relative to sexual tendencies is brought together in G. H. Seward's *Sex and the Social Order* (New York, McGraw-Hill Book Co., 1946). The survey includes sexual behavior of animals, sexual development in man, and changing sex roles in western culture. An important book on aggression is *Frustration and Aggression* by J. Dollard, L. W. Doob, N. E. Miller, O. H. Mowrer & R. R. Sears (New Haven, Yale University Press, 1939).

D. M. Levy's *Maternal Overprotection* (New York, Columbia University Press, 1943), primarily a report of a specific research, is one of those rare monographs that conveys a rich experience of interest and insight.

CHAPTER 4

THE INTEGRATION OF PERSONALITY

In a living organism a great many processes go on at the same time. These processes affect each other and work according to some kind of pattern. It is almost impossible to talk about this pattern of happenings without taking it to pieces and considering one process at a time. In the last chapter we saw that the development of personality goes forward through differentiation and integration of tendencies. We then discussed development in connection with certain tendencies that are apt to be the source of problems. The emphasis was a little on the side of differentiation. We made no attempt to show how the tendencies affect each other and form a workable pattern. In this chapter the emphasis will be a little on the side of integration. Let us admit, however, that the distinction is more or less impracticable. Differentiation and integration cannot really be separated. When a parent tells a child to use his knife and fork the way big children do, he simultaneously suggests a new differentiated channel and an integrated pattern of conduct—the ideal of behaving like a bigger child. Our main theme in this chapter will be integration, but in pursuing this theme we shall come across further material on the differentiation of tendencies.

The Concept of the Self

Taking a short historical perspective, it can be said that the self or ego has recently emerged and risen to prominence in psychology. Taking a longer perspective, the self has experienced a brief absence from the center of the psychological stage and has now returned to play the indispensable role allotted to it by serious thinkers throughout the ages. The self was placed in obscurity only for that brief period—perhaps from 1880 to 1930—when psychology, fascinated by the methods and models of the physical sciences, devoted itself to experiments on elementary processes and postponed the attempt to understand the person as we know him in everyday life. From abnormal psychology, which of necessity continued to take people as its subject-matter, this concept was never really absent. The self or

ego is one of the most difficult concepts in the whole realm of thought. It would simplify things if we could do without it. But no one can write sensibly about people without using this concept or its equivalent. As Allport puts it, "the existence of one's own self is the one fact of which every mortal person—every psychologist included—is perfectly convinced." [1]

The necessity of using the concept of the self does not confer the privilege of misusing it. As we use concepts in our thinking, they tend to get firmer and harder. Thought about fluid events tends to curdle and form solid clots. Before long we begin to think of the self as if it were a lump in the personality. It becomes a region, an institution, an entity, and pretty soon someone starts an argument as to whether a certain piece of behavior belongs in the self or out of it, proceeds across an ego boundary, or involves a collision between the ego and something else. In the end the self is standing like a solid boulder of granite in the midst of personality, and one's thinking about it is as flexible as granite.

Need for a Unifying Concept.—In spite of its dangers, we need the concept of the self or ego—we shall use these two words interchangeably. Without such a concept we have no point of anchorage for the personal pattern of tendencies. When we speak of a personal pattern our phrase carries several implications. It means, first, that the individual's tendencies form an *arrangement of related strivings*, rather than a list or chance conglomeration. It means, in the second place, that this pattern has no standard form, but *differs from one person to another* according to his nature and history. It must have still a third implication if we are going to talk about living people rather than inanimate systems. It must mean that the tendencies are patterned in order to accomplish the maintenance and expansion of a living unit. They function within an organism, and they are *patterned to make that organism live and grow.* That is the principle that governs the patterning and makes it intelligible.

The concept of the self helps us to bear in mind the basic fact of the unity of the organism. If we forget this basic fact, we are apt to talk about urges and differentiated tendencies as if they were tenants in a boarding house, each leading an independent life and submitting to a pattern of rules and regulations only because the other tenants interfere so badly. In practice none of us regards either himself or anyone else as a boarding house full of independent

[1] Allport, G. W., "The Ego in Contemporary Psychology," *Psychological Review*, 1943, Vol. 50, pp. 451–478.

tendencies. If I lose my temper and make a childish scene, I do not blame one of my tenants, the aggressive urge; I blame myself for letting this tenant get out of hand. If my neighbor starts an unpromising venture and makes a success of it, I do not congratulate his need for achievement; I congratulate the man. We think of ourselves and others not as conglomerations, not even just as patterns, but as units. Some writers maintain that it is a mistake to talk in the first place about separate tendencies, urges, or drives. Goldstein, for instance, believes that "the facts which are taken as foundations for the assumption of different drives are more or less abstractions from the natural behavior of the organism." He prefers to speak of "only one drive, the drive of self-actualization," manifesting itself in different ways under different circumstances. In Goldstein's view we should not put ourselves in the position of having to introduce a special concept in order to keep in mind the unity of the organism. That unity is present from the start and should be implicit in everything we say about separate tendencies.[2]

Most of us show our loyalty to the concept of a unitary self by our surprise when it is questioned. Stevenson's *Dr. Jekyll and Mr. Hyde* strikes us as a profoundly true yet extremely fantastic tale. Profound truth lies in its description of conflict between different tendencies within the person. But it seems like wild fantasy to suppose that such a conflict could divide the personality into two separate selves with separate identities and an imperfect awareness of each other. Stevenson himself, even with all the freedom of fiction at his disposal, felt it necessary to introduce a magic drug to accomplish the transformation. There are, of course, real cases of multiple personality in which two or more selves function within the same individual.[3] That they are so rare, and that they strike us with such wonderment, testifies to the stubborn tendency of personality to become organized into a unitary self.

A unifying concept becomes particularly valuable when we want to take account of man's constructive and long-range behavior. The setting of distant goals, the discharging of obligations, the making and keeping of promises, the taking of initiative and persisting against obstacles, the struggle to live up to ideals, the whole forward movement whereby a person becomes an independent, effective, and at the same time reliable human being—all of this activity implies a very high degree of organization. It implies a hierarchy of

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[2] Goldstein, K., *Human Nature in the Light of Psychopathology*, Cambridge, Harvard University Press, 1940, pp. 144–145.

[3] See below, pages 302–305.

tendencies so ordered that the ones affirmed to be of most importance are given right of way over the less important. To say that this hierarchy takes shape in the interests of the *self*, and that things are more important or less important to a *self*, seems at present the most satisfactory way to conceptualize the whole difficult subject. But in order to keep the self from solidifying into a block of granite in our thoughts, we must consider its history and perceive it as a growing and changing system.

Formation of the Self.—There can be no doubt that the self, like everything else in an organism, develops and changes a great deal in the course of life. Its nucleus appears to be what is experienced as "I" and "me," as distinguished from everything else that is "not me." This distinction, whatever its primitive basis, is amplified and strengthened by learning: children find out by investigation that the foot is part of "me" and the favorite toy is not.[4] As time goes on, "myself" assumes a fuller and richer meaning. It is compounded of bodily sensations, feelings, the image of one's body, the sound of one's name, the continuity of one's memories, all leading to the experience of oneself as a unique and separate person having a continuous existence. Particularly important is the feeling of activity and initiative. One's self is experienced not only as an object but as an agent. This feeling of activity, whatever its nature, is a highly characteristic feature of the ego system. Under experimental conditions, as we shall see when we discuss hypnotism in the next chapter, behavior can be divested of the feeling of active participation. It is then experienced as occurring of its own accord and the experience is indeed a curious one.

Around this enduring nucleus are gathered many accretions. Parents apply adjectives to children, and children begin to apply them to each other. The child learns that he is strong, naughty, smart, silly; through the labels applied by others he builds up a conception of his own traits and forms attitudes toward them. Gardner Murphy describes the situation as follows:

> Children are forever classifying one another by the use of good and bad names, applying to one another the nouns and adjectives which they have heard used in such a tone as to make them appropriate for praising or damning . . . Most of the trait names that are used represent general action tendencies; and as soon as they are applied to oneself,

[4] Observations and experiments on the development of the ego in childhood have been recently reviewed by Sherif, M. & Cantril, H., *The Psychology of Ego-Involvements* New York, John Wiley & Sons, 1947, pp. 158–178.

> or as soon as one finds himself applying them to others, they stimulate a trait psychology in their user . . . Generalities are evoked by means of labels; the child lives up to the terms employed. . . . The child forms general ideas about himself. *In short, the self becomes less and less a pure perceptual object, and more and more a conceptual trait system.*[5]

These accretions to the enduring nucleus of the ego are subject to continuous change. The pattern is formed and reformed many times in the course of life. You may remember but little of what you were like as a child, though you do remember it as *your* childhood continuous with your life today. You may remember more clearly yourself as a high-school sophomore, though only with a pleasant sense that you are not like that any more. A less sympathetic observer might point out more continuities than you would care to admit, but certainly you are not just the same from year to year. A particularly large reworking occurs at adolescence, when family membership weakens and social acceptability becomes the most vital attribute of the self. In the course of time the pattern of selfhood becomes more stable. In this it is assisted by social pressure. "With age and greater responsibility, the individual organism is persuaded more and more to act like a unit, to phrase the multiplicity and incongruity of its wants in terms of the multiple expressions of a fixed self." [6] It is easier to live with others when they function as unified selves, and we encourage them to do so. The self is thus shaped into a unity from both directions at once. On the one hand it is attached to the enduring nucleus represented by one's sense of personal identity. On the other hand its various accretions are pressed toward unity by the requirements of social living.

In the next three sections of this chapter we shall describe the normal course of ego-development, indicating some of the ways in which maladjustment may occur. The account is broken down in such a way as to focus on three very important, though not necessarily all-inclusive, developmental processes. First we consider the growth of the self under the heading of *competence and self-esteem.* The qualities of the person himself, his physique, temperamental traits, mental abilities, special aptitudes, all of which we refer to here as *competence*, exert a marked influence over his behavior. They affect his evaluation by others and thus his evaluation of himself. This self-evaluation may range from a supreme and arrogant self-confidence through all the degrees of normal self-esteem to

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[5] Murphy, G., *Personality: A Biosocial Approach to Origins and Structure*, New York, Harper & Bros., 1947, pp. 505–506.
[6] *Ibid.*, p. 489.

miserable feelings of inferiority. Our next caption, *memberships and social roles,* calls attention more directly to the important part played by others in the development of the self. The ego does not exist in isolation. From the beginning, each individual grows up in a field of interpersonal relations, his own behavior evoking behavior from others and this in turn evoking further behavior from himself. As a member of groups he is affected by what others expect of him—the roles he is expected to play. The importance of such interactions becomes particularly evident when a person enters a new social environment. He is apt to feel very much lost and confused until he forms new memberships and finds social roles that bring the support of approval. The third aspect of ego-development to be considered here is labeled *conscience and ideals.* To an extent that differs from one individual to another, the constraints and expectancies of others are worked over and reformulated in one's own mind. The life that one leads and the ideals for which one stands become in this way something more than a faithful copy of what other people expect. The guides and controls of behavior are internalized so that the person becomes able to resist and fight the expectancies of others when these do not coincide with his own values. He may even become a leader who gathers his own group about him.

Competence and Self-Esteem

Importance of Age-Mates.—A child's sense of competence and self-esteem is tremendously affected by his experience in the family circle. We have already examined one instance, the case of Bert Whipley, whose father's impatience and sarcasm completely undermined his feeling that he was good for anything. As an adult, Bert apologized for everything he did, and often threw away perfectly acceptable work because he was sure it could not measure up to standard. The encouragement and discouragement that parents and siblings bestow on the child's efforts at accomplishment play a vital part in establishing his self-esteem.

Nevertheless it is fair to say that the crucial arena for self-esteem is the arena of one's age-mates. At home there is an age hierarchy. Even the siblings are bigger or smaller, so that differences of competence are expected. The home, moreover, continues to be the source of love and provision of basic wants, even when the child ventures forth to playground and school. At home he must be *love-worthy:* this may include being competent, but it is heavily weighted on the side of being good, obedient, and affectionate. On

the playground the values are different: he must be *respect-worthy*, able to command respect because he shows competence and handles himself with ease. It is a sharp strain for many children when they pass from the atmosphere of a child-centered home into the competitive realities of even a friendly play group. They must now show what they have in the way of physical prowess, courage, manipulative skill, outgoing friendliness, all in direct comparison with other children of their age. The penalties for failure are humiliation, ridicule, rejection from the group. Even the last is probably a less basic threat than rejection from parental love, but it is none the less an acute threat.

This demand to show what you have—to demonstrate competence or suffer the pains of inferiority—brings us to the question of individual differences in competence.

Individual Differences in Physique.—Physique plays a dual part in the development of personality. It is the basis of one's competence along lines of physical prowess and vitality. It is also the basis for social judgments having to do with beauty and personal attractiveness. Individual differences of physique have been studied for many centuries, but the crude knowledge thus acquired reached the level of exact measurement only in quite recent studies, especially those of Sheldon.[7] This writer has developed a technique for measuring the important dimensions of the body from photographs taken at a fixed distance. Measurement of a series of 4,000 young men of college age allowed the conclusion that physique has three chief components which Sheldon named *endomorphy, mesomorphy,* and *ectomorphy.* Any individual physique is a combination of the three components, but the proportions may differ greatly. When endomorphy predominates, the digestive viscera are massive relative to other structures, and the body form is characterized by soft roundness, though not necessarily fat. In predominant mesomorphy, the somatic structures—bone, muscle, and connective tissue—have the first place, the body being hard, firm, strong, somewhat rectangular in outline. When ectomorphy predominates, the body is fragile, linear, and delicate in structure, the arms and hands, for instance, being slender and poorly muscled and the chest rather flat. There is considerable though not yet conclusive evidence that the individual physique or *somatotype* does not change in the course of

[7] Sheldon, W. H., Stevens, S. S. & Tucker, W. B., *The Varieties of Human Physique,* New York, Harper & Bros., 1940. A condensed account is given by Sheldon in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders,* New York, The Ronald Press Co., 1944, Vol. 1, Ch. 17.

life.[8] There are minor changes in hardness of muscle depending on physical fitness, and major changes in appearance due to fat deposits, but neither of these change the basic structural properties of the body.

The importance of these bodily differences is very great, especially for boys. Weakness in the mesomorphic component makes athletic success virtually impossible. Considerable endomorphy can be utilized in sports where weight is an advantage, and considerable ectomorphy can be valuable in the quick and agile games like tennis and fencing, but a substantial amount of mesomorphy is necessary in either case to supply the requisite sturdiness. High athletic ability may go far to counteract developmental handicaps. An actual case is a young man severely rejected at home, solitary and socially awkward, who entered high school in a strange community and after a short period of lonely confusion became a popular and admired student because of what his magnificent mesomorphic body could do on the athletic field. The mesomorphic component also confers advantages in the way of acceptance by girls, who are likely to prefer the athletic type to the soft endomorphs and skinny ectomorphs.

The body, including both its competence and its attractiveness, takes a significant place in the development of self-esteem, especially between the ages of 5 and 20. Any marked deviations from the norm, unless they are on the side of athletic ability in boys and beauty in girls, are likely to create sharp feelings of inferiority. As Zachry has shown in a research on high-school pupils, these problems rise to a climax at puberty when changes draw attention to the body and make it peculiarly "symbolic of the self."[9] The fashion department of the magazine *Seventeen* receives pleas like the following:[10]

> How about showing some clothes for the short, chubby teen-ager? We all want to look like the rest of the crowd—but you know how some of us look in sweaters and skirts.
>
> You put too much emphasis on the petite junior miss and leave her skyscraper cousin out in the cold!

The importance of defects and blemishes is well displayed in the detailed case report of 15-year-old Betty, by Blos.[11] Betty had a

[8] *The Varieties of Human Physique, op. cit.*, pp. 221–226.
[9] Zachry, C. B., *Emotion and Conduct in Adolescence*, New York, D. Appleton-Century Co., 1940.
[10] Quoted by Sherif & Cantril, *The Psychology of Ego-Involvements, op. cit.*, p. 227.
[11] Blos, P., *The Adolescent Personality*, New York, D. Appleton-Century Co., 1941, pp. 29–109.

mole on her cheek, and this fact dominated her self-consciousness and held down her self-esteem for several years.

One of the problems that affects both girls and boys, though in different ways, is deviations in the time of sexual maturation. It has been found that early maturing girls, big for their age, and late maturing boys, small for their age, are quite likely to be temporarily maladjusted.[12] Joseph Kidd got into this trap on account of skipping a grade in school. His difficult adjustment to a strange high school was complicated by his being the only pre-pubescent boy in his group. The problem was considerably greater in the case of John Sanders, reported by Jones.[13] John's predominantly ectomorphic physique at no time contributed much to his self-esteem, but when in addition his adolescent growth spurt and secondary sexual characteristics were delayed, so that for a year or more he was still a little boy among adolescent boys and girls who practically ceased to be aware of his existence, his whole precarious adjustment and even his school work rapidly deteriorated. This case shows with remarkable clearness the importance of physique, its competence, and its social acceptance.

Individual Differences in Temperament.—Observers of very young children stand in the crucial position to study individual differences in temperament. So rapid and so effective is the learning process that after a few months it is no easy matter to separate constitutional endowment from what has been learned. Importance must therefore be attached to observations such as those of Shirley and Washburn, who studied children from the time of birth.[14] Shirley found highly consistent differences in activity level and in a variety of other probably innate traits measured from month to month. Washburn showed that individual babies remained consistently jolly, serious, or more or less expressionless throughout the first year of life. The studies of Gesell and his associates cover a longer period, one large group of children having been followed from early infancy to adolescence.[15] Gesell's material gives rather strong reason to believe that qualities such as energy output, social responsiveness, humor, talkativeness, and emotional expressiveness re-

[12] Bayley, N. & Tuddenham, R., "Adolescent Changes in Body Build," *43rd Yearbook, National Society for the Study of Education*, 1944, pp. 33–55.

[13] Jones, H. E., *Development in Adolescence*, New York, D. Appleton-Century Co., 1943, esp. Chs. 5, 10.

[14] Shirley, M., *The First Two Years: A Study of Twenty-Five Babies*, Minneapolis, University of Minnesota Press, Vol. 3, 1933; Washburn, R. W., "A Study of the Smiling and Laughing of Infants in the First Year of Life," *Genetic Psychology Monographs*, 1929, Vol. 6, pp. 397–537.

[15] Gesell, A., et al., *Biographies of Child Development*, New York, Paul B. Hoeber 1939

main fairly constant throughout the years of growth and therefore probably have their origin in innate predisposition. Studies of the endocrine glands suggest one possible root of these differences. Studies of differences in biochemical make-up and in the activity of the nervous system come perhaps even closer to the roots, but unfortunately these investigations are still far from the point where they can begin to illuminate the role of temperament in the development of personality.

Promising leads have come from the work of Sheldon, whose studies of physique were concurrent with an investigation of temperament. The method was entirely different, consisting of extensive individual interviews designed to bring out the person's consistent preferences and peculiarities along such lines as posture and movement, exercise, relaxation, eating and sleeping habits, reactions to stress and to alcohol, adventurousness, sensitivity, and general attitude toward other people. An intensive study of 200 young men brought out such highly consistent relationships with the components of physique that Sheldon felt justified in speaking of three related components of temperament.[16] With the endomorphic, or soft round component of physique, goes a group of traits called *viscerotonia,* which includes love of comfort, relaxation, conviviality, and sociability. With mesomorphy goes *somatotonia,* characterized by vigorous assertiveness, push, a preference for action, and a dominating and somewhat insensitive attitude toward others. The traits linked with slender, fragile ectomorphy are called *cerebrotonia,* and center around the attentional and inhibitory aspects of behavior. When this component predominates, the person is tense, overvigilant, sensitive, inhibited in action, and uncomfortable and awkward in social situations.

The high correlation (average +.81) between each component of temperament and its corresponding component of physique suggests that temperament also will not change greatly in the course of life. Even in nursery school, as Sheldon points out, the extremes of temperament can be readily observed:

> There are often a few vigorous-bodied somatotonics who take the lead in all enterprises, a few round, healthy-looking viscerotonics who join in with excellent fellowship, and a few little pinch-faced cerebrotonics who constitute a watchful and unsocialized periphery. These little cerebrotonics seem to want to stay on the side lines and watch. Their eyes are sharp as needlepoints and nothing seems to escape their

[16] Sheldon, W. H. & Stevens, S. S., *The Varieties of Temperament,* New York Harper & Bros., 1942.

> quick attention, but they do not want to be pushed into the swim. They are under stern internal check, and they seem to want to see without being seen.[17]

As the children grow older, these temperamental differences will remain, even though somewhat obscured by the effects of experience. Adjustments will be achieved differently, and maladjustment will ensue if the person feels obliged to behave in a fashion to which he is temperamentally unsuited. If a strongly somatotonic child feels pressed to adopt the career of a meditative philosopher, if a Falstaffian viscerotonic finds himself committed to long hours of solitary work, if a predominant cerebrotonic in a misguided moment accepts a job as a cruise director or showman, maladjustment is to be expected. Tendencies which are not backed by a certain natural push yield little satisfaction and much conflict.

It should be noticed that Sheldon's use of *temperament* is not strictly in accord with its customary meanings. These are, according to MacKinnon,[18] one or more of the following: (1) characteristic emotional experiences (strength, depth, and speed of emotional arousal, changes of mood, etc.); (2) assumed physiological bases for such experiences (glandular differences, for example); and (3) kinetic characteristics (energy and control of motor responses, expressive movements, etc.). Sheldon's components of temperament include all three meanings and more besides. Some of the traits he uses to define a component of temperament are scarcely distinguishable from traits of physique: those, for instance, that have to do with posture, movement, and relaxation. Others carry over *into the realm of social relationships: the friendly companionability* of viscerotonia, the competitive aggressiveness of somatotonia, the shyness and love of privacy that go with cerebrotonia. But Sheldon's clusters of traits were not put together logically; they arose out of the empirical findings of an extensive research. They bring out an unsuspected correlation between innate constitutional make-up and certain characteristics that affect social development.

It is known, of course, that tendencies such as friendliness, assertiveness, and shyness are strongly influenced by personal experience. In the last chapter we saw that parental attitudes exerted just such an effect. Sheldon's findings call attention to the fact that such tendencies may also be constitutionally weighted in the given individual. When this weighting is extreme, as it is in the six cases

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[17] *The Varieties of Human Physique, op. cit.*, p. 260.

[18] MacKinnon, D. W., "The Structure of Personality," Ch. 1 in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders, op. cit.*, Vol. 1, pp 8–9.

Sheldon has described at length,[19] the person cannot be forced very far out of his prescribed temperamental pattern. Most temperaments, however, like most physiques, represent a balance of components, and this allows larger scope for environmental pressures. When some one factor in a person's development is overwhelmingly strong, whether it be (to name a few possibilities) high somatotonia, thyroid deficiency, maternal overprotection, group rejection, or a pronounced special aptitude, this prominent factor appears to dominate the personal pattern of tendencies. When the determinants are more equally balanced, their interaction becomes apparent.

Individual Differences in Ability.—No human ability has been more widely studied in the last fifty years than *general intelligence.* It is defined in different ways, but nearly all definitions bring it into relation with our present theme by emphasizing the central position of adjustment. Intelligence has to do with learning, problem-solving, judgment, and thinking. It can be called the cognitive side of one's capacity for adjustment, in rough contrast to the motivational aspects of the adjustive process. There is growing evidence that general intelligence is really a cluster of more or less independent abilities. But the concept of the I.Q. is so firmly entrenched that most studies of deviations in mental ability treat intelligence as though it were in fact general.

It is obvious that high intelligence favors adjustment and that low intelligence obstructs it. When the I.Q. falls short of 50, the individual is unable to achieve adjustment to the world around him except under the simplified conditions of a custodial institution or its equivalent. Problems of adjustment are more acute with the so-called "high-grade subnormals," often subdivided (in ascending order) into moron, borderline, and dull normal groups, and lying in the I.Q. range between 50 and 90. Superficially, these individuals do not appear handicapped and may easily be expected to perform in ways that are beyond their competence. In a study of high-grade subnormal adolescent girls by Abel and Kinder,[20] it is shown that the retardation may remain essentially undetected until the child has gone some distance in school.

> When a child's intellectual limitations become unmistakably apparent, she is generally placed in one of two situations, depending on the type of the school system to which she belongs. If no special classes

[19] *The Varieties of Temperament, op. cit.,* Ch. 4.
[20] Abel, T. M. & Kinder, E. F., *The Subnormal Adolescent Girl,* New York, Columbia University Press, 1942.

> are available for the mentally retarded, the girl remains in the regular classes, usually repeating grades and acquiring a reputation of being both dull and the perennial despair of teachers. If the school system provides for special classes, the subnormal girl may find the work she is expected to do much easier and more in keeping with her interests. But she still has to combat the disapprobation of more intelligent girls, who remain in the regular classes and make her feel inferior in some way. Either course lessens her possibilities for later adjustment by emphasizing her feeling of inferiority.[21]

Feelings of inferiority may well have begun at home, especially if siblings and parents are of better ability. When they are reinforced at school it becomes virtually impossible to develop a satisfactory level of self-esteem. As a result many high-grade subnormals, who under favorable conditions might make a perfectly good adjustment at fairly routine work, either fall into delinquent ways or isolate themselves in pleasant fantasies. Both forms of behavior constitute a "revolt against an intolerable situation." [22]

Superior intelligence is in general an aid to adjustment. It does not, of course, preclude maladjustment. Intelligence, alone and by itself, does not even guarantee scholastic success, which depends on a favorable pattern of motives as well as mental ability. But the weight of evidence still favors the conclusions reached by Terman, who reported in 1925 that gifted children (I.Q. above 140) are superior to the general average in health, physique, breadth of interests, social adjustment, and emotional stability and that they maintain these advantages as they grow older.[23] The popular stereotype of the highly intelligent child as a puny, awkward, narrow eccentric has its basis in the unusual case and does not apply to the majority of gifted children.

Special problems arise, however, when the mental superiority is so great that it throws the person out of contact with those around him. Leta Hollingworth made an intensive study of children with I.Q.'s of 180 or better. In the course of twenty-three years of professional work in the New York area, she discovered 12 such children.[24] The mental competence of these children is so far ahead of their contemporaries that they simply cannot maintain mutual interests and common understanding. They are almost cer-

[21] *Ibid.*, pp. 51–52.
[22] *Ibid.*, p. 135.
[23] Terman, L. M., et al., *Genetic Studies of Genius*, Vol. 1, *Mental and Physical Traits of a Thousand Gifted Children*, Stanford University Press, 1925. A condensed account brought up to date appears as Ch. 17 in Barker, R. G., Kounin, J. S. & Wright, H. F. (eds.), *Child Behavior and Development*, New York, McGraw-Hill Book Co., Inc., 1943.
[24] Hollingworth, L. S., *Children Above 180 I.Q.*, Yonkers, World Book Co., 1942.

tain to be advanced in school, and therefore to be at a physical and social disadvantage. Friendships are difficult, because it is so hard to find someone who functions at approximately the same mental level. Out of his social isolation and feelings of social inferiority, the highly gifted child is sorely tempted to build a compensation which takes the form of contempt for all the fools in the world, including teachers and others in authority. This leads neither to happiness nor to the ultimate full utilization of his rare gifts for the benefit of society. Hollingworth was led by her studies to the concept of an "optimum intelligence" for total adjustment.

> There is a certain restricted portion of the total range of intelligence which is most favorable to the development of successful and well-rounded personality in the world as it now exists. This limited range appears to be somewhere between 125 and 155 I.Q. Children and adolescents in this area are enough more intelligent than the average to win the confidence of large numbers of their fellows, which brings about leadership, and to manage their own lives with superior efficiency. Moreover, there are enough of them to afford mutual esteem and understanding. But those of 170 I.Q. and beyond are too intelligent to be understood by the general run of people with whom they make contact. They are too infrequent to find many congenial companions. They have to contend with loneliness and with personal isolation from their contemporaries throughout the period of immaturity.[25]

The question of individual differences in *special abilities,* apart from general intelligence, has great practical importance, especially in vocational adjustments. Often a person is unhappy and frustrated in his work even when all the surrounding conditions, such as pay, status, and congenial companions, are entirely satisfactory. For example, a man rises rapidly in an engineering company because of his craftsmanship and inventiveness in designing machines. As he is promoted to higher and better-paid positions, he gradually gets out of engineering itself and has more to do with business policy, sales, and personnel. He becomes progressively miserable, yearning to go back to designing, yet unable to resist the social pressure to move onward and upward. There is a strong presumption in such a case that the design of machines was backed by high aptitude, executive work by a much lower aptitude, so that the better-paid work is experienced as disagreeable, laborious, and frustrating. Unfortunately we know all too little about such special abilities. They are so apt to be entangled with problems of motivation that it is

[25] *Ibid.,* pp. 264–65.

almost impossible to devise tests that will measure them in isolation. But this does not diminish the probability that they are important in mediating both good and bad adjustments.

Competence and Adjustment.—High competence of any kind is potentially a strong asset in adjustment. Whether it be in sports, in craftsmanship, in school work, in music, in art, in managing others, in wit and entertainment, whatever the nature of the competence, it can serve as a point of integration for the personal pattern of tendencies. Actions that are performed well are performed with a feeling of satisfaction, quite apart from any social reward that may be added. When the child Handel sneaked into the garret at night to play his harpsichord in spite of his father's threats of punishment, he was seeking the reward that results from exercising a strong talent. Behavior that is backed by talent should be looked upon as to a certain extent self-rewarding. It is affected by social rewards: good abilities can be suppressed by ridicule and mediocre ones inflated by praise. But the exercise of high competence brings satisfaction in its own right. It may even be so engrossing that little attention is paid to the immediately surrounding world. When engaged on an important work, Handel locked himself in his room and went without food and sleep for many days at a time, composing with extraordinary concentration and speed. The life of Handel cannot be explained as the result of parental encouragements, reaction formations, social rewards, economic need, and the expectations of the culture, although it probably cannot be fully explained without them. The central theme and ruling determinant was his possession of an extremely high special ability and special sensitivity. The line between ability and motivation in such a case is hard to draw. The competence is self-rewarding and needs to be exercised.

The same centrality may be assumed by a strongly developed interest based on sufficient but not necessarily remarkable natural competence. Suppose a boy gets interested in radio; he buys, trades, builds sets, spends his time tinkering and experimenting, accumulates special knowledge and relevant skills, and ends up with an acquired competence that again is indistinguishable from motivation. The original interest may have started in ways that have little to do with competence. It may have been copied from an admired friend or picked up from a favorite book. But it leads to a cluster of interests and competences that may prove highly integrative.

The integrative action of high competence can be conceived as follows. High competence offers a fairly reliable line along which

the person can function happily and achieve esteem. Once it is discovered that exercise of the competence brings social as well as intrinsic rewards, the person's development begins to be guided by a selective principle. Assured of esteem in one area, he can begin to discard the skills and roles that offer less promise. His tendencies thus assume an hierarchical pattern. Moreover, he can begin to select the groups and the companions whose esteem he will seek and value. He no longer has to care about the esteem of every "bunch" in his high school; he needs only the esteem of the "bunch" that is keen on science, for example, and, more particularly, the few radio experts in the school. If he goes to college he will probably know what subjects he most wants to study, and he will shortly discover a group of like-minded companions among whom he will achieve his social adjustment. Very likely he will never know problems of vocational adjustment so long as there are opportunities in the line dictated by his central cluster of competence and interest.

The importance of this integrative action becomes clearer if we contrast such a person with Joseph Kidd. In Kidd's range of abilities there were no salient competences that could bring him the income of esteem to which he had become accustomed in childhood. Having outgrown his earlier methods of winning esteem, he found himself trying out one role after another, sickening of each one when he could not fulfill it with immediate distinction. His efforts had no focus: he was sure of esteem nowhere, and he had to hope for it and search for it from everyone who crossed his path. Temporarily, he represented an anarchy of tendencies with no hierarchical organization.

The Inferiority Complex.—Our examination of competence and its relation to adjustment will help us to understand how feelings of inferiority arise and how they can be overcome. As we saw in the first chapter, the concept of the *inferiority complex* was introduced by Alfred Adler, who made it central in his theory of neurosis if not in development as a whole. Adler's concept is so valuable that we should not ruin it, as some of his followers have done, by indiscriminate use. Everyone is inferior in a great many ways. Most people do not mind this in the least. Their self-esteem is dependent on only a small range of excellencies. Failure in many areas may mean little if it is compensated by success in just one area. As Allport observes, "Only in terms of ego-psychology can we account for such fluid compensation. Mental health and happiness . . . depends upon the *person* finding *some* area of success *somewhere*. The *ego*

must be satisfied." [26] Much the same point was made by William James with memorable illustrations.

> I, who for the time have staked my all on being a psychologist, am mortified if others know much more psychology than I. But I am content to wallow in the grossest ignorance of Greek. My deficiencies there give me no sense of personal humiliation at all. Had I "pretensions" to be a linguist, it would have been just the reverse. So we have the paradox of a man shamed to death because he is only the second pugilist or the second oarsman in the world. That he is able to beat the whole population of the globe minus one is nothing; he has "pitted" himself to beat that one; and as long as he doesn't do that nothing else counts. He is to his own regard as if he were not, indeed he *is* not.
>
> Yonder puny fellow, however, whom everyone can beat, suffers no chagrin about it, for he has long ago abandoned the attempt to "carry that line," as the merchants say, of self at all. With no attempt, there can be no failure; with no failure, no humiliation. So our self-feeling in this world depends entirely on what we *back* ourselves to be and do.[27]

In a relatively integrated personality, which enjoys reasonable esteem somewhere, feelings of inferiority will be absent or transient and of small importance. It is justifiable to speak of an inferiority *complex* only when the person continually makes unfavorable comparisons between himself and others, covering far more lines of excellence than any one individual could hope to carry. If such a person hears someone tell a story well, he wishes he might possess this excellence and laments his inferiority as a storyteller. The next moment someone else entertains with a song, and he feels miserable that he cannot do likewise. Then card playing starts, and he has a chance to deplore his mediocrity at cards. A single evening will provide him with an opportunity to feel inferior in a dozen ways. But it is not really these dozen inferiorities that trouble him. It is rather the over-all fact that he does not have sufficient competence anywhere to form a nucleus of self-esteem and satisfy the self as a whole. If he could find some real excellence of his own, he would be willing to forego distinction in story-telling, singing, and cards.

The inferiority complex is apt to occur when obstacles, either internal or external, prevent the development of some personal pattern of excellence capable of supporting self-esteem. Obstacles may

[26] Allport, G. W., "The Ego in Contemporary Psychology," *Psychological Review*, 1943, Vol. 50, pp. 451–478.

[27] James, W., *The Principles of Psychology*, New York, Henry Holt & Co., 1890, Vol. 1, p. 310.

lie very much outside the individual, as when, for instance, his best competences are not valued in his society or there is an oversupply of his particular skills. Internally the greatest obstacle is a real lack of ability; we saw that people of subnormal intelligence were particularly exposed to severe feelings of inferiority. Apart from these very general obstacles, it is possible for situations to occur in which the development of a feeling of competence and self-esteem is blocked, even though excellent potentialities are present. A typical example, familiar to child guidance workers, is the situation in which two siblings near together in age constantly compete for the same excellencies, the ones most valued by their parents and by their group. The weaker competitor is constantly falling short, but it is hard for him to shift to other lines of excellence because these do not command an equal amount of esteem. The stronger competitor stands astride the prescribed avenue to esteem and the weaker cannot pass him.

It follows from what has been said that any measures designed to encourage the development of some area of excellence will help to reduce if not prevent an inferiority complex. Recognized competence is the thing that counteracts inferiority. Experiments by Jack and Page have shown that children who were very submissive in competition could be made more ascendant by giving them practice in advance in the games to be played.[28] Educators currently advise teachers to be at great pains to develop for each child some area of success and social approval. Parents who are willing to recognize different kinds of excellence, even encourage them, provide more favorable circumstances than those who love only one pattern. In one family of five sturdy boys, each youngster was encouraged to specialize in a different sport. The result was five local champions and no inferiority complexes.

Memberships and Social Roles

It is impossible to consider self-esteem without taking into account its close dependence on the esteem provided by others. When a person displays competence or incompetence in the presence of others, he is strongly affected by their evaluation of his performance. In direct or subtle ways they communicate their judgment, and this, mingling with the comparisons he can make on his own account,

[28] Jack, L. M., "An Experimental Study of Ascendant Behavior in Preschool Children," *University of Iowa Studies in Child Welfare*, 1934, Vol. 9, No. 3; Page, M. L., "The Modification of Ascendant Behavior in Preschool Children," *ibid.*, 1936, Vol. 12, No. 3.

provides the basis for his self-evaluation. The level of self-esteem depends on competence acknowledged and recognized by others, especially by those groups in which the individual enjoys membership.

Group memberships and interactions with other people play a large part in forming personality. That part does not end with judgments of competence and implicit expressions of esteem. The formative influence of memberships is more far-reaching, their function in the adult personality more vital, than could be indicated in our discussion of competence. What happens to development when a child is constantly uprooted and set down again in a new social environment? What happens to the adult personality when it is abruptly taken from its entire social context and dropped in a new land or in a concentration camp? These two extreme but unfortunately not unreal possibilities will serve to focus attention on the activity of the social milieu in shaping and maintaining the personal pattern of tendencies.

Effects of Membership on the Individual.—When an individual becomes a member of a group, his life is in many respects enriched and expanded. His strength is increased: the group can accomplish many things and resist many pressures where he alone would be helpless. His courage is increased by the sense of shared responsibility and group support. His initiative is increased by sharing in the initiative of other members of the group. His purposes become solidified and his feeling of personal worth becomes established in the framework of group purposes and group values. He receives an income of friendliness, approval, recognition, and he gladly expends these things upon other members of the group. In time of stress he has the double satisfaction of helping others and receiving help from them.

On the other hand, membership in a group entails certain restrictions. The individual can no longer do just what he pleases. His initiative may be submerged because the group decides to do something some other way. He may want to play third base, but the group puts him in right field. The group defines for him a number of possible *roles* and helps him to select those he is best fitted to play. It provides him with a set of *norms,* indicating by approval or disapproval the kinds of behavior considered within that group to be right or wrong, good or bad, loyal or disloyal. These roles and norms constitute a social structure or framework within which he finds his place as a member of the group. If membership yields him sufficient satisfaction and enrichment, he willingly accepts the

restrictions of the social framework. He learns how to give and take.

A person may be said to occupy a position or status in society as a whole, but it is through membership in much smaller groups, starting even with the family, that he actually discovers his status. The play group, the bunch, the gang, the clique, the unit at the shop, the crowd at the office, the folks in the neighborhood constitute the groups that directly affect him and determine his social position. His conception of his place in society as a whole is to a considerable extent learned from the place of these groups in society, the relations of in-group and out-group, rival group, superior and inferior groups, and so forth. Through identifications with groups a person becomes able to identify himself as a member of society.

The action of groups and their effect on the individual can best be observed under relatively simple conditions. In a recent study, Sherif and Cantril select urban street-corner delinquent gangs as ideal exhibits of group psychology.[29] Drawing on the important studies of gangs by Thrasher, Zorbaugh, Clifford Shaw, and W. F. Whyte,[30] they point out that such gangs form spontaneously and build up their own internal organization with little influence from historical tradition or from the norms of the existing social order. In spite of their informal origins and lack of legal and conventional sanction, these gangs exert a tremendous effect on their individual members. Within his gang, the boy, almost always from a distressing home in a disorganized neighborhood, finds himself accepted, esteemed, taken seriously. In company with gang members he can perform deeds of recklessness and bravado that would be impossible alone. When sick or in trouble, he receives sympathy and assistance. The gang becomes a point of anchorage in the social ocean. He feels strong and happy with his group, lonely and depressed if he is separated from it. As Thrasher expresses it:

> Any standing in the group is better than none, and there is always the possibility of improving one's status. Participation in gang activities means everything to the boy. It not only defines for him his position in the only society he is greatly concerned with, but it becomes the basis of his conception of himself.[31]

Within these gangs there is a definite hierarchical structure. There are leaders and followers, and there are all kinds of specialized

[29] Sherif, M. & Cantril, H., *The Psychology of Ego-Involvements, op. cit.*, Ch. 10.
[30] Thrasher, F. M., *The Gang*, 1927; Zorbaugh, H. W., *The Gold Coast and the Slum*, 1929; Shaw, C. R., *The Jack-Roller*, 1930, *The Natural History of a Delinquent Career*, 1931, *Brothers in Crime*, 1938; Whyte, W. F., *Street Corner Society*, 1943. All published by the University of Chicago Press, Chicago.
[31] Thrasher, F. M., *op. cit.*, p. 332.

roles based on particular talents. Social pressure in the form of applause and preferment, ridicule, scorn, and ostracism keeps the individual members in their places and enforces the norms of the gang. In delinquent gangs the most serious offense is "squealing," which sometimes receives even the death penalty. If a gang member is caught, he is expected to "take the rap" no matter how hard it may be. Living in a precarious relation to the police, the gang must always act as a loyal unit. There can be no fraternizing with outsiders or members of rival gangs. The individual member comes to occupy a clearly defined place both within the group and in relation to the rest of the social order.

It is hard for anyone to leave a group with which he has become identified. Many war veterans, after demobilization, go through a period of "homesickness" for their units and may even try to bring about some kind of reunion. When a business man is transferred to another city, even with a flattering promotion, it may take him a long time to find new memberships that will replace the old ones that were destroyed. He has a better job with more money, but he feels temporarily lost and dislocated, very likely mourning for the old position. These everyday facts serve to remind us that membership in groups constitutes an important part of adjustment: The significance of group memberships does not lie wholly in their initial educative effect: teaching the young person his place in the social framework and the roles he will be encouraged to play. Group participation is needed as a means of *maintaining* adjustment and as a source of friendliness, approval, and esteem. Just as daily nourishment must be taken in by even a plump and well-nourished person, or—to change the figure of speech—just as a thriving business must continue to sell and take in money, so an individual needs to keep participating in his membership groups in order to enjoy their benefits.

Formative Influence of Memberships at Different Ages.—First of all, the individual is a member of his family group. This fact can be taken as a point of reference in considering the importance of other groups. Earlier in this chapter we distinguished between the functions of the family group, which provides love, support, and gratification of basic needs, and which requires the child to be love-worthy, and the functions of age-mate groups, which expect the child to show competence and to prove himself respect-worthy. During childhood, and for the average family, this distinction is roughly appropriate. With his playmates the child seeks better

games and more exciting adventures than can be found at home. He also tries to discover his status with others of his age and work out the roles he is going to be able to play. At first, for instance in the fall term of a nursery school, there is much random testing of roles and little stable organization. Even within a year the roles begin to become more stable. Some children more consistently lead, for example, while others more consistently follow.[32] Moving on to a different group in kindergarten, or finding another group outside school, the child may fall into a different set of roles. His social traits—friendliness, sympathy, leadership, for instance—change from year to year and from group to group. Temperament and competence set limits to these changes, weighting certain roles at the expense of others, but a stable social personality is not established until adolescence or later. Even in adolescence and adult life, social traits change under the influence of different group memberships, though a person's cumulative experience with successful roles tends to reduce his readiness for change.

During adolescence the functions of age-mate groups become more complex and important. The society of one's peers begins to take over the supporting role that has hitherto been maintained by the family. Blos points out that "belongingness to the group, to some extent "replaces family ties"; this is the secret of the adolescent's tremendous dependence on the esteem and approval of his peers.

> The group of contemporaries is uncompromising in its demands that the adolescent conform to its standards of behavior and belief. It offers him in return a security in group belongingness and in collective responsibility at a time when he is abandoning childhood relationships and reorienting himself in terms of mature goals. In response to the pressures of peer culture, his family patterns of relationship, identification, and feeling life are gradually modified in the direction of group norms. . . . The great dependence on group support and belongingness is naturally at its height at a time when the adolescent leaves the family, its protection and support, and has not yet the capacity to function independently on a mature level.[33]

The height of dependence on the group comes at fourteen and fifteen years. Thereafter the young person becomes increasingly able to choose the groups with which he will become identified and to influence the roles he will assume. During adolescence, group mem-

[32] Parten, M. B., "Leadership Among Preschool Children," *Journal of Abnormal and Social Psychology*, 1933, Vol. 28, pp. 430–440.
[33] Blos, P., *The Adolescent Personality*, New York, D. Appleton-Century Co., 1941, pp. 250–254.

berships mediate the transition from family-member and child roles to roles as an independent maturing adult.

In adulthood, group memberships play a significant part in the individual's conception of the value and meaning of his life. He becomes identified with his occupation: he is a doctor, banker, teacher, skilled worker, farmer, etc. Within the broad category of occupation he becomes identified with smaller subgroups. As a doctor he is more specifically a psychiatrist, with a feeling that the rest of medicine is an out-group—a feeling, however, that will evaporate if medicine as a whole is attacked by a still-more-out-group. Within psychiatry he is even more specifically a psychoanalyst with a psychogenic point of view, feeling rivalry with hospital psychiatrists whose outlook is somatogenic. He may belong to a local society of psychoanalysts, and within that society may associate himself with the subgroup that favors public lectures as opposed to a conservative subgroup that thinks lectures would do more harm than good. Outside of his occupation he is a member of this or that group that tries to effect changes in the community. His membership in clubs and informal social groups will influence his feeling of position in the community. On a larger scale he may feel himself identified with a political party and with groups working for far-reaching causes, such as world peace. Examples could be multiplied endlessly. The point is that each person is a member of many groups, and of subgroups within groups. However active he may be in choosing his memberships, these groups react upon him, shape him in the direction of their norms and expectations, and strongly affect his conception of what he *is* and what he is *doing* in the world.

The importance of subgroup memberships in determining one's sense of personal worth is well illustrated in recent studies of industrial workers by Roethlisberger and Dickson. These investigators point out that in a factory the workers performing a particular task are assigned by the other workers a definite place in a prestige scale. "Each work group becomes a carrier of social values. Each of these groups, too, has its own value system." [84] Much misunderstanding arises from failure by the management to recognize the importance of this spontaneously created social system. Changes conceived merely as beneficial to production may have the effect of altering the whole social equilibrium so that certain workers lose the accustomed place by which their status was defined. When a subgroup com-

[84] Roethlisberger, F. J. & Dickson, W. J., *Management and the Worker*, Cambridge, Harvard University Press, 1943, p. 555.

plains about a wage scale, it may turn out that the objection is not wholly to the amount proposed but rather to the failure of that amount to "express appropriately the differences in social significance which the different jobs have to the employees themselves." [85] Status and sense of worth are at stake, as well as security and material comfort.

Morale as a Group Phenomenon.—The study of morale sprang to sudden importance early in the Second World War when it appeared that the Fascist and militaristic powers, with their clear and simple goals, greatly surpassed the democracies in their will to fight. The clearest outcome of this study was the realization that morale is to a large extent a group phenomenon, the strength of the individual being very closely dependent on the strength of his group memberships. Small groups with relatively tight internal cohesion illustrate the principle most clearly. In their study of air combat units, Grinker and Spiegel show that loyalty to the unit is the strongest force making for good morale.[86] These writers remind us of the behavior required in air combat with these words:

> What is the force that compels a man to risk his life day after day, to endure the constant tension, the fear of death, the teasing threat of flak, the steady loss of friends, the empty beds in the barracks? What makes him willing to put up with the sight of the injured, the bleeding, the dying, the burning plane on his wing exploding into a thousand *anonymous fragments? What drives him to dump four thousand pounds* of death on the little people in the factories miles below him? What can possess a rational man to make him act so irrationally? [87]

The thing that "possesses" a man to behave in this way is a powerful feeling of loyalty to his unit. Doubtless the cohesion of the group is much strengthened by acute danger and by living together in a strange land. Under these circumstances there is a melting away of barriers that would separate men in civil life: race, class, rank, regional origin. A new social unit is formed.

> The men and their plane become identified with each other with an intensity that in civil life is found only within the family circle. Crew members habitually refer to each other as "my pilot," "my bombardier," "my gunner," and so on, and their feeling for their plane is equally strong, since its strength and reliability are as important as those of any human members of the crew.[88]

[85] *Ibid.*, p. 576.
[86] Grinker, R. R. & Spiegel, J. P., *Men Under Stress*, Philadelphia, Blakiston Co., 1945, esp. Chs. 2, 3, 6, 8, 15. The same point of view is taken in Bill Mauldin's *Up Front*, New York, Henry Holt & Co., 1945, esp. p. 58.
[87] *Ibid.*, pp. 37–38.
[88] *Ibid.*, p. 24.

Very strong feelings of friendship and brotherhood are likely to develop, while the combat leader comes to be regarded rather like a father, regardless of his age. This group cohesion is a powerful integrating and strengthening force. The men fight *for* their unit rather than *against* the enemy.

In committing himself to membership and identification with the unit, the individual makes what we might refer to as a psychological bargain. He devotes his love and interest to the group. He submerges his identity and personal wishes, accepting the discipline and initiative of others. He gives up part of his reliance on his own competence, allowing safety and survival to depend on successful group activity. In return he expects that the group will give him protection, that the other members of the unit will give him appreciation and support, and especially that his officers and immediate leaders will take an interest in him and look out for his welfare. This psychological bargain is of course not worked out consciously. But by assuming its operation we can understand not only the amazing strength and fortitude of a well-knit, well-led unit but also the ways in which morale may weaken. If the bargain does not pay off—if the group does not provide protection, if the close friends are lost, if the leadership is impersonal and inefficient—then the individual draws his interest back into himself and feels resentment toward the group. He becomes less willing to endure the rigors of combat. It was under such circumstances, according to Grinker and Spiegel, that breakdown under stress was most likely to occur.

Morale as a group phenomenon is further illustrated in a study of the Buchenwald concentration camp by one of its inmates.[89] Isolated individuals, uprooted from all their accustomed social supports, showed considerable degrees of personal disorganization. This was not the case with twenty boys from a training farm who together with their director entered the camp as a group. Carrying out its previous ideals of character building and group responsibility, this group set itself the goal of surviving the camp experience without loss of life or breakdown of nerves. The members stuck together, shared blankets and extra food, helped each other in sickness, gave interest and support. In this way they resisted the disorganization and despair surrounding them and achieved their difficult goal.

Maladjustments Arising from Memberships and Social Roles. —In a rough way, we can distinguish two general maladjustive pos-

[89] Bondy, C., "Problems of Internment Camps," *Journal of Abnormal and Social Psychology*, 1943, Vol. 38, pp. 453–475.

sibilities: (1) *too little identification with groups,* so that the person does not receive the educative benefits of membership and the expanded sense of worth that goes with it; and (2) *excessive identification with groups,* so that the person reflects, like a chameleon, the colors of each group in which he enjoys membership and develops no stable pattern of his own.

1. INSUFFICIENT GROUP IDENTIFICATION.—Many forces may conspire to prevent a child from entering readily into relations with groups. Strong temperamental *cerebrotonia* may handicap him from the start, predisposing him to shy, tense withdrawal from the normal bruisings of child society. Very strong *somatotonia,* to which knocking another child down seems a natural expression of exuberant friendship, does not predispose to easy assimilation in the group. Geographical isolation may get the child off to a poor start as regards social experience. A serious obstacle is offered by parental overprotection. Perhaps the parents apprehensively interfere with the child's social contacts or try to bind him by creating a too perfect environment at home. If he is accustomed to whine for his own way or to demand it aggressively, he will react badly to the give and take of the group and probably suffer rejection. On the other side of the picture, the difficulty may lie less with the individual than with the groups he is in a position to join. After an auspicious beginning he may gradually discover himself rejected because he belongs to a different class, race, nationality, or religion from the majority in the neighborhood. If he moves a great deal, he will experience a certain feeling of rejection merely because he is a newcomer who must be assimilated to already existing groups.

When circumstances pile up to hinder identification with the more available groups, it often happens that the difficulty is solved by searching out or even bringing together a small and special group with congenial interests. Otherwise maladjustment tends to develop along one of two lines, sometimes along both at once. The person may remain shy, retiring, homebound, limited in his interests to things that can be done by himself. He does not learn the give and take of group relations and remains a stranger to convivial good fellowship. He may compensate in fantasy for his lack of the expanded selfhood and significance that comes from group memberships at their best, but he will never feel quite certain of his actual roles and actual position in the social organism. Certain developments will be harder for him, especially those that depend on separation from parental support. Without the compensating support of

his age-mates at adolescence, he will feel less confidence in separating himself from parental supervision and opinions and in carrying out a mature sexual adjustment. Unless he is in the meantime developing exceptional talents that bring him back into relation with others, he is likely to feel progressively isolated and insignificant.

The other line of maladjustment has the character of a reaction-formation. Rather than realize that his social inclinations are frustrated and that he himself is rejected, the person develops the role of contemptuous independence. He rejects the very idea of membership in stupid, commonplace groups with their plebeian interests and petty politics. He tends to inflate himself into an important personage who can achieve great things if not hampered by the mob. He tries to pump up in himself the feeling of strength and importance that actually comes most readily through membership. With exceptional talent, such a person may accomplish something, but his usual fate is essential isolation, ineffectiveness, and bitter resentment.

2. Excessive Group Identification.—Group memberships confer many benefits, but excessive identification with groups may lead to severe problems of adjustment. A person of great amiability who joins all available groups with indiscriminate warmth soon finds himself in trouble because of conflicting expectations. This is particularly likely to happen in times like the present, when social standards and values are changing. In most American communities there is conflict between the old tried ways and the new free ways. There is inherent contradiction among some of our long-cherished values: for example, between Christian brotherly love and competitive business success. With such conflicting norms in the background, it is all the more likely that the groups available to any one person will uphold completely contradictory values. Some people depend so heavily on group affiliation that they make themselves skillful at playing the right role in the right place. They meet the expectations of each group while they are in it, and they never err by telling the sex joke, the Scotch joke, the joke on the President, the joke on the party out of power, to the wrong audience. This is adjustment, but it is likely to become adjustment at the cost of personal integrity. Occasionally a person who behaves in this fashion becomes aware of wild impulses to break out in completely unconventional ways and shock everybody to the core. More often he remains unaware of his inner impoverishment until some crisis arises. Perhaps his different groups begin to demand more consistent and exclusive

loyalty, so that he is forced to decide what he will espouse as his own real values. At such a point he is likely to feel lost and bewildered.

The problem of overadjustment to social expectations has been examined with particular care by the Swiss psychiatrist, C. G. Jung.[40] It is seen most clearly in cases having the following pattern: the patient is a person in middle life who has been well adjusted and successful, but who feels an intolerable discontent, uneasiness, frustration, and sense that his life has become meaningless. To understand such cases Jung introduces the concept of the *persona.*

> The word "persona" is really a very suitable expression for it, since *persona* originally meant the mask worn by an actor to signify his role. . . . It is a compromise between the individual and society as to the kind of semblance to adopt, what a man should "appear to be." He takes a name, earns a title, represents an office, and belongs to this or that. . . . Society expects, and indeed must expect, that every individual should play the role assigned to him as completely as possible. Accordingly, a man who is also a pastor, must not only carry out his professional functions objectively but at all times and seasons he must play the role of pastor in a flawless manner. Society demands this as a kind of security . . . It is therefore not surprising that everyone who wants to be successful has to take these expectations into account.
>
> The construction of a collectively suitable persona means a very great concession to the outer world. It is a real self-sacrifice which *directly forces the ego into an identification with the persona, so that* there are people who actually believe themselves to be what they present to the public view . . . These identifications with the social role are a very fruitful source of neuroses. A man cannot get rid of himself in favor of an artificial personality without punishment. The mere attempt to do so releases, in all the ordinary cases, unconscious reactions in the form of moods, affects, fears, compulsive ideas, feelings, vices, etc.[41]

When a person has made the mistake of identifying himself too completely with his social roles—with his persona—and is paying the price in irritability and discontent, he can restore his well-being only by striking a new bargain with the demands of society. He must remove the "false wrappings of the persona," as Jung put it, and regain contact with those aspects of himself that have been suppressed in the process of social adjustment. In his new bargain with society there will be room for the fulfillment of what is more

[40] Jung, C. G., *Two Essays on Analytical Psychology*, trans. by H. G. & C. F. Baynes, New York, Dodd, Mead & Co., 1928, esp. pp. 163–171 and 202–232.
[41] *Ibid.*, pp. 164–165, 209–210.

or less peculiar to himself. Instead of a persona he will become, in today's popular phrase, a "real person."

Conscience and Ideals

Some of the most noteworthy human actions occur in the service of conscience and ideals. Considerations of immediate reward, of self-interest, even of harmony with fellow group members, may be laid aside in favor of principles that are felt to be in the interests of broader human welfare. In extreme situations a person may have to choose between his life and his ideals, and he may choose his ideals. People who have died for their country, gone to the stake for their religious faith, endured poverty for their art, gone to jail or into exile for their political beliefs, all show the extent to which ideals can govern behavior. Many of the most admired human achievements demand concepts such as conscience and ideals.

In recent years, however, such concepts have been under a cloud. Talk about ideals is sometimes only a sham, a piece of window-dressing whereby a person seeks to give commonplace or dishonest motives a noble appearance. The patent insincerity of advertisers, politicians, dictators, and other self-interested people has gone a long way to sour our respect for the kind of ideals they proclaim. Conscience has had an even harder time. Freud unmasked it as one of the causes of neurosis and of many shortcomings in personal development. Going further, Chisholm, in a recent paper, makes conscience responsible for all the blindness, guilt, fear, and frustration that make men unable to prevent war. "The necessity to fight wars," he says, is an "irrational behavior pattern resulting from unsuccessful development and failure to reach emotional maturity." The human race seems perpetually liable to this form of irrational behavior. The one psychological force capable of producing such recurrent folly, says Chisholm, is "morality, the concept of right and wrong." Only when men escape from the conviction of sin and the equally damaging conviction of moral superiority can they achieve "the qualities of adaptability and compromise" which would put an end to war.[42]

It is confusing to think of conscience as the cause of neurosis, war, and highly integrated noble deeds. But it does no harm to start from this confusion if it makes us attentive to the different meanings attached to conscience. Conscience and ideals have a his-

[42] Chisholm, G. B., "The Reestablishment of Peacetime Society," *Psychiatry*, 1946, Vol. 9, pp. 3–11.

tory in the individual. Like everything else, their development can go astray so that they enter into the composition of neurosis, warmongering, dictatorship, cruel self-righteousness, and many other forms of individual and social maladjustment. They can also develop in ways that make men dedicate their efforts to human betterment. Most of the trouble comes from the fact that conscience begins in childhood before the child can understand what it is about.

Freud's Concept of the Super-ego.—Freud developed the concept of the super-ego in order to explain the irrational guilt feelings and self-punishments observed in the free associations of neurotic patients. He felt justified in considering it a separate entity because it seemed to act with remarkable independence, forcing its norms upon the patient even when the patient did not want to accept them. Irrational guilt feelings often occur in normal people. An old lady, nearing eighty, feels a little guilty when she knits on Sunday, even though she is making socks for soldiers, because in her childhood her parents forbade work on the Sabbath. A young man of very strict training decides he will adopt the standards of his college companions, but when he smokes or allows his lips to touch alcohol he still feels as if he had committed a crime. Such things are more far-reaching and crippling in neurotic patients. The moral compulsions and scruples seem completely autonomous or *ego-alien:* "the individual seems to have no say in the matter of the self-imposed rules; whether he likes them, whether he believes in their value, enters as little into the picture as his capacity to apply them with discrimination." [48]

The reason for the power and irrationality of the super-ego lies in the circumstances of its origin. It goes back to infancy; Freud said to the fourth and fifth years, but later workers with children trace it to the earliest parental restrictions. Conscience, Freud observed, is not present from the very beginning.

> Small children are notoriously amoral. They have no internal inhibitions against their pleasure-seeking impulses. The role which the superego undertakes later in life is at first played by an external power, by parental authority. The influence of the parents dominates the child by granting proofs of affection and by threats of punishment which to the child mean loss of love and which must also be feared on their own account . . . It is only later that the secondary situation arises, which we are far too ready to regard as the normal state of affairs; the external

[48] Horney, K., *New Ways in Psychoanalysis,* New York, W. W. Norton & Co. 1939, p. 208.

> restrictions are introjected, so that the superego takes the place of the parental function, and thenceforward observes, guides, and threatens the ego in just the same way as the parents acted to the child before.[44]

The concept of *introjection* has been considerably elaborated in psychoanalytic writings. The introjection of parental restrictions, however, is basically a learning process and may even be likened to simple conditioning. The child acts on some impulse, the behavior is punished (or punishment threatened), and this linkage with punishment causes the action to be internally inhibited thereafter. The super-ego is conceived to include not only prohibitions but also positive ideals such as cleanliness, self-reliance, perfection. The introjection of these ideals can also be reduced to a simple learning process in which behavior is strengthened by reward. In actual practice, the super-ego is usually described at a more complex level. It includes the attitudes and tendencies that are taken over wholesale from the parents during the earlier years of childhood. It is the childhood version of the conscience and ideals of later life.

Shortly after Freud directed attention to these matters, it became apparent that the super-ego was not always a faithful copy of parental attitudes. Delinquent children showed practically no introjection of parental restraints, even when these were strongly applied. It could be assumed in such cases that the child had not been offered a good bargain: there was too little love to make it worth his while to inhibit things he wanted to do. More puzzling was the situation in which mild and amiable discipline reappeared in the child as a severe and violently punishing super-ego. How could conscience grow so far beyond its source? The answer seemed to be that the child's own feelings of aggression got mixed up in the process. Angry because of his frustration, he projected this feeling into the parents and assumed that they, too, were angry. Thus he introjected a badly falsified image of the parental code.

The child's misapprehension of norms goes much further than this. We have to ask how a child understands rules and ideals quite apart from emotional involvement with them. How does an immature mind grasp the difficult notion of morality?

Piaget's Study of Child Morality.—As part of his investigation of children's thinking, Jean Piaget, at Geneva, has studied the growth of moral judgments in children from five to adolescence.[45] He used

[44] Freud, S., *New Introductory Lectures in Psychoanalysis*, New York, W. W. Norton & Co., 1933, p. 89.

[45] Piaget, J., *The Moral Judgment of the Child*, New York, Harcourt, Brace & Co., 1932.

the technique of the provoked value judgment; that is, he initiated conversations or played games with children in the course of which he could ask them about the rules for playing marbles or how they felt about such faults as clumsiness, stealing, and lying. Piaget found that for all the younger children, a rule has an absolute status, like a thing that exists, an outlook which he christened *moral realism.* The younger ones assumed that the rules for marbles had always existed, and that it would be impossible to change them even if everyone agreed to do so. To offenses they attributed an equally unchanging status: if you mischievously broke one cup it was far less serious than if you broke a whole tray of cups quite by accident. To the child, intention played no part in the moral judgment. An offense was severe in direct proportion to the amount of damage done. Apparently, the younger children felt that the parents punished because of their anger at losing the cups; they were more angry when they lost more cups, and they had to punish more severely in order to feel better.

In contrast to this, the older children were able to take a point of view which Piaget called *moral relativism.* They could see that the rules for marbles were matters of mutual agreement for mutual benefit and could be changed by agreement. They understood that the intention behind an offense had to be included in judging the seriousness of the offense. Moral relativism means judging the quality of an act by its actual effects on others.

In view of this analysis, it becomes plain that the super-ego, originating as it does in the earlier part of childhood, will embody the outlook of moral realism. Even our everyday illustrations showed this: it is wrong to work on the Sabbath, even if you are assisting the war effort, and it is sinful to touch tobacco and alcohol, even if your mature self can perceive no harmful consequences. The super-ego can thus be considered the irrational, and, indeed, often unconscious conscience that is left over from childhood. Like any childhood function, it should develop and keep pace with a maturing outlook. Freud showed that in many cases this development did not take place, with the result that the super-ego persisted with force and with ego-alien independence.

Development of Moral Insight.—The outgrowing of moral realism depends to a large extent on being able to see things from another person's point of view. Young children can be utterly confused by questions that involve putting themselves in someone else's place: for instance, "How many brothers has your brother?" In an attempt to study perspectives, Lerner told children a story about an

offense which, from an adult point of view, would be judged very differently by the different characters included in the story. The younger children did not grasp the different perspectives, and made each character give exactly the same judgment of the offense, even those who had benefited by it.[46]

The development of perspective enabling the child to see that events affect different people differently—that what gives pleasure to him and his friend, for instance, may be disadvantageous or painful to a third child—is partly a matter of mental maturation, but it is partly the result of particular kinds of experience. L. B. Murphy has shown that nursery-school children display very real sympathy for each other's distress, and that this sympathy is stronger when the child himself has been in a similar plight.[47] Isaacs gives instances, also from nursery school, of children discontinuing behavior that annoys others because they grasp, with a little help, the image of how they would feel if they were the victims.[48] Especially important for understanding morality are situations in which others violate the rules to the child's disadvantage. The functions of a promise dawn on him with crystal clearness when his parents forget that they were going to take him to the circus. The reason for the rules of a game strikes him when another child violates them and starts to pocket his marbles. To be sinned against is one of the crucial experiences giving insight into the nature of sin.

Many writers do not distinguish between super-ego and mature conscience. Freud did not do so, but he made a rather similar distinction when he pointed out that children, as they grow older, copy the norms and ideals of other people besides their parents. These identifications, he said, "regularly provide important contributions to the formation of character; but these only affect the ego; they have no influence on the super-ego, which has been determined by the earliest parental imagos."[49] It is probably true that even the most mature, independently worked out conscience contains traces of the super-ego as it existed in early childhood. Nevertheless we miss an important aspect of development if we attempt no theoretical distinction. We shall regard the super-ego as a childhood conscience, built upon moral realism, irrational in character, borrowed straight from parental sanctions *without reflection or the use of his own experience*

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[46] Lerner, E., "The Problem of Perspective in Moral Reasoning," *American Journal of Sociology*, 1937, Vol. 43, pp. 249–269.
[47] Murphy, L. B., *Social Behavior and Child Personality*, New York, Columbia University Press, 1937.
[48] Isaacs, S., *Social Development in Young Children*, New York, Harcourt, Brace & Co., 1937, pp. 275–278, 369–375.
[49] Freud, S., *New Introductory Lectures, op. cit.*, p. 92.

on the part of the child. Mature conscience begins when the child's sympathy and insight get to work so that he sees a purpose—other than pleasing his parents—behind restraints and ideals. It continues when he discriminates the effects of his actions on everyone who is affected by them, judging his acts accordingly and freeing himself from blind literal obedience to a code. Murray describes this process as the integration of the super-ego into the ego, the integration being accomplished by cognitive activity and independent judgment.[80] To the extent that this integration is accomplished, the super-ego ceases to exist as an ego-alien force in the personality.

Fixation of the Super-Ego.—When the super-ego is not outgrown in the manner just described—and we must admit that much of our moral training seems designed to prevent it from being outgrown—it remains an autonomous and often rather disturbing force in personality. The person may be subjected to an unbearable burden of guilt and fear as his super-ego passes its archaic moral judgments on his behavior. He may try to rebel and act the part of a libertine, but he cannot do it with peace of mind. He may surrender to the force he is unable to integrate and become a literal embodiment of all the virtues. This sacrifice is likely to make him envious of anyone who dares violate a single rule, so he attacks such people with the cruel venom of the self-righteous. It is these manifestations of a fixated super-ego that justify writers such as Chisholm, quoted above, who see so much evil in conscience and the concept of right and wrong. A mature conscience is another matter.

In general, the super-ego becomes fixated when there is anxiety as regards parental love and acceptance. The child does not dare to question parental norms or to behave in any way that may imperil the tenuous relation. He is scared. This blocks the growth of sympathy and insight, the outflow of feeling toward other children who might help him gain new perspectives. It prevents the use of his own experience and judgment. So much is at stake in being perfect as the parents mean it that he cannot give up or modify those patterns of behavior. Fixation of the super-ego is encouraged by society's timidity in allowing the individual to think for himself, especially on moral matters. The image of moral chaos, doubtless greatly exaggerated, makes men hesitate to encourage individual moral maturity. It is easier and safer to keep people in line. Under these circumstances the outgrowing of an initial fixation is doubly difficult.

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[80] Murray, H. A., *Explorations in Personality, op. cit.*, pp. 136, 190.

The Ego-Ideal.—Ego-ideal means simply the self that one wants to become. It may take the form of an ideal of personal conduct: to be an upright man, a charming woman, an altruistic person, a top-notch gangster. It may be identified with desired accomplishments: the person wants his life to mean clean city government, freedom for artistic expression, a world without alcohol, a world-wide fascist revolution. Our examples are chosen to suggest that the concept of ego-ideal is important, regardless of the wisdom and ethical character of the self one wants to become. Like the ego itself, the broader concept with which we started this chapter, the ego-ideal is an integrative concept. People may have what others consider to be conflicting aims. But they rarely think of the "selves" they would like to become. Their ideals are linked to one organism, one ego, one personal identity, integrated somehow into a single ego-ideal.

When we think of idle and drifting lives, or of lives so bound by circumstance that they seem to run themselves out as a matter of routine, the concept of an ego-ideal may appear superfluous. It is needed, however, perhaps even to understand these lives, and certainly to understand those contrasting lives that achieve things of importance and change the world. It is not necessary to conceive that an effective ego-ideal must be conscious and communicable in words. Sometimes an outside observer can say more clearly than you yourself what you seem to be living for, even though he does not have the advantage of introspection. An ego-ideal can be functionally effective without being consciously formulated. In fact, when a person can formulate his ego-ideal too readily, we may suspect that the verbal statement is drifting loose from the functionally effective guides of his behavior and is being used to impress, if not to deceive, himself and others.

The ego-ideal must be conceived as a construction, an individual synthesis built up out of personal experience. In this respect it is exactly like the self of which it is a part. What a person wants to become is determined in part by his competences and the success and recognition they have received. It is influenced by his group memberships and the social roles he has been able to play acceptably. It may be strongly marked by his childhood super-ego, and further affected by the moral insight he has developed as he grew older. Experience will have served to accent certain possible ideals and suppress many that are quite impossible for him. But throughout the whole process the person himself—the living organism which is never completely passive—performs acts of selection and synthesis. The result is an individual guiding pattern that helps put his dif-

ferent tendencies into a hierarchy and that steadies his progress toward remote and difficult goals.

The forming of an effective ego-ideal is made easier by the possibility of *identification.* Plenty of models are available to copy. From the time when the little boy is urged to act like a big boy to the time when, let us say, he enters a religious order that patterns its activities on St. Francis of Assisi or a political group that espouses the philosophy and program of Lenin, he is proffered a large array of more or less ready-made ego-ideals. Here again he must select and synthesize, but the ready-made images of living or once-living people quicken his imagination and enlist his energies more strongly than would otherwise be possible. One of the important things to know, if possible, about a person's development is the identifications he has made along the way. Absence of strong or worthy identification figures may badly cripple his own integration. On the other hand he may be overwhelmed by too rich an array of strong identification figures, especially if these are pressed upon him. It is not easy for a child growing up in a family circle of famous and accomplished people to avoid a continual sense of shortcoming.

The concept of the ego-ideal rounds out our description of the integrative aspects of personality. It emphasizes the forward movement or activity that is characteristic of living organisms. The personal pattern of tendencies, a product of the past, bears reference to the future. Today's behavior is shaped in order to realize certain anticipations of a better tomorrow.

SUGGESTIONS FOR FURTHER READING

Many of the topics taken up in this chapter are discussed in Gardner Murphy's *Personality: A Biosocial Approach to Origins and Structure* (New York, Harper & Bros., 1947). In Chs. 3, 4, and 7, Murphy considers the question of constitutional differences, in Chs. 20–22 the origins, evolution, and enhancement of the self, in Chs. 32 and 34 and in Part Six as a whole the problems of group membership, social roles, and cultural determinism. Murphy's treatment is reflective and theoretical, not easy but eminently worth while. Valuable especially for its many concrete illustrations is M. Sherif's and H. Cantril's *The Psychology of Ego-Involvements* (New York, John Wiley & Sons, 1947), especially Chs. 7–9 on the genetic formation and re-formation of the ego, and Chs. 10–11 on the effects of group memberships and identifications. In J. McV. Hunt's *Personality and the Behavior Disorders* (New York, The Ronald Press Co., 1944) will be found the following relevant chapters: Ch. 16 on heredity by L. S. Penrose, Ch. 17 on constitutional factors by W. H. Sheldon, Ch. 23 by G. Bateson on cultural determinants of personality, and Ch. 24 by R. E. L. Faris on ecological factors in human behavior.

The chapter deals with the integrative aspects of development and therefore with difficult and far-reaching concepts that can easily float away from their moorings in concrete fact. An excellent corrective exercise is to read case histories, bearing in mind the concepts used here and trying to work out their importance in the particular case. The following cases are recommended, with the suggestion that the exercise can be made even more valuable by reading several and comparing them: the case of John Sanders (H. E. Jones, *Development in Adolescence,* New York, D. Appleton-Century Co., 1943), the cases of Betty and Paul (P. Blos, *The Adolescent Personality,* New York, D. Appleton-Century Co., 1941, pp. 23–219), the six cases given by W. H. Sheldon (*The Varieties of Temperament,* New York, Harper & Bros., 1942, pp. 96–245), and the case of a delinquent by C. R. Shaw (*The Jack-Roller* Chicago, University of Chicago Press, 1930).

CHAPTER 5

FANTASY, DREAMS, AND HYPNOTIC BEHAVIOR

If we needed a single title to cover the three topics described in this chapter, it would have to be something like "normal irrationality" or "everyday unrealistic behavior." Fantasy, dreams, and hypnotic behavior have this in common, that they all occur most readily under circumstances from which the immediate pressure of stern reality has been somewhat removed. They show the way we behave, or can behave, when vigilance can be relaxed in favor of a certain playful freedom. Several other kinds of behavior exemplify a similar departure from the highest levels of alert, realistic vigilance. We might mention play, behavior under the influence of drugs and alcohol, or mob hysteria and behavior in crowds. We shall confine ourselves, however, to the three topics of our title because they give us more direct insight into the abnormal personality.

Fantasy and dreams are universal, well-known experiences. Hypnotic behavior, which calls for special techniques, is less well known, but there is every reason to believe that it can be produced in the great majority of normal people. These three topics, therefore, properly belong in the study of the normal personality. None of them implies anything morbid or unhealthy. They are traditionally assigned to abnormal psychology because of historical accidents: the circumstance that hypnotism was discovered in the attempt to cure disease, that dreams proved to have special value in treatment by psychoanalysis, that fantasy takes its wildest and most dramatic forms in mentally disordered people. But if these topics do not logically belong to the abnormal, they nevertheless help us greatly in understanding certain aspects of disordered behavior. The less rational and less vigilant levels of behavior are not necessarily less important. Sometimes it is impossible to understand a person's troubles without investigating the fantasies, the feelings, and the dreams that lie behind them.

Fantasy

"Fantasy is popularly thought of," writes Symonds, "as the fairyland, the unreal part of the mind. Actually, it is very real and in a

way tough—a part of the mind that cannot be so easily dispensed with. Even though fantasy is intangible and fleeting, it still has an actual existence and is influential in shaping personality and guiding behavior." [1]

The Process of Daydreaming.—Freud's discovery of free association, which we described in the first chapter as an important landmark in the study of human nature, drew scientific attention to the less logical, less controlled, more spontaneous and dreamy thought processes. In a first attempt to study these processes, Bleuler, in 1912, introduced the distinction between *realistic* and *autistic* thinking.[2] Realistic thinking is oriented toward correctly understanding the world around us and toward communicating with others. It implies vigilance, an intention not to be deceived or misunderstood, and it therefore has a toilsome quality that leads to fatigue. Autistic thinking is experienced as free from effort. It goes forward spontaneously, unhampered by realistic and logical constraints, and appears to be guided by feelings and wishes. Bleuler's distinction is convenient and useful, but it is probably more correct to conceive of the whole thing as a continuum rather than as two distinct ways of thinking. There are all degrees of freedom from realistic constraints. Starting with cold hard problem-solving, we can run down the line through imaginative speculation, shared playful fantasy, free association, and private daydreams until we reach the elaborate fantasies that occur under the influence of drugs and the bizarre experiences that constitute our night dreams.

An intensive study of the daydreaming process was reported by Varendonck in 1921.[3] This worker undertook a systematic study of his own daydreams or reveries. Every so often he would suddenly awaken to the fact that his mind had been wandering in revery, and he would then undertake to trace back the train of thoughts and images to their starting point. While reading, to take one example, he realized that he was not grasping the meaning. His mind proved to be occupied with thoughts of getting this doctor and that doctor in case his child's cold got worse, and then he recollected that a few moments before he had heard the child cough, a stimulus that apparently went unnoticed at the time.[4]

On the whole, Varendonck found that reveries started either

[1] Symonds, P. M., *The Dynamics of Human Adjustment*, New York, D. Appleton-Century Co., 1946, p. 487.

[2] Cf. Bleuler, E., *Textbook of Psychiatry*, New York, The Macmillan Co., 1942, pp. 45–47; here Bleuler substituted *dereistic* (away from reality) for the term *autistic*.

[3] Varendonck, J., *The Psychology of Day-Dreams*, New York, The Macmillan Co., 1921.

[4] *Ibid.*, p. 44.

from outer stimuli or from spontaneous memories that touched on matters of personal importance. There would follow a chain of thoughts and images, connected by associative links but guided by personal feelings: worries, interests, or pleasant wishes that could be imagined as fulfilled. Many of Varendonck's reveries had to do with writing a thesis, getting a doctor's degree, and securing a position, these being his chief personal concerns at the time. Some arose from situations in which he felt unfairly treated, the revery usually reaching a happier conclusion than the real event. He noticed further that his daydreams proceeded almost like pictures or actual experiences. They showed an affinity for the present tense with an absence of conditional words like "if" and "when." The thought chains were concrete rather than abstract.

Everyone engages in revery a good deal of the time. Most of it is quickly forgotten, but anyone can attest its frequency by noticing his thoughts for a few hours. Sometimes our reveries awaken considerable feeling and even influence our bodily reactions. We may feel hot with embarrassment as we recollect some blunder, and our pulse may rise as we angrily rectify, in fantasy, some insult or unjust criticism. The fact that these daydreams do not actually engage with real life and change the real situation makes us a little apologetic about them. Much of their content, moreover, strikes us as a little humiliating. They are full of hurt feelings, petty pride, spiteful retaliations, or absurdly glorious roles we would like to play. They abound with repartee that did not occur to us in time, and with imaginary conversations in which we display sparkling wit or heavenly eloquence. Pride invites us to overlook these vanities in ourselves, but the psychologist cannot neglect this "very real and in a way tough" realm that shapes and sustains the personality.

Balancing and Prospective Aspects of Daydreams.—In the two previous chapters, we studied adjustment. We saw that adjustment always takes place at a cost: that is, it entails the giving up of certain tendencies and privileges in order to enjoy the fuller satisfaction of other tendencies. We noticed that maladjustment sometimes happens because the cost is too great; the inducements to growing up are not sufficiently attractive. But in any case, even when a good psychological bargain can be struck, a great many aspects of oneself are neglected and sacrificed in order to live a mature and useful life.

The cost of adjustment is well illustrated in the case of a college

undergraduate named Helmler.[5] By the time he reached high school it was clear that tendencies toward friendly sociability and tendencies toward dominating others were both strong in his make-up. Only in one situation, however, up to the time of graduation from college, did he find it possible to satisfy both tendencies without conflict. He was chosen for a summer camp designed to give training in leadership. He rose in the hierarchy, "was given a good deal of authority as one of the camp leaders," and at the same time "made about fifteen close friends." These circumstances conspired to make his camp experience the outstanding satisfaction of his life. In high school he became a prominent politician, which satisfied his love for dominance but cost him his close friendships. To his regret, he found himself considered "a rather serious stuffed shirt, out for all I could get." At college the situation was reversed. His friendliness flourished, but he achieved no prominence. He was adjusted, but with a gnawing sense of discontent. Compared to its high-school glory, his life seemed unimportant and trivial. He had daydreams in which he assumed important roles in government, business, or military service. One evening, during some horseplay at the dormitory, he suggested, all in a spirit of fun, that his companions gather around and call him God.

For the most part daydreaming is prompted by unrelieved tensions of one kind or another. Its themes are the minor frustrations of the day and the major frustrations of the person's life as a whole. In so far as the daydream merely wishes things around into a more pleasing shape, it might be regarded as a cheap substitute for actual achievement. Even though cheap, however, it is a substitute. It helps us to get used to the frustrations that exist, while at the same time presenting images of a more hopeful state of affairs for the future. Thus daydreaming can be seen as a kind of balancing activity in which existing frustrations are made less painful and burdensome.

In considering fantasy in this way, we should not overlook its prospective aspect. Imagined actions have an element of practice or rehearsal about them, and this practice may affect actual behavior on some future occasion. Children can often be observed trying out roles in play and then putting them into practice in reality. A little boy is scared by the banging and squeal of a hay fork and refuses to go near the barn. With parental help he presently builds a barn out of blocks, rigs up a hay fork with string, brings a toy truck

[5] White, R. W., Tomkins, S. S. & Alper, T. G., "The Realistic Synthesis: A Personality Study," *Journal of Abnormal and Social Psychology*, 1945, Vol. 40, pp. 228–248.

and trailer to the scene, and for some time makes the truck lift imaginary hay out of the trailer. He then announces that he is going to the barn where he pulls on the rope and moves the hay fork by his own effort—an action which apparently could not be managed without the intermediate step of rehearsal in fantasy. Daydreaming, similarly, is not necessarily idle. It may contain, along with its too-easy satisfactions, an important element of imaginative practice for the future.

Modern psychopathology has probably increased the disrepute in which fantasy is held. Schizophrenia, the most common of the psychoses, first became intelligible when its manifestations were perceived as analogous to dreams and daydreams. Generalizing too hastily from this discovery, people began to deplore daydreaming on the ground that it would lead to schizophrenia. In our case material in the second chapter, there were two examples of excessive daydreaming. Joseph Kidd, when discouraged with the failure of his various attempted "personalities," found himself daydreaming most of the time. But when he found an appreciative girl and a satisfactory job, the daydreaming ceased to be a subject for complaint. His daydreaming was a symptom of maladjustment, not a cause, and there is no reason to suppose that his frequent reveries slowed the process of readjustment. In L. Percy King's case, daydreaming reached far more serious proportions, so that large blocks of fantasy became for him indistinguishable from reality. But it is meaningless to say that he became schizophrenic because he daydreamed too much. We saw that his illness arose from intolerable conflict, a conflict that was merely reflected in fantasy. Even in his case the prospective, rehearsing aspect of fantasy can be observed. In his thoughts he tried to explain things more coherently and to shape his behavior more realistically, and he actually improved his adjustment. That the attempt was not successful enough to restore his full sanity should not lead us to overlook its readaptive direction.

Projective Tests

Close study of a person's daydreams would tell us a great deal about his personality. If we could open a door and observe the free streaming of his revery, we would be rewarded by many insights that could never be obtained by conversation or by observing his behavior from the outside. We would see his private world and learn the personal meaning of events in his life. For this very reason most people are unwilling to disclose what goes on in their

reveries. They prefer that the private world should stay private. Most people are, in any event, only half aware of this realm of revery. Varendonck had to develop a special alertness in order to arrest his own daydreams before they drifted off into forgetfulness. The spontaneous daydream cannot often be the object of scientific study.

The Study of Associations and Imaginative Productions.— One way to circumvent reticence is to use Freud's method of free association. Under instruction to forget the constraints of logic or decency, and simply tell everything that occurs to him, a person necessarily thinks in a way that is much like spontaneous revery. Free association, however, more or less implies that the person is receiving treatment. It is likely, after a little while, to bring his problems to the surface, and it should not be asked of a person unless the investigator is competent to offer help in solving these problems. It is nevertheless highly desirable, unless we are content with a superficial understanding of personality, to have methods that will at least give clues as to what goes on inside. The first step in this direction was taken by Jung shortly after 1900. As a substitute for free association he devised the *word association test,* in which the experimenter calls out a list of words and the subject replies with the first thought that comes to his mind. In 1921 Hermann Rorschach published his work with ink-blots, showing that a person's choices as to what he saw in relatively meaningless figures could reflect many significant aspects of personality. More recently psychologists have turned with increasing interest to man's playful and imaginative behavior, and many tests have been devised to give these observations a standardized form.[6]

Tests of this kind are now generally called *projective tests.* The term originated in the notion that the subject unwittingly projects certain aspects of himself into the task that is assigned. The characteristics of projective tests can be summarized as follows. The subject is confronted with a somewhat unstructured, ambiguous situation—an ink-blot, paper, and crayons, an incomplete story, an array of toys—and asked to do something with it. He is thus left free to organize the material in his own way. Having no conventional patterns to follow, he is obliged to fall back on his own preferences and peculiarities, and it is in this way that he reveals himself. It is further characteristic of projective methods that the sub-

[6] This work is summarized up to 1942 in J. McV. Hunt's *Personality and the Behavior Disorders,* New York, The Ronald Press Co., 1944, Vol. 1, Ch. 6.

ject does not know what kinds of inferences the examiner intends to make. His attention is focused on the task in hand, and it is well-nigh impossible for him to guess at its psychological meaning. This is particularly true of the Rorschach ink-blot test, which requires a complicated system of scoring before any inferences are made.

The Thematic Apperception Test.—At present the Rorschach test is the most widely used of the projective methods. It is not, however, primarily a test of fantasy; it is more properly described as an experiment on selective perception. In order to get an idea of the diagnostic possibilities of provoked fantasy, we shall examine for a moment the *Thematic Apperception Test* introduced in 1935 by Morgan and Murray.[7] In this test the subject is given a series of pictures, mostly of somewhat indefinite content, and asked to make up a story about each picture. As Murray explains it:

> The test is based upon the well-recognized fact that when a person interprets an ambiguous social situation he is apt to expose his own personality as much as the phenomenon to which he is attending. Absorbed in his attempt to explain the objective occurrence, he becomes naïvely unconscious of himself and of the scrutiny of others and, therefore, defensively less vigilant. To one with double hearing, however, he is disclosing certain inner tendencies and cathexes: wishes, fears, and traces of past experience.[8]

In the stories that are told, the characters are placed in various situations; they act and think and feel in certain ways, and their behavior leads to some kind of an outcome, frustrating or successful. The test is based upon the assumption that a substantial part of what the storyteller ascribes to his characters, especially to the character with whom he is most identified, is an expression of his own personal pattern of tendencies.

In a test situation of this kind we are dealing not with spontaneous revery but with provoked fantasy. It must be expected that other things besides the storyteller's personal tendencies will influence the content of his narrations. He will follow certain conventions as to what constitutes a good story. He may borrow his plots from recent books or movies. The content is influenced, moreover, by the immediate situation. Stories given to a male examiner will differ somewhat from stories told to a female examiner. Interest and praise from the examiner tend to increase the length and fan-

[7] Murray, H. A., *Explorations in Personality*, New York, Oxford University Press, 1938, pp. 530–545.
[8] *Ibid.*, p. 531.

tastic quality of the productions, and Bellak has shown that when the examiner greets the subject's work with critical disparagement, the events in the next few stories become heavily laden with aggression.[9] The stories told by Bert Whipley naturally included a good many crimes, and these crimes almost always eventuated in punishment. We cannot attach great importance to this persistent theme when we bear in mind that the stories were told to the prison psychologist.

When all allowances are made, however, the stories told by different individuals are decidedly different and sometimes plainly autobiographical. That they provide clues to deeper personal tendencies, such as might come out in spontaneous revery or free association, can be shown by experiments using matching and prediction. Harrison, for instance, used the stories of psychiatric patients and validated his inferences against rather full hospital records. From the stories alone he could deduce with considerable accuracy (83 per cent correct) not only a number of biographical facts about the patients but also their interests, attitudes, problems, and conflicts.[10] Masserman and Balken found characteristic differences among the thematic apperceptions of patients consistent with the psychological mechanisms underlying their illnesses.[11] Morgan and Murray studied a case in which the thematic apperceptions foreshadowed all the chief trends that later emerged in an extended psychoanalysis.[12]

The personal tendencies and peculiarities of the storyteller manifest themselves in various ways. Considerable judgment and experience are necessary before an examiner can make reliable inferences. Sometimes the repeated themes seem particularly informative; at other times it appears that the most important problems receive treatment in only a single story, the other themes being relatively superficial. One of the best ways of studying a set of stories is to look for things that are unwittingly taken for granted—the storyteller's unwitting expectations. Sometimes when one reads through a whole set of stories it is apparent that the heroes are almost always helpless or that their efforts fail. In other cases the heroes competently solve their problems, or perhaps a fortuitous turn of events usually makes the story come out happily. One can look for uniformity in different classes of characters: what are the subject's

[9] Bellak, L., "The Concept of Projection," *Psychiatry*, 1944, Vol. 7, pp. 353–370.

[10] Harrison, R., "Studies in the Use and Validity of the Thematic Apperception Test with Mentally Disordered Patients," *Character and Personality*, 1940, Vol. 9, pp. 122–138.

[11] Masserman, J. H. & Balken, E. R., "The Psychoanalytic and Psychiatric Significance of Phantasy," *Psychoanalytic Review*, 1939, Vol. 26, pp. 343–379, 535–549.

[12] Morgan, C. D. & Murray, H. A., "A Method for Investigating Fantasies: the Thematic Apperception Test," *Archives of Neurology and Psychiatry*, 1935, Vol. 34, pp. 289–306.

older men like, or his older women, or the characters represented as girl friends? But we shall learn more from an example than from further general statements.

An Example of Thematic Apperceptions.—The use of provoked fantasies as a clue to underlying factors in personality is well illustrated in the case of Joseph Kidd. He was first given the thematic apperception test when his troubles were at their worst, during his junior year at college. One of the most persistent themes in his stories centered around the loneliness and longing engendered by the loss of loved persons. In the course of twenty stories this theme occurred five times. For example, when shown the picture of an elderly woman peering from the threshold of a half-opened door, Kidd related the story of a childless widow who could not believe that her husband was really dead and who wandered around the house looking for him and speaking to him. In another story a young husband by jealous nagging destroyed his wife's affection and drove her to leave him and marry again. He soon discovered that he could not bear her loss, and after becoming an eccentric outcast he committed suicide. The details as well as the theme of these stories showed familiarity with the experience of bereavement and a current preoccupation with feelings of loneliness. Since the chief characters in Kidd's life history were all still alive, his "bereavement" must have sprung from the marked decline of his parents' loving attention and from the growing indifference of his girl. The repetition of the theme of loneliness in the stories gave evidence of an intense craving for this waning love, a craving that was probably mingled with dependence.

Another outstanding theme had to do with the control of selfish and aggressive impulses. Kidd's handling of this theme displayed certain unwitting assumptions that provided valuable clues to his inner state. In seven stories the principal character was moved by aggressive, cruel, greedy, and purely self-seeking motives. Not in a single instance was he able to control these impulses by himself. In three stories they reigned unchecked and led to somebody's death, after which the chief character was tortured by horrible remorse. Once the hero managed to control his evil tendencies for the sake of a beautiful girl's love, but the struggle with temptations was long and bitter. Quite different was the outcome in the other three tales, in each of which the evil impulses were transformed by the kindly intervention and sympathetic interest of an older man. Thus a young surgeon's callous recklessness was tempered when a kind old

physician took him in hand and showed him what operations and amputations mean to the patient. In another story Kidd told of a poet who harbored a grudge against the world and wrote spiteful poetry which nobody bought. When he was on the brink of starvation an old man who had read all his works told him to climb a certain tower and find great wealth. Expecting to find money, he obeyed, but instead he encountered a vision of light and human happiness which set him on a successful literary career. The third story told of a boy who had become vengeful against his religion and his people because of his father's death. A priest who understood his frame of mind comforted him, and he braced up and went ahead successfully.

These stories revealed Kidd's unwitting assumption that evil impulses cannot be controlled unless one has the reward of affectionate interest and understanding from an older man. From interviews it was known that Kidd's father had originally made a great pet of him, but had withdrawn his favor in the last few years because of the better social and athletic progress of Kidd's two brothers. The depths of Kidd's distress over this loss came out in the three stories just described. From the thematic apperceptions we also learn that he had never really internalized an effective control over aggressive and self-seeking tendencies. Control was performed to please his father and depended on his father's making him a favorite.

The test was repeated three years later, at a time when Kidd had found an appreciative girl friend and had been restored to parental favor. In the new stories the theme of bereavement sank to insignificant proportions and the theme of regeneration by an older man did not occur at all. The heroes still had some trouble with their evil impulses, but they were able to deal with them better than the earlier characters.

Dreams

Most people will readily admit, though perhaps only to themselves, that their daydreams and fantasies reflect personal tendencies and reveal things of importance concerning their private worlds. That the same should be true of night dreams is apt to be conceded with more hesitation. Sometimes a dream shows excellent plot and organization, but generally it is a piece of sheer nonsense. How can we find personal significance in the weird actions and incongruous situations that make up a dream? Many scientists reject the whole idea and dismiss dreams as only the chance "rumblings of brain

molecules." But there is a certain similarity between dreams and spontaneous revery. In drowsy states it is possible to witness a transition between the two. If we find significance in fantasy, we are justified in seeking it behind the scrambled language of the dream.

Freud's Theory of Dreams.—The most influential modern theory of dreams was offered to the world by Freud in 1900 in a large volume called *The Interpretation of Dreams.* To begin with, Freud drew a distinction between the *manifest content* of a dream, the procession of images and events, often completely incoherent, that one experiences in sleep and remembers on waking, and the *latent content* or basic strivings and memories that set the dream in motion in the first place. To make his way from the manifest to the latent content, he used the method of free association, starting in turn from each item in the reported dream. Just as free association led from the meaningless symptoms and imaginings of neurotic patients to their tangled underlying strivings, so it formed a bridge from the absurd manifest content to the meaningful motives that lay behind dreams. Freud first became convinced that dreams represent the fulfillment of wishes; later, in order to allow for battle dreams and nightmares where fear was the reigning emotion, he modified his view and said that "the dream is an *attempted* wish-fulfillment; under certain conditions it can only achieve its end in a very incomplete way, or has to abandon it entirely." [13] The function of the dream is to preserve sleep. The principal disturbers of sleep are unfulfilled wishes, and the dream attempts to ward off the disturbance by representing that the wish is fulfilled. If such fulfillment involves too great anxiety, or if the wish is constantly reinforced from somatic sources, the dream fails in its purpose and the sleeper awakens.

If the manifest content does not in the least resemble an attempted wish-fulfillment, or indeed any other intelligible process, it is because the wish in its passage to finished dream expression incurs a high degree of distortion. Working backwards over the chain of free associations, Freud developed his theory of the dream-work, the process by which latent impulses combine with available images to fashion the final product. "The dream-content appears to us as the translation of the dream-thoughts into another mode of expression, whose symbols and laws of composition we must learn by comparing the origin with the translation." [14] One of the mecha-

[13] Freud, S., *New Introductory Lectures on Psychoanalysis,* New York, W. W. Norton & Co., 1933, p. 45.
[14] Freud, S., *The Interpretation of Dreams,* trans. by A. A. Brill, New York, The Macmillan Co., 1933, p. 268.

nisms of translation is *condensation,* the compressing of numerous thoughts into a small number of images, a process that Freud believed necessary to raise the images to sufficient intensity. Related to it is *displacement,* which is said to occur when the importance or value of an idea in the latent content is removed to a wholly neutral idea in the manifest content. Further distortion arises because the latent thoughts have to be represented in *concrete imagery,* as events actually taking place, so that logical relations are almost entirely lost. Dream-work is not able to create its own images; the wishes that seek expression have to combine with images lying ready in the mind, usually remnants from the previous day. Finally there occurs a *secondary elaboration,* an unwitting attempt to make better sense of the dream as one recalls it afterward. All of these distortions arise from the peculiar nature of the sleeping state, but they can furthermore be seized upon by forces making for repression. In summary Freud says:

> The dream is a psychic act full of import; its motive power is invariably a wish craving fulfillment; the fact that it is unrecognizable as a wish, and its many peculiarities and absurdities, are due to the influence of the psychic censorship to which it has been subjected during its formation. Besides the necessity of evading the censorship, the following factors have played a part in its formation: first, a need for condensing the psychic material; second, regard for representability in sensory images; and third (though not constantly), regard for a rational and intelligible exterior of the dream-structure.[15]

In practice this statement of the theory is qualified by two additional propositions. Freud believed that in adults, at any rate, the only wishes having power enough to create dreams were the repressed infantile sexual wishes that he had shown to be so important in neurosis. Furthermore, he maintained that certain symbols, especially those having to do with infantile conceptions of the sex act, were so nearly universal that they could be interpreted without regard to their connotation for the individual dreamer.

Freud's theory of dreams, like so much of his other work, contains important truths along with certain exaggerations and errors. Three features of the theory have stood up badly to criticism. (1) The notion of fixed dream symbols is now almost universally rejected. Whether a dreamed cigar means the male genital, or a box the female genital, depends entirely on the associations these objects have for that particular dreamer. (2) It appears arbitrary to assert that only unconscious infantile sexual wishes can activate a dream. Any-

[15] *Ibid.,* pp. 491–492.

thing that disturbs nocturnal peace can probably stimulate dreaming. (3) Doubt has been cast on the use of free association as a technique for retracing the pathways from manifest to latent content. Very likely free association carries one back into a welter of images and memories that had something to do with forming the dream, but an accurate reconstruction of the dream-work is not warranted by any technique now at our disposal.

These three criticisms alter Freud's theory considerably, but they do not obscure the main outlines. Dreams spring from an attempt to interpret and manage tensions that are likely to disturb sleep. The information they yield may be of unique value when these tensions happen to arise from unadmitted personal desires. Before we can interpret this information, however, we have to allow for the fact that dreams take place in a language of concrete image and real event which may distort and conceal an otherwise intelligible process.

The Form of Expression in Dreams.—Dreams adhere faithfully to the present tense. They are experienced as events that really happen. Actually they are thoughts turned into realities. The transition can easily be observed in those rather vivid images (hypnagogic images) that sometimes spring into mind as one is on the border between waking and sleeping. Abstract problems can sometimes be caught at such moments in the very act of translation into dream-like images. A scholar, lying sleepily on his sofa, was trying to work out a comparison of the views of Kant and Schopenhauer on time. The thought trains fell apart and he could not recapture them. Suddenly the vain struggle turned into an image in which he was asking a grumpy secretary for information and receiving a look of angry refusal.[16] In Gutheil's book on dreams there are numerous examples of the same process; for instance, a patient who fears inability to control certain impulses dreams that she is teaching school and cannot prevent the children from running around.[17] The content of the dream is present events, and all other thoughts, abstract, conditional, remote, and complex, must be translated or symbolized in this medium. In this respect the dream simply carries to an extreme the qualities noticed by Varendonck in his studies of day-dreams.

Attempts have been made to study the dream process experimentally by giving suitable suggestions to hypnotized subjects. Most of

[16] Quoted by Freud in *The Interpretation of Dreams*, p. 465. Cf. also pp. 328–329.
[17] Gutheil, E. A., *The Language of the Dream*, New York, The Macmillan Co., 1939.

these experiments do not add much to what has just been said. One interesting variation, however, was worked out by Farber and Fisher. The topic for a dream was suggested to a hypnotized person, who immediately dreamed it in his own concrete images and symbols. This dream was later read to another hypnotized person who was asked to interpret it. Subjects under hypnosis were found to be much better dream interpreters than subjects in the waking state. Their minds apparently worked in the same pictorial fashion that produced the hypnotic dreams in the first place.[18]

The Activation of Dreams.—Just as thought occurs in an attempt to understand and solve the problems of waking life, dreams take place in an attempt to interpret and manage the tensions that disturb sleep. Such disturbance can arise from many sources: external stimuli, internal stimuli, impressions and unfinished business of recent days, chronic unsolved emotional problems.

There is no doubt that *external stimuli* act as disturbers of sleep and find their way into dreams. Nearly a century ago a French investigator, Maury, experimented with sleeping subjects, tickling the face with a feather, pinching the neck, or placing a bottle of perfume at the nostrils. Similar experiments have been carried out by Klein with hypnotized subjects.[19] In general the external stimulus is interpreted in somewhat exaggerated fashion. If the subject's hand is brushed with a feather, for instance, he dreams that he is bitten by a rat. Klein found that the well-known dream of flying and falling could be produced by pressing down on the mattress or pillow so that the dreamer's body received a slight passive downward movement. Others have produced this dream by quite different forms of stimulation. External stimuli have an effect on dreams, but they are perceived very inaccurately and with a wide range of personal variation. Bergson's remark is well justified that "a gust of wind blowing down the chimney becomes the howl of a wild beast or a tuneful melody."

Internal stimuli act in a similar fashion, but their greater persistence leads more often to a correct interpretation. Thirst, distention of the bladder, sexual excitation are often the subject of dreams which do not greatly distort the source of disturbance even though they provide strange solutions. Most people have drunk from

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[18] Farber, L. H. & Fisher, C., "An Experimental Approach to Dream Psychology Through the Use of Hypnosis," *Psychoanalytic Quarterly*, 1943, Vol. 12, pp. 202–216. Reprinted in Tomkins, S. S. (ed.), *Contemporary Psychopathology*, Cambridge, Harvard University Press, 1943, Ch. 38.

[19] Klein, D. B., "The Experimental Production of Dreams During Hypnosis," *University of Texas Bulletin*, 1930, No. 3009.

cooling springs only to wake up and find themselves still bothered by thirst. Dreams of this kind illustrate with particular clearness the function ascribed by Freud: preservation of sleep in the face of mounting tension by representing that the desire is satisfied.

It has been observed that *impressions of the previous day* play a rather large part in dreams. This is by no means to the exclusion of earlier recollections, even quite remote ones, but it gives rise to the impression that dreams most readily employ images that have the advantage of freshness. In any accurate record of dreams, memories of the previous day will be found to have the greatest frequency. Morton Prince performed experiments in which subjects were made to recover, with the aid of hypnosis, all the memories connected with a given dream. He drew the following conclusion:

> A very large part of the psychological material out of which the dreams were fashioned was furnished by the previous waking thoughts of the dreamer, particularly those disconnected ideas which coursed in a passive, fleeting way through the mind *just before going to sleep* . . . Whenever pains were taken to recover the pre-sleeping thoughts, *certain elements of these pre-sleeping ideas invariably appeared in the content of the dream.* These ideas furnished the material out of which, to a large extent, the dream was formed.[20]

It is obvious, however, that only certain elements are selected for inclusion in dreams. Sometimes it appears that the selection is governed by the relation of these elements to the *unfinished business* of the day. Stimulating work in the evening has the effect on some people that they dream all night, waking up from time to time to find that they have dreamed some crazy solution to an unfinished problem. When the unfinished business is connected with *important personal tendencies,* it is the more likely to invade dreams. Studies of nightmares show that they seem to center on what is the person's currently most important problem.[21]

Of greatest interest for the student of abnormal psychology are those dreams that appear to be activated by *repressed tendencies.* Sometimes the careful study of a dream shows that it is pieced together out of thoughts and experiences of the previous day that passed virtually unnoticed at the time. These thoughts have the common property that they tend to activate tendencies which the person does not want to recognize in himself. He is able to avoid

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[20] Prince, M., *Clinical and Experimental Studies in Personality,* Cambridge, Sci-Art Publishers, 1939, p. 516.

[21] Cason, H., "The Nightmare Dream," *Psychological Monographs,* 1935, Vol. 46 No. 209.

recognizing them during the day, but at night the activated tendency disturbs sleep and gives rise to dream formation.

The process can be clarified by an illustration. Hendrick reports the dream of a patient which consisted simply of this scene: Two Negro boys were wrestling.[22] When the patient had given exhaustive free associations to each element of the dream, and in so doing had recaptured several fleeting memories from the previous weeks and from childhood, it turned out that the latent wish behind his dream was the desire to express his much inhibited sexual need. He recalled that he saw a Negro couple the day before and noticed the woman's attractive figure. A week earlier he had seen a Negro woman with a white man; his companions had made ribald comments. This led him to recall tales of erotic adventure recounted by his friends. The idea of wrestling called up an incident of early childhood when he had been given one punishment for two misdemeanors: wrestling with a boy and erotic mischief with a little girl. He remembered also having once thought that certain wrestlers' holds were like those of amorous couples. All of these thoughts and incidents had been pretty well suppressed at the time they occurred. But in one way or another they all bore a relation to his chronic problem, the desire to satisfy his sexual need like other men of his age. This problem was stimulated by seeing the Negro couple, and it proceeded to activate a dream which utilized a mass of past associations to produce the highly condensed and still disguised image of two Negro boys wrestling. This dream can be regarded as a great success in preserving sleep. It represented the young man's sexual wish as fulfilled, but it disguised the fulfillment sufficiently so that he was not awakened by anxiety.

The emergence of repressed material in dreams was produced under controlled conditions in an ingenious experiment by Malamud and Linder.[23] The subjects were hospital patients whose outstanding emotional problems were known to the investigators. The technique consisted of showing to the patient a picture, giving him only 30 seconds to look at it, then shortly afterwards asking for a complete description. Meanwhile the patient was under instruction to report his dreams each morning. Sometimes the picture touched very directly on the patient's problem, and under these circumstances there was a tendency to distort or omit parts of the picture when describing it. On several occasions—not always, but it happened 16 times

[22] Hendrick, I., *Facts and Theories of Psychoanalysis*, New York, Alfred A. Knopf, 1939, pp. 21–22.

[23] Malamud, W. & Linder, F. E., "Dreams and Their Relationship to Recent Impressions," *Archives of Neurology and Psychiatry*, 1931, Vol. 25, pp. 1081–1099.

during a long series of experiments—a dream of the following night clearly utilized the material omitted from the description, usually arranging it in a more welcome form. One picture, for example, was Murillo's "Immaculate Conception," in which cherubs gaze adoringly at the Madonna whose glory is further emphasized by a crescent moon under her feet. This was shown to a patient who habitually made exacting demands on her children and suffered depression when they neglected her. In describing the picture, the patient omitted the crescent moon and said that the faces of the cherubs were turned away from the Madonna. The painful difference between her own situation and that of the adored figure in the picture made it impossible for her to recall these crucial details, but the aroused tension persisted and intruded itself upon her sleep. She dreamed that her son was sitting at her feet looking up at her with an affectionate expression. He said that he was selling planetariums and showed her some of the constituents such as moon and stars.

Our study of daydreams, fantasy productions, and night dreams has shown the importance of the less rational levels of experience. All these forms of expression lie open to whatever bothers us in the way of unsolved personal problems and emotional tensions. If the person can find no peace unless, like Joseph Kidd, he wins back the esteem of parents and girl friends, or unless, like the young man who dreamed of Negro boys wrestling, he breaks down the obstacles to mature sexual expression; in other words, if some vital problem is pressing for solution, it constantly invades the less rational forms of behavior even when it must do so in disguise. It will keep appearing in revery, it will influence selective perception, and it will activate dreams. It is likely to crop up when the person is shown the Rorschach ink-blots, and it will probably exert an influence on his stories if he is given the thematic apperception test. None of these expressions solves the problem or even necessarily causes it to be understood by the subject, although fantasy and even dreams may serve as a kind of practice toward a new and better real solution. What we are studying here is not the solving of problems, but the way problems influence us and work within us when they are not being solved. Even when nothing realistic can be done, they press toward solution and show their pressure in revery, fantasy, and dream. It is analogous to the way different versions of an important conversation will course through one's mind while one waits for the actual conversation to begin.

Our interest in the less rational levels of experience does not stop, however, with their service as avenues through which unsolved and

perhaps unconscious personal problems come to expression. We cannot have a well-rounded conception of human behavior, normal or abnormal, until we realize how much of it takes place at a level that corresponds to revery and imagination rather than to thinking and volition. There is plenty of evidence for this kind of thing in daily experience, but it can be brought into more striking prominence by the experimental technique of hypnotism.

The Facts of Hypnotism

The history of hypnotism has given it a bad name both in medicine and in scientific research. Originally promoted by medical men, it has constantly drifted to the disreputable fringes of medical practice. Investigated from time to time by strictly scientific procedures, it has cut a far larger figure in literature, moving pictures, and stage shows where every attempt is made to dress it up in the trappings of magic. While it is more fun to regard hypnotism as magic, we must consider it here as an *experimental modification of behavior*. It is ultimately a lawful process, even though we may not yet know all the laws.

The outstanding phenomena of hypnotism can best be presented by describing a typical experiment and commenting on each step of the demonstration. To begin with, the experimenter (E) takes steps to enlist the cooperation of the subject (S) and to allay any misgivings S may feel concerning the character of the hypnotic experience. The old belief that a person cannot be hypnotized "against his will" is substantially true. He may feel anxious, he may feel hopeful or even confident that it will not work, but the experiment cannot be performed at all unless he is willing to cooperate to the extent of following the directions and allowing himself to become temporarily passive. At all events, upon receiving indications that S is willing to take part, E asks him to lie down on a couch and to place himself in a relaxed and comfortable position. The room is somewhat darkened and the doors closed to insure quiet and freedom from interruption.

Induction of Hypnosis.—One of the oldest and commonest means for inducing hypnosis is to ask S to fixate his gaze upon some small bright object. While S is thus engaged, E begins what soon turns into a soothing and monotonous stream of talk. E declares, and keeps declaring, that S is feeling tired and sleepy, that his muscles are relaxing, that his eyelids are heavy and drooping, and that he will presently be fast asleep. After a while S begins to show signs

of drowsiness: his eyelids droop or close, and his breathing becomes slower and deeper. As soon as it is clear that he experiences difficulty in keeping his eyes open, he is told to close them, after which further remarks are made about drowsiness and sleepiness.

The procedure thus far described has as its goal the production of a relaxed and moderately drowsy state. If nothing more were done or said, it is quite likely that *S*, unless surprised by the sudden silence, would drop off into a natural sleep. This would obviously defeat the purpose of the experiment. *S* must remain sufficiently awake so that he can respond to suggestions and perform the various acts about to be described. We can see at once that in spite of *E*'s talk about drowsiness, the hypnotic state is distinctly different from the state of being asleep.

This method of inducing hypnosis can be varied in many ways. It can be highly dramatized with the regalia of magic and with posturings of omnipotence on the part of the hypnotist. On the other hand it can be mechanized by putting the words of the operator on a phonograph record or even by dispensing with words in favor of artificial monotonous auditory stimulation. Neither magic nor machinery is necessary; an unassuming attitude by the hypnotist and a casual procedure work just as well for most subjects.[24] When a person has been hypnotized several times, the whole procedure can be simplified and shortened. An experienced or habituated subject can even be hypnotized at a signal.

Suggested Catalepsies.—When *S* seems completely relaxed, his eyes having been closed for several minutes, *E* introduces another suggestion and for the first time puts its efficacy to the test. He declares repeatedly that *S*'s eyelids have become so heavy that they can no longer be opened; they are stuck down, and it will be impossible to open them. *S* is cautioned not to try at once, but after a considerable repetition of the suggestion he is directly challenged to try to open his eyes. Sometimes, of course, *S* opens his eyes at this point without difficulty, and we accept this as a sign that he is not hypnotized. But for present purposes we shall suppose that *S* is an excellent hypnotic subject: he struggles to open his eyes, moving the surrounding musculature vigorously, but his eyes remain tightly closed.

[24] Several methods of induction are described by Hull, C. L., *Hypnosis and Suggestibility*, New York, Appleton-Century Co., 1933, Ch. 2. A standard procedure, accurately timed, is reported by Friedlander, J. W. & Sarbin, T. R., "The Depth of Hypnosis," *Journal of Abnormal and Social Psychology*, 1938, Vol. 33, pp. 453–475. The use of wordless monotonous sound is described by Kubie, L. S. & Margolin, S., "The Process of Hypnotism and the Nature of the Hypnotic State," *American Journal of Psychiatry*, 1944, Vol. 100, pp. 610–622.

S's inability to open his eyes is an example of *suggested catalepsy*. Another example, rather easy to produce, is catalepsy of the clasped hands. *S* is asked to clasp his hands and is then told, with much repetition, that they are clasped too tightly to be separated. After a while he is challenged to try, and his unsuccessful struggle gives dramatic evidence that the suggestion has taken full effect. Other forms of catalepsy, such as paralysis of an arm or inability to speak, can be produced by an identical procedure of repeated assertion. As soon as success is demonstrated it is desirable to cancel the suggestion and secure a contrastingly easy performance of the act in question.

Suggested catalepsies are the most easily produced of hypnotic phenomena. Nearly every subject feels the force of suggestions of this kind, even though some in the end manage to perform the actions that have been declared impossible. For everyday purposes we say that a person is *hypnotized* when he cannot open his eyes or unclasp his hands, and that he is *not hypnotized* when he performs these actions contrary to suggestion even if he has quite a struggle to do so. It will be seen from this that the definition of hypnosis is a rather arbitrary one. In effect we say that a subject is hypnotized when his susceptibility to suggestion reaches an arbitrary degree of efficacy.

Suggested catalepsy can be understood at this point as a shift in the forces that control behavior. *S* struggles to separate his clasped hands, and fails to do it merely because *E* has said so. In ordinary circumstances we expect those forces which we experience as *volition* or *intention* to exert a more or less complete control over muscular processes; certainly we expect these forces to be stronger than a mere arbitrary statement directed at us by another person. In hypnotic catalepsy the balance seems to be reversed: *E*'s statements dominate the muscular processes and *S*'s voluntary opposition fails. How do *E*'s suggestions gain this unexpectedly favorable balance of power? For many years, as we have seen, it was customary to assume a magnetic force, an invisible fluid, or some other powerful agent passing from the operator into the subject. Such theories are no longer plausible, and we must ultimately seek the answer in the dynamics of the subject's own behavior.

Suggested Anaesthesia.—Up to this point in the experiment, a skeptical witness might suppose that *S* was faking. Surely he could overcome the suggestions if he really tried. The next phenomenon, suggested anaesthesia, easily puts an end to these doubts. *E* suggests that *S*'s hand is gradually losing all feeling, that it is going to sleep, that it has become completely insensitive. He asks *S* to report

whenever he is touched; *S* makes no reply when the touch is on the insensitive hand. *E* proceeds to apply more strenuous stimulations. He jabs the hand with a needle, but *S* does not flinch. He touches the skin with the lighted end of a cigarette, but *S* neither stirs nor cries out, even though the skin is distinctly burned. For purposes more worthy than mere curiosity, *E* might carry his proceedings to surprising extremes. In very suggestible subjects, properly trained beforehand, it is possible to induce hypnotic anaesthesia so profound that the pains of dental work, childbirth, and even surgical operations can be rendered ineffective, the subject remaining calmly relaxed through what would otherwise be an excruciating experience and reporting afterwards that no discomfort was felt. A century ago, just before the introduction of chloroform and ether, it looked as if hypnotism might be going to play a vital part in surgery. James Esdaile, working in India from 1845 to 1851, reported on 300 major operations and many minor ones, all conducted in the hypnotic state. The patients lay quietly relaxed during the operations and reported afterwards that they felt no pain. This freedom from struggle and suffering was found to favor recovery. The mortality rates for certain serious operations were much smaller when the patients had been treated under hypnosis. The discovery of chemical anaesthetics, which could be used with patients regardless of their susceptibility to hypnosis, largely put an end to these experiments, although even today there are occasional reports of surgery with hypnotic anaesthesia. The fact remains that suggestion in the hypnotic state is capable of reducing the experience of pain and the bodily responses to tissue laceration to a degree far in excess of waking volitional control.

The best modern experiment on the subject is the one reported by Sears in 1932.[25] As a pain-giving stimulus, Sears used a blunt pointed instrument arranged to give a sharp jab on the calf of the subject's leg. Responses to this painful stimulation were measured in various ways: verbal report, facial flinch or grimace, rate and variability of breathing, rate and variability of pulse, and the galvanic skin reaction. The last-named reaction consists of a change in the electrical resistance of the skin. It is measured by passing through the skin a weak electric current, too weak to be felt. It is known to accompany pain as well as other sudden stimulations and to be controlled by the autonomic nervous system. While the mechanism is not fully understood, there is a hypothesis that the changed resistance is caused by the secretion of sweat.

[25] Sears, R. R., "An Experimental Study of Hypnotic Anaesthesia," *Journal of Experimental Psychology*, 1932, Vol. 15, pp. 1–22.

The critical point in this experiment is to compare the subject's responses in the normal waking state with his responses when hypnotized and when given the suggestion that there is no feeling in his leg. To what extent are the responses to painful stimulation *reduced* by hypnotically created anaesthesia? All the measured responses were significantly reduced, but it is interesting to see that some were reduced more than others. All seven of the subjects reported that they felt no pain, though some were faintly aware of contact by the blunt point. The usual changes in rate of respiration—catching the breath and breathing faster—were completely abolished in the hypnotic part of the experiment. Facial flinch was reduced by 92 per cent, in other words to less than a tenth of its normal quantity. The effect on the pulse rate was less complete, though still far in excess of anything that could be produced by volition. The normal effect of painful stimulation is to increase both the rate and the variability of the pulse. Hypnotic anaesthesia eliminated 77 per cent of the normal increase in pulse rate, and 50 per cent of the heightened variability. In other words, the pulse still retained some part of its response to pain, even though the subjects were not experiencing pain. Hypnosis had its smallest effect on the galvanic skin reaction, suppressing it by less than a quarter (22 per cent). This completely involuntary reaction, governed by the autonomic nervous system, continued at about three quarters of its normal strength in spite of suggested anaesthesia.

This experiment shows that suggestion in hypnosis can suppress the responses to painful stimulation to a degree that transcends the limits of voluntary control. The differences were obtained even when the unhypnotized subjects tried as hard as possible to feel and show no pain. The experiment also shows that the amount of this transcendence is not infinite; it is measurable, and reaches 100 per cent only in the cases of respiration and verbal report. We are dealing not with a magical but with a measurable phenomenon. It is not without significance that the least altered response, the galvanic skin reaction, was the one furthest removed from ordinary volitional control.

Positive and Negative Hallucinations.—The next step in our imaginary experiment is the production of suggested hallucinations. This can be done without requiring *S* to open his eyes: he can be told to count the strokes of a clock which *E* declares to be striking, or he can be invited to sniff the fragrance of a rose which *E* pretends to place in his hands. A very good hypnotic subject can, however, open his eyes without altering the hypnotic state; he can even become

physically active, speaking and moving about the room. With such a subject visual hallucinations can be produced. *E* says there is a big friendly dog in the room; *S* begins to talk to it and pat it. *E* substitutes a tiger, and *S* evinces terror or tries to hide behind furniture. These are valueless and somewhat ridiculous suggestions, but they illustrate the possibility of producing *positive hallucinations.*

Negative hallucinations, by contrast, occur in response to the suggestion that something actually present is absent. *E* suggests that a certain bulky armchair has been removed from the room. He asks *S* to fetch a book from the bookcase against which the chair is actually standing. *S* does his best to carry out this action without touching or moving the chair. Negative hallucinations are of great significance for any theory of hypnotism. If we watch *S* closely, we can observe that although he cannot "see" the chair—he tells us he cannot see it—he nevertheless reacts to its presence in the very process of avoiding it. We have no suitable language to describe this inconsistency within the hypnotized person. He does not "see" the chair, but somehow he "knows" that it is there and guides his actions so as to avoid it.

Some insight into these phenomena can be obtained from an experiment by Lundholm.[26] It is based on the fact that if a light is flashed a little to one side of a person's line of vision, he will make two responses: his eyes will turn toward the light and his pupils will contract. Lundholm suggested to a deeply hypnotized subject that he was blind. When the light was lighted under these circumstances, the subject's eyes did not turn, but the pupillary contraction occurred as usual. Shortly afterwards, having removed the suggested blindness, Lundholm gave the suggestion that upon hearing a certain signal the subject would see the light go on. This time the light was not actually lighted; the suggestion called for a positive hallucination without real change of illumination. Under these circumstances the subject's eyes turned toward the dark electric bulb, but there was no sign of the pupillary reflex.

Results of this kind are sometimes seized upon by those who want to believe that hypnotic behavior is nothing but a show put on voluntarily by the subject. The voluntary response, turning the eyes, follows the operator's suggestions, but the subject cannot affect the involuntary pupillary response. We should notice, however, that this result of Lundholm's is entirely analogous to the one obtained by Sears with hypnotic anaesthesia. Rate of respiration was fully re-

[26] Lundholm, H., "An Experimental Study of Functional Anaesthesias as Induced by Suggestion in Hypnosis," *Journal of Abnormal and Social Psychology,* 1928, Vol. 23, pp. 337–355.

sponsive to hypnotic suggestion, but the galvanic skin reaction was only slightly altered. Once again we find that hypnotic behavior has its limits: suggested blindness and suggested positive hallucinations do not reach deeply enough into neurophysiological processes to govern the pupillary response to light. They do reach deeply enough, however, to affect *some* of the activities governed by the autonomic nervous system to an extent that transcends volitional control. This can be shown by another demonstration. *E* makes elaborate suggestions to the effect that *S* is in the frozen north and is very cold; *S* begins to shiver. *E* quickly transports him to the tropics and exposes him to the sticky heat of the jungle; *S* begins to perspire freely. Neither shivering nor sweating is to this extent under volitional control. That these responses can be elicited by verbal suggestion becomes plausible only if we assume that the usual organization of behavior is considerably altered in the hypnotic state. The subject imagines himself in cold or hot climates far more successfully and profoundly than he could ever do by wide-awake voluntary effort.

Sustained Hypnotic Behavior.—A misleading impression of hypnosis would be created if we did not include in our demonstration some example of sustained hypnotic behavior. Suggestions can be given in such a way that they govern one act at a time, but they can equally well be given so as to set off a series of actions the details of which are left to the subject. Stage hypnotists delight in creating scenes like the following, taken from an old book:

> A hypnotized young man was told to think of himself as managing a sideshow at a circus. When his mind had absorbed this idea, he was ordered to open his exhibition. He at once mounted a table and, in the voice of the traditional sideshow fakir, began to dilate upon the fat woman and the snakes, upon the wild man from Borneo, upon the learned pig, and all the other accessories of sideshows. He went over the usual characteristic "patter," getting more and more in earnest, assuring his hearers that for the small sum of ten cents they could see more wonders than ever before had been crowded under one canvas tent. He harangued the crowd as they surged about the tent door. He made change for his patrons. He indulged in side remarks, such as "this is hot work." He rolled up his sleeves and took off his collar and necktie, all the time expatiating on the merits of the freaks inside his tent.

This example shows plainly that hypnotic behavior is much more than a literal execution of acts suggested by the hypnotist. All the details were improvised and invented by the young man himself.

The subject's behavior, even though touched off by a suggestion, shows all the qualities of active, vivid, even creative imagination.

Post-Hypnotic Amnesia.—Hypnosis is terminated by a reversal of the processes by which it was induced. *S* is simply told that the drowsiness will disappear and that at a given signal he will open his eyes and become wide awake. Shortly before he is awakened, he may be told that he will not remember anything that happened during the hypnotic sleep. On the other hand he may be told that he will remember everything clearly. Either suggestion is completely effective with a good hypnotic subject. If amnesia is suggested, *S* will be completely blank for the events of the hypnosis and he may remain so for many days, although there seems to be a tendency for the memories to work their way back into consciousness in the course of time. When neither remembering nor forgetting is directly suggested, there is likely to be a spontaneous amnesia, at least in subjects capable of the more difficult phenomena such as anaesthesia and hallucination. This may result from indirect suggestion: *S* expects not to remember what goes on when he is "asleep." On the other hand it may reflect the difficulty of remembering one state of mind when one is in quite a different state of mind. Conclusive research has not yet been done on this point.

Post-Hypnotic Suggestion.—One of the most interesting phenomena of hypnotism is the production of post-hypnotic suggestions: actions suggested while *S* is hypnotized and then carried out some time after he has resumed his normal waking state. *E* tells the hypnotized *S* that five minutes after he has awakened he will get up from his chair, strike several matches, and drop them, burning, into an ash tray on *E*'s table. This suggestion is repeated several times, along with the statement that *S* will forget the command and have no idea, when the time comes, why he is striking the matches. In due course *S* carries out the bizarre action, showing no particular embarrassment, explaining if questioned that he just had an impulse to light some matches. The impulse is experienced as an urgent one, and *S* can be made very uncomfortable if obstacles are interposed which prevent him from completing the suggested action. When only a light hypnosis was achieved, *S* may vaguely or even clearly remember that he was given a post-hypnotic suggestion. Under these circumstances he is much less likely to carry it out, but he may experience a distinct and annoying impulse to do so.

Post-hypnotic suggested actions take place in a person who is otherwise wide awake and completely alert to what is going on

around him. The peculiar conditions used to create hypnosis have been withdrawn. Post-hypnotic suggestion therefore illustrates the persistence and force of an unconscious impulse in an otherwise normal, self-directing individual. In this respect it resembles, more than anything else among hypnotic phenomena, neurotic symptoms and other types of maladjusted behavior; these also are experienced as senseless, compelled, and resistant to voluntary control.

Hypnotic Susceptibility.—Individuals vary widely in their response to hypnotic technique. The results of many investigations on this subject, both old and new, can best be summarized by roughly classifying the degree of responsiveness under four headings:

1. *Insusceptible.* These subjects give no evidence of feeling the effects of suggestion. They can open their eyes easily, for example, when told that this is impossible.

2. *Light Hypnosis.* These subjects become distinctly drowsy and have at least considerable difficulty in overcoming suggestions such as catalepsy of the clasped hands; perhaps one or two such suggestions are fully successful.

3. *Deeper Hypnosis.* These subjects show the catalepsies and more or less complete post-hypnotic amnesia; they carry out simple post-hypnotic suggestions and can achieve an appreciable amount of suggested anaesthesia.

4. *Somnambulism.* These subjects display positive and negative hallucinations and complete anaesthesia. They can open their eyes and walk about without disturbing the hypnotic state.

About 12 per cent of the population will be found insusceptible, another 30 per cent will get no further than light hypnosis, 40 per cent will attain deeper hypnosis, and about 18 per cent will be capable of hypnotic somnambulism. These figures fully justify our earlier statement that hypnosis is a normal, not an abnormal or morbid, phenomenon.[27]

The reasons for these wide individual differences are probably quite complex. Undoubtedly favorable motivation speeds the hypnotic process, while suspicious, defensive, and contemptuously ag-

[27] The figures were compiled from Bramwell, J. H., *Hypnotism: Its History, Theory, and Practice*, London, Wm. Rider & Son, 1921, pp. 57–59; Davis, L. W. & Husband, R. W., "A Study of Hypnotic Susceptibility in Relation to Personality Traits," *Journal of Abnormal and Social Psychology*, 1931, Vol. 26, pp. 175–182; Barry, H., MacKinnon, D. W. & Murray, H. A., "Hypnotizability as a Personality Trait and Its Topological Relations," *Human Biology*, 1931, Vol. 3, pp. 1–36; Friedlander, J. W. & Sarbin, T. R., "The Depth of Hypnosis," *Journal of Abnormal and Social Psychology*, 1938, Vol. 33, pp. 453–475.

gressive attitudes stand in its way.[28] With men as hypnotists, women are found very slightly more susceptible than men, the difference being so small that in no one experiment does it reach statistical significance.[29] Whenever hypnotic susceptibility and intelligence have been tested in the same subjects, there has always been found a small *positive* correlation; the more intelligent subjects show slightly *greater* responsiveness to hypnotic suggestion. Clearly one does not have to be stupid or gullible in order to perform well as a hypnotic subject.[30] Furthermore, there appears to be very little relation between hypnotic susceptibility and general suggestibility as we know it in everyday life.[31] Whether an important part is played by some kind of natural aptitude or innate predisposition, we have at present no means of knowing.

Character of the Hypnotic Experience.—It is not true, as many people suppose, that hypnosis is a state of unconsciousness. While it is going on it is a coherent conscious experience capable of being clearly remembered afterwards. The subject's behavior when he has his eyes open and is talking and moving about may be outwardly indistinguishable from his usual wide-awake state. In order to further our understanding of hypnosis we shall take advantage of the fact that subjects can sometimes tell us what the experience is like. On an earlier page we proposed that hypnosis be conceived as a shift in the balance of forces that control behavior. Before continuing this speculation we must consider how the shift of forces presents itself in the experience of hypnotized persons.

In the first place it is very clear that suggested behavior can be distinguished from behavior that represents a voluntary compliance with the hypnotist's commands. Janet reports that a patient, ordinarily suggestible, one day declared that the suggestion "did not take." "You tell me to do this," she said, "and I will do it if you like, but I warn you that what you say has not caught on."[32] This patient clearly recognized the difference between obedience, when one intentionally carries out another person's command, and suggestion, when the action seems to execute itself without the experience of intention. Another subject reported himself as "quite marveling at

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[28] White, R. W., "An Analysis of Motivation in Hypnosis," *Journal of General Psychology*, 1941, Vol. 24, pp. 145–162.
[29] Davis & Husband; Barry, MacKinnon & Murray; Friedlander & Sarbin, *op. cit.*
[30] Hull, C. L., *Hypnosis and Suggestibility, op. cit.*, p. 87.
[31] Eysenck, H. J. & Furneaux, W. D., "Primary and Secondary Suggestibility: an Experimental and Statistical Study," *Journal of Experimental Psychology*, 1945, Vol. 35, pp. 485–503.
[32] Janet, P., *Psychological Healing*, trans. by E. & C. Paul, London, Allen & Unwin, 1925, Vol. I, p. 216.

the way my arm stayed up, apparently without volition on my part. I was still aware of myself off in a corner looking on." Still another described the experience of post-hypnotic suggestion by saying that his muscles seemed to be trying to walk across the room of their own accord.

These reports are typical examples of the hypnotic experience. So far as the subject is concerned, the outstanding change is a change in the experience of volition. The suggested actions appear to execute themselves, and the subject feels like a rather helpless spectator who does not initiate nor even ratify them. Introspective reports thus correspond very well to what we observed in our demonstration of hypnotic catalepsy. When *E* repeatedly suggests that *S*'s hands are so tightly clasped that they cannot be separated, *S* experiences his hands as squeezing themselves together without the slightest collaboration on his part. When told to try to separate them, *S* experiences his attempt as a true act of volition and is surprised to find that his volition cannot countermand the squeezing of his hands. Introspection supports our statement that the usual balance of forces is changed in hypnosis: those associated with the experience of volition are weaker than usual, while those activated by the hypnotist's suggestions seem endowed with unexpected strength.

Subjects who are being hypnotized for the first time frequently report an experience which lies midway between the normal and the hypnotic balance of forces. Their hands squeeze together and they fail to pull them apart, but they retain a feeling of voluntary compliance in both actions. They say that they talked themselves into squeezing their hands, helping the suggestion with a bit of voluntary aid. They report that they could have pulled the hands apart if they had really tried, but they did not want to spoil the experiment. It is clear in such cases that the transition from wide-awake to hypnotic behavior occurs gradually, passing through a point at which the subject cannot discriminate between actions brought about by suggestion and actions representing voluntary compliance on his part. This discrimination becomes easy, as we have seen, in later stages of hypnosis.

The Limits of Hypnotic Behavior

Hypnotism makes a very strong appeal to man's delight in the marvelous and his desire for omnipotence. So strong is this appeal that many people would rather not be told that hypnotic phenomena are measurable and that they can be explained by straightforward

psychological principles. It is more fun to believe that every vestige of the response to pain can be wiped out, or that suggested blindness produces the equivalent of real blindness, than to regard these as limited, measurable changes in the usual organization of behavior. As a result of this secret joy in magic and omnipotence, there has tended to be a large and important constant error in all thinking about the nature of hypnotism. This error is the belief that the *hypnotist, rather than the subject, produces the phenomena.* The trouble began with Mesmer, who believed that he possessed a peculiar magnetic force which could be directed into his patients' bodies. It continued in those theories which represented the subject as a helpless automaton whose will, body, and muscles were given over completely to the operator's whims and wishes. It continues today in the minds of those hypnotists who believe that the subject does not know what is going on, that you can fool him with statements which do not in the least fool an onlooker, that you can divide him up into dissociated pockets and hold private conversation with different parts of him. We should always bear in mind that the subject is still a person, even though he is participating in an unusual experiment and entering an unusual state. He has not become a fool, and it is he who produces the hypnotic behavior.

Experiments on Hypnotically Induced Crime.—At no point is it more important to remember this than when we turn to what is probably the most intriguing problem concerning hypnotism. Can the hypnotized person be forced to commit a crime? Can he be forced, through suggestion, to perform an act which is repugnant to his usual ideals and ethical standards? Can he be obliged to act in such a way as to endanger himself or others? There was a time when this question was vigorously argued in European law courts. Defendants claimed that although they had committed crimes they had been forced to do so by someone who held a hypnotic influence over them, and they were therefore not responsible for their deeds. Such claims led to various experimental investigations in which hypnotized persons were given suggestions to perform criminal acts. These experiments labored under one great disadvantage. As it was not known whether the subjects would carry out the suggestions, the "criminal acts" had to be arranged so that a really dangerous outcome was impossible. Rubber daggers and wooden pistols were used, the subjects being assured that they were real weapons. The outcome of all these earlier experiments can be condensed in a single illustration, amusingly described by Janet.

> A number of persons of importance, magistrates and professors, had assembled in the main hall of the Salpêtrière museum to witness a great séance of criminal suggestions. Witt., the principal subject, thrown into the somnambulist state, had under the influence of suggestion displayed the most sanguinary instincts. At a word or a sign, she had stabbed, shot, and poisoned; the room was littered with corpses. The notables had withdrawn, greatly impressed, leaving only a few students with the subject, who was still in the somnambulist state. The students, having a fancy to bring the séance to a close by a less blood-curdling experiment, made a very simple suggestion to Witt. They told her that she was now quite alone in the hall. She was to strip and take a bath. Witt., who had murdered all the magistrates without turning a hair, was seized with shame at the thought of undressing. Rather than accede to the suggestion, she had a violent fit of hysterics.[83]

This example exposes the fallacy that has ruined so much experimental work with hypnotism: the notion that the subject is a helpless fool who has no idea that he is being deceived. It points unmistakably to the conclusion that hypnotized persons will not carry out suggested acts which are repugnant to them—not when they think the consequences are real. Many experiments supported this conclusion, some being fortified with introspective reports in which the subjects showed how well they grasped what was going on. Bramwell, for example, handed a deeply hypnotized girl a lump of sugar, told her it was soaked in arsenic, and suggested that she put it in her mother's tea. The mother was present and the act was performed at once. In a later hypnosis, when Bramwell questioned the girl about her criminal act, she made it quite clear that she knew he would never have given her real poison under such circumstances.[84] The hypnotized person, like the bystanders, knows perfectly well what is going on, and cannot be forced to perform acts when there is a motive for not doing so.

Experiments on Harmful and Dangerous Acts.—This issue was regarded as settled until Rowland, in 1939, published a series of new experiments.[85] The invention of "invisible glass" (glass curved in such a way that it reflects no light in the observer's direction) permitted Rowland to create a perfect illusion that a suggested dangerous act could really be executed. A large, lively, angry rattlesnake was placed behind the glass; to all appearances, the snake was

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[83] Janet, P., *Psychological Healing, op. cit.*, Vol. 1, p. 184.
[84] Bramwell, J. M., *Hypnotism: Its History, Theory, and Practice, op. cit.*, p. 318.
[85] Rowland, L. W., "Will Hypnotized Persons Try to Harm Themselves or Others?" *Journal of Abnormal and Social Psychology, 1939, Vol. 34, pp. 114–117.*

in a cage with one side wide open. The deeply hypnotized subject was told to go over and pick up the snake. This procedure was tried with four subjects; one refused to execute the suggestion, but three went over to the cage and evinced surprise when their outstretched hands struck the invisible glass. In contrast, a control experiment was done with forty-two subjects, not hypnotized, who were merely asked to come into the laboratory and pick up the snake. Forty-one were badly frightened and refused even to approach the box: only one behaved like the three hypnotic subjects and reached for the snake. In another experiment two different hypnotized subjects were persuaded to throw strong sulphuric acid into the face of an assistant, displaying surprise when the acid splashed out on the invisible glass before reaching its intended victim.

Rowland's study gives us five instances out of six attempts in which a hypnotized person carried out a suggested act that appeared extremely dangerous to himself or another person. The immediate situation was so arranged that the execution of the acts appeared completely possible. But we must ask ourselves whether, even by this ingenious technique, we have really escaped the difficulty about fooling the subject. Could the subjects have really believed that a scientist in a university laboratory was commanding them to get themselves killed or to burn the face of another person? They could not see what the trick was, but they must have been confident there was some trick—as in fact there was. Rowland's experiments cannot therefore be accepted as a crucial demonstration. If the subjects had accidentally met the experimenter in a disreputable part of town, and had really supposed themselves to have fallen into criminal hands, the results might well have been altogether different.[36]

It is interesting to compare Rowland's results with those obtained by Erickson in a series of thirty-five experiments, in each of which some "antisocial act" was suggested.[37] In general, Erickson's suggestions were not as serious as Rowland's appeared to be, but there was no trick to prevent their being carried out. The suggestions included stealing and lying, slapping faces, reading other people's mail, giving a friend a harmless but uncomfortable electric shock,

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[36] Experiments by Wells, by Brenman, and by Watkins also show apparent criminal and dangerous behavior by hypnotized subjects. These workers are among those who do not agree with the position taken here. Cf. Wells, W. R., "Experiments in the Hypnotic Production of Crime," *Journal of Psychology*, 1941, Vol. 11, pp. 63–102; Brenman, M., "Experiments in the Hypnotic Production of Anti-Social and Self-Injurious Behavior," *Psychiatry*, 1942, Vol. 5, pp. 49–61; Watkins, J. G., "Antisocial Compulsions Induced under Hypnotic Trance," *Journal of Abnormal and Social Psychology*, 1947, Vol. 42, pp. 256–259.

[37] Erickson, M. H., "An Experimental Investigation of the Possible Anti-Social Use of Hypnosis," *Psychiatry*, 1939, Vol. 2, pp. 391–414.

and similar annoying but not dangerous actions. In no instance was the suggestion carried out. The nearest approach to success was an occasional token performance of the action in such a way that it largely lost its antisocial character.

In conclusion, then, the weight of evidence heavily favors the statement that a hypnotized person will not carry out suggestions which are repugnant to him or which awaken any serious motive for opposition. Though hypnotized, he remains aware of the general situation, and we have no reason to assume that he can be fooled more easily than a wide-awake onlooker.

Alleged Dangers of Hypnotism.—Quite apart from the matters just discussed, there is a rather common fear that hypnotism will have a damaging effect on a person, especially if it is often repeated. This apprehension is expressed in such ways as that repeated hypnosis weakens a person's will or that it makes him abjectly dependent on the operator. There is little ground for this fear. While it is true that a practiced subject enters the hypnotic state with great facility, this does not mean that a dependent relationship is established apart from the experimental situation or that the subject could not resist being hypnotized if he had a good reason for doing so. Fear that the subject will fail to awaken at the end of the experiment is hardly ever justified, and it is in any event only a temporary inconvenience: he will probably doze into a real sleep and awaken naturally some time later. Of course, a subject can be made very uncomfortable by a bungling hypnotist who forgets to cancel suggestions or proposes contradictory and impossible acts. But this will not occur when the operator is a trained, responsible person.

Nevertheless there is a certain danger in hypnotism. It happens rarely, but the margin of risk is just great enough so that hypnotism should not be used for entertainment or other casual purposes apart from serious scientific investigation. There is always the possibility that the hypnotic situation will stimulate in the subject repressed wishes or unconscious fantasies which greatly disturb him and upset a perfectly good working equilibrium. Once released in hypnosis, these fantasies may take such full and vivid possession of the subject that he no longer pays attention to the operator and it is difficult to restore him to the waking state. For example, a college student was hypnotized by his instructor; at the suggestion that his hands were stuck together he said that they were paralyzed, then that his whole body was paralyzed, then that he was without any feeling, finally that he was dead. At this point the hypnotist began ex-

tremely vigorous measures to restore the subject to the waking state. He commanded him loudly to pay attention, to relax his hands; he sat him up roughly on the couch and practically lifted him to a standing position, ordered his eyes opened, walked him around the room. At length the subject awakened, blinking and surprised, with a complete amnesia for the whole episode. In this particular subject hypnosis apparently awakened very devastating fantasies. Just in time, before he passed completely into their grip, he was brought back to a waking state. In his case there were no serious after-effects; the fantasies were again repressed and the student continued his successful career in college. In other cases, however, the outcome is not so happy. The person may become badly disturbed and a long course of psychotherapy may be necessary to restore him to psychological health.

Hypnotism exerts a certain fascination, and there are always some people who think they would like to try it on their friends. Anyone so inclined should examine his own motives. If he is looking for a chance to show off and pose as a strong, omnipotent being, he had better find a more genuine basis for establishing self-respect. To be able to hypnotize another person reflects no real power in the operator. If he wants to use hypnotism for serious scientific investigations or as an aid in therapy, he should aim to become a skilled scientist or therapist first, with all that that implies in the way of postgraduate training. Afterwards he can learn his hypnotic technique from an experienced instructor. The technique of hypnotism is not difficult, but to use it wisely—for the right purposes with the right people—implies that one has become a trained specialist in psychology or medicine.

Attempts to Explain Hypnotism

Although the phenomena of hypnotism differ distinctly from what we conceive to be normal behavior, we should do our best to understand them as expressions of general behavioral laws. As we have seen, no good can come from making up a special hypothesis such as animal magnetism until we have exhausted every possibility of explaining the facts in a simpler fashion: namely, as exaggerated forms of behavior already familiar to us in everyday life. Bertrand, in 1820, declared that "the general laws of imagination, expectant attention, and desire" were sufficient to explain all that was known about hypnosis. Current thinking seems to have taken the direction indicated by Bertrand.

In our review of the facts we have constantly indicated their theoretical implications. It will be sufficient here to gather these into a series of condensed statements representing the current trend in hypnotic theory.

Facts Which Require Explanation.—The facts which any theory of hypnotism must explain—the ways in which hypnotic behavior differs from everyday behavior—can be summarized as follows. (1) *The hypnotized person can in some respects transcend the normal limits of volitional control.* He can do certain things that he could not possibly do in the waking state. While many of the older claims about this transcendence have not been supported by modern research, there is ample evidence that measurable transcendence does occur, notably in respect to anaesthesia. (2) Regardless of whether or not it transcends the normal limits of volition, *the hypnotized person experiences his behavior as having a distinctive non-volitional quality.* Stiffening the arm or clasping the hands are actions that anyone could perform volitionally, but in hypnosis they occur without benefit of volition, unaccompanied by the experience of intention. They feel as if they performed themselves, at times so strongly that the subject seems unable to arrest them when he tries. Furthermore, hypnotic actions are carried out with a curious lack of humor and self-consciousness, often with an air of abstraction, and they do not seem to have the claim over subsequent memory to which their recency and importance entitle them. (3) *These changes are effected by methods which do not seem sufficiently radical:* initially, by bringing about a drowsy, quiescent state, later by speaking certain suggestions. If a person suffered a head injury, took a drug, or was worked into a state of violent emotion, we would expect marked changes in his behavior, but the hypnotic procedure, with its emphasis on relaxation and quiet, scarcely seems radical enough to explain the resulting changes.

Hypnotic Behavior as Goal-Directed.—We have learned to look for the motivational or striving aspect of behavior, even in such things as neurotic symptoms, dreams, and slips of the tongue, which on the surface appear meaningless. The same insight should be applied to the behavior of the hypnotized person. We must penetrate the immediate appearance of helpless, automatic obedience, and ask ourselves what the hypnotic subject is trying to do. As applied to hypnosis, the concept of striving can be embodied in the following statement: *"hypnotic behavior is meaningful, goal-directed*

striving, its most general goal being to behave like a hypnotized person as this is continuously defined by the operator and understood by the subject." [88] Viewed in this way, the hypnotized person is seen not as an almost inanimate object, upon which strange effects can be wrought by touching the right levers or tapping the right lines of cleavage, but rather as a human being who hears, who understands, and who tries to behave in the different ways that are proposed to him. When the operator says that his hands are clasped together so tightly that he cannot separate them, this statement defines for the moment what it means to behave like a hypnotized person. The subject forthwith produces the behavior: he clasps his hands tightly together and he fails in an attempt to pull them apart. When he is told that there is no feeling in his leg, he behaves so far as possible as if there were no feeling in his leg, even though it be given a painful jab. If he is told that he will forget everything that happened when he was asleep, he behaves as if he remembered nothing. In each case he behaves like a hypnotized person as the operator at that moment defines it for him.

The statement that hypnotic behavior is a meaningful, goal-directed striving is not in itself a complete or sufficient theory. It is a necessary first step toward understanding the mechanisms of hypnosis. Taken by itself it makes no distinction between hypnotic behavior and a mere fake, a voluntary compliance on the part of the subject. We know that there is a marked difference between voluntary compliance and true hypnotic behavior, a difference that is experienced by the subject and clearly demonstrated in those instances in which the limits of voluntary control are transcended. Any theory must take account of this difference.

Hypnotic Behavior as Vividly Imagined Behavior.—At various times in the past it has been suggested that hypnotic behavior might be understood as the outcome of an unusual concentration on the ideas and actions proposed by the operator, a concentration so strong that the ideas and actions tend to go over into motor and autonomic expression. The words *monoideism* and *ideo-motor action* have been used in this connection. This line of thought has recently been enlarged and developed in harmony with modern psychological theory in a paper by Arnold.[89]

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[88] White, R. W., "A Preface to the Theory of Hypnotism," *Journal of Abnormal and Social Psychology*, 1941, Vol. 36, pp. 477–505. Reprinted in Tomkins, S. S. (ed.), *Contemporary Psychopathology*, Cambridge, Harvard University Press, 1943, pp. 479–502.

[89] Arnold, M. B., "On the Mechanism of Suggestion and Hypnosis," *Journal of Abnormal and Social Psychology*, 1946, Vol. 41, pp. 107–128.

We suggest, then, that hypnosis essentially consists in concentrating and therefore intensifying the subject's imaginative processes. Directed toward one focus, the situation described by the experimenter, the subject will be able to imagine this situation much more intensely than he is able to do ordinarily, without the usual internal and external distractions, and as a consequence his imagination will produce results which are far more effective than they could be in the waking state. There is no magic control of hypnotized by hypnotist. The suggestions or commands of the hypnotist have no other purpose than to provide the subject with the blueprint of a situation which he can imagine and therefore unwittingly act out. If the hypnotized subject is told that his arm is stiff and he will not be able to bend it, he immediately conceives of his arm as being stiff, and no contradictory thought will interfere. As long as the arm is imagined as stiff the arm *feels* stiff, and with this feeling comes an actual contraction of muscles; thus, as long as this feeling of rigidity lasts, the arm really cannot be moved. Any effort to bend it will consist of an indiscriminate contraction of muscles, often all over the body, without, however, changing the focus of imagination. The real reason why the subject cannot bend his arm is that he cannot *imagine* it flexible and therefore cannot imagine bending it.

The hypnotic subject is actively striving to focus on the situation the experimenter describes and to imagine himself in it—thus incidentally producing the feelings, sensations, movements, which he would actually experience.

Throughout our discussion we have seen that many of the facts of hypnotism can be best understood as products of heightened imagination. Most people are probably not aware of the ease with which strongly imagined situations go over into motor and autonomic expression. Arnold's paper mentions numerous experiments in which this tendency has been demonstrated quite apart from hypnotism. Movements resulting from imagination are experienced as wholly involuntary.

When we say that hypnotic behavior is a heightening and focusing of imagination, we are improving our description but still not explaining hypnotism. Another question at once arises: how is imagination heightened and focused to the requisite degree? How is the usual organization of behavior changed in this particular direction?

The Hypnotic State.—In order to comprehend these changes, which when fully developed are generally referred to as the *hypnotic state*, it is natural to turn to the process of induction. The best analysis of this process is contained in an article by Kubie and

Margolin.[40] They point out that there is in all techniques a reduction of sensory input. Visual excitation is lowered by darkening the room, by monotonous optical fixation, and by closing of the eyes. Tactual and proprioceptive input is curtailed by immobilizing the subject. Even the auditory field is restricted by the exclusion of disturbing noise and by monotonous stimulation. There is a virtual closing of the usual sensory avenues analogous to what takes place in the process of falling asleep, but with one very significant difference. One channel of communication remains actively open, namely, the stimulation proceeding from the hypnotist. In order to permit this restriction of sensory input, the subject must be free from anxiety or other disturbing feelings. He must feel secure enough "to abate the normal attitude of diffuse alertness and allow his sensory sentinels to doze"; he must feel "at least as secure as he ordinarily feels when he retires to bed." When going to sleep a person withdraws attention from all fields. When being hypnotized he withdraws attention from all fields except the various situations described by the operator. If he went to sleep he might have dreams, products of imagination, which he would experience as real present events. When he is hypnotized he does not quite dream, but he experiences the situations proposed to him with almost equal vividness and reality. Hypnotic technique can thus be seen to create the very conditions required by Arnold's hypothesis: security, reduced responsiveness to diffuse sensory signals, freedom from distraction, and a consequent strong focalization and vivid imaginative development of the situations described by the operator.

This is satisfactory as far as it goes, but another step is required to complete a theory of hypnotism. Kubie and Margolin recognize that the conditions produced during the induction of hypnosis need not be continued in the fully developed hypnotic state.

> Once he is fully hypnotized, the subject need not remain silent, inert, and apart. If appropriate words from the hypnotist engender corresponding purposes in the subject, he will walk around, converse intelligently, and in general make it evident that his sensorimotor horizons have re-expanded, seemingly to their prehypnotic limits. Furthermore, after the induction process is complete, the hypnotist no longer functions as the only channel of communication between the subject and the outer world. Instead, he becomes something which the subject carries around *inside of him*—a secret "will" or purpose—a "still, small voice of conscience."

[40] Kubie, L. S. & Margolin, S., "The Process of Hypnotism and the Nature of the Hypnotic State," *American Journal of Psychiatry*, 1944, Vol. 100, pp. 611–622.

Admittedly this is the most baffling point in the theory of hypnotism. If immobility, relaxation, and restriction of sensory horizons develop the hypnotic state in the first place, how is it possible for them to be abandoned without returning the subject to his normal waking condition? Why do they cease to be necessary in an experienced subject who can be hypnotized at a signal? We cannot understand this problem without considering again its motivational aspect. The subject expands his sensory-motor horizons, but he preserves intact his desire to behave like a hypnotized person. He continues to be able to imagine vividly and to act out what is proposed. This comes about because he incorporates very firmly within himself the intention to go on behaving like a hypnotized person. Sensory distraction can be tolerated without loss of imaginative focus for the reason that there is no longer any motivational distraction. When we were considering criminal and repugnant acts we came to the conclusion that a subject would resist such suggestions if he had any motive for doing so—if he understood that the acts were really repugnant and could really be carried out. We can see now that the effect of repugnant suggestions is to shatter the subject's desire and intention to behave like a hypnotized person. They introduce a conflict of motives and destroy the single-mindedness characteristic of hypnotic behavior. The fully developed hypnotic state can be conceived as a state of intensified and focalized motivation.

It will be recognized that these statements do not constitute a fully satisfactory explanation. They are still descriptive; they do not completely untangle the mechanism of hypnotic behavior. Like most scientific hypotheses, the theory of hypnotism has still to be completed. But even if we cannot fully explain hypnotic behavior, it becomes a valuable adjunct to our study of abnormal psychology. Along with fantasy and dreams it familiarizes us with the less rational and less vigilantly alert aspects of behavior in all their rich variety. It also is entitled to serious consideration as an aid in psychotherapy.

SUGGESTIONS FOR FURTHER READING

Freud's large book, *The Interpretation of Dreams* (New York: The Macmillan Co., 3rd ed., 1933) is a remarkable and thought-provoking work, but his contribution can be grasped in a shorter time by reading Chs. 5–15 of *A General Introduction to Psychoanalysis* (New York, Boni & Liveright, 1920), together with Ch. 1 of *New Introductory Lectures on Psychoanalysis* (New York, W. W. Norton & Co., 1933). E. A. Gutheil's *The Language of the Dream* (New York, The Macmillan Co., 1939) contains much valuable material. An interesting little book on fantasy, especially in children, is

G. H. Green's *The Daydream: A Study in Development* (London, University of London Press, 1923).

A brief survey of projective techniques is to be found in R. W. White's "Interpretation of Imaginative Productions" (Ch. 6 in J. McV. Hunt's *Personality and the Behavior Disorders,* New York, The Ronald Press Co., 1944, Vol. 1). For the thematic apperception test, H. A. Murray's *Explorations in Personality* (New York, Oxford University Press, 1938, pp. 530–545) is recommended.

Among the older books on hypnotism, which have the advantage of highly detailed descriptions of hypnotic phenomena, the two following are the most satisfactory: Albert Moll, *Hypnotism* (trans. by A. F. Hopkirk, London, Walter Scott Publishing Co., 1909) and J. Milne Bramwell, *Hypnotism: Its History, Theory, and Practice* (3rd ed., London, Wm. Rider & Son, 1921). Bramwell gives an exhaustive account both of hypnotic techniques and of theories up to the time of his writing. A splendid historical survey with a very discriminating treatment of the theory of hypnotism is to be found in P. Janet's treatise, *Psychological Healing: a Historical and Clinical Study* (trans. by E. & C. Paul, New York, The Macmillan Co., 1925, Vol. 1) Chs. 4–8. Like all of Janet's books, this is good reading.

The classic work on the experimental study of hypnotism is Clark Hull's *Hypnosis and Suggestibility: An Experimental Approach* (New York, D. Appleton-Century, 1933). Naturally experimentation has not been idle in the intervening years; the easiest way to be brought up to date is to consult P. C. Young's "Experimental Hypnotism: A Review" (*Psychological Bulletin,* 1941, Vol. 38, pp. 92–104) and A. Jenness, "Hypnotism" (in Hunt, J. McV., ed., *Personality and the Behavior Disorders,* New York, The Ronald Press Co., 1944, Vol. 1, Ch. 15).

CHAPTER 6

ANXIETY AND DEFENSE

The next three chapters will be devoted to the study of neurosis. Before we begin this undertaking it will be well to look backward for a moment and summarize what we have thus far accomplished. To understand disordered personal reactions it is necessary to have in mind the normal course of development from which they deviate. Just as knowledge of sound vision should precede the attempt to understand eye troubles, just as knowledge of the normal intact nervous system should precede the study of neurological disorders, so knowledge of the normal growth of personality should stand as the basis for comprehending the psychogenic aspects of disordered behavior. In the last three chapters we have tried to lay this essential foundation. We have studied adjustment in order to establish points of reference for maladjustment. At each point we described not only the normal course of events but also the maladjustive possibilities peculiar to that particular developmental process.

It is impossible to have a simple theory of *maladjustment*. There are hundreds of ways in which a person can become maladjusted. Even in our condensed account we have seen very diverse possibilities. Failure to outgrow the dependent and autonomous tendencies of childhood, failure to achieve a working compromise between the demands of society and one's sexual and aggressive tendencies, warping by the impact of parental personalities, difficulties arising from constitutional and temperamental endowment, deviant patterns of ability, troubles in establishing competence and its recognition by others, lack of group memberships, conflicts among socially expected roles, an unabsorbed super-ego, unfortunate options in the way of identification figures, failure to internalize a workable hierarchy of tendencies and a guiding ego-ideal—each of these maladjustive possibilities exists and plays a significant part in one life or another. In the nature of the case there can be no one theory of maladjustment. The best we can do is to work out the normal course of development and see all the ways in which it can go astray.

In contrast, there is a real possibility of having a unified theory

of *neurosis*. We saw at the end of our historical survey (Chapter 1) that many students of psychogenic disorder had begun to organize their thinking around the central concepts of anxiety and defense. Motivation—especially unconscious motivation—and conflict—especially conflict among unconscious strivings—proved indispensable in understanding neurotic patients, but it was impossible to build up a satisfactory theory without considering the peculiar importance of anxiety and of the defensive measures used to hold anxiety in check. When Freud characterized anxiety as "the fundamental phenomenon and the central problem of neurosis," he summarized the impressions of many workers besides himself and the members of his psychoanalytic school.

A Theory of Neurosis

The Nuclear Neurotic Process.—An anxiety theory of neurosis takes its start from the general notion that neurosis is an outcome of the individual's struggle for safety and security. Its root is in self-preservation. It is of course not the only outcome of that universal struggle, and it is certainly a warped outcome, but it can be considered as the only possible outcome when certain combinations of circumstances prevail in the person's life. His troubles have their origin in being scared, and represent the only way he can feel safe. Perhaps he is scared by a few terrifying experiences, more often by chronic situations that threaten to undermine his security. He unwittingly applies defensive measures to prevent a recurrence of threat, and these cripple in certain respects the further development of his personality. If further difficulties accumulate, his anxieties and his defenses may both be intensified to a point of breakdown and symptom formation, or to a point of unpleasantness that he can no longer tolerate. This in rough outline is the conception of neurosis that we shall set forth in the next three chapters.

There is a catch in the statement that we can have a unified theory of neurosis based on anxiety and defense. No matter how simply we describe the nucleus of the neurotic process, neurosis occurs in a *person* and its effects may ramify widely throughout the personality. Thus a complete theory of neurosis necessarily includes all those processes of development that we have attempted to describe in the preceding chapters. Neurotic personalities, like normal ones, exhibit very great diversity. In the chapter following this one we shall give explicit recognition to this aspect of the problem by studying the far-reaching effects of chronic neurotic conflict on the per-

sonality as a whole. It is still legitimate, however, to speak of a unified theory of neurosis. The claim to unity lies in this contention: all the forms of neurosis are the outgrowth of a fairly uniform nuclear process involving anxiety and defense.

With this in mind we shall attempt to study the nuclear process in the simplest possible cases. We need to examine the effects of frightening experiences and the way in which these effects are overcome. Frightening experiences entail learning; to overcome anxiety requires new learning, and this new learning takes place, as we shall see, under somewhat difficult conditions. The core of a neurosis lies at the point where anxiety has blocked or distorted the learning process so that new learning essential to adjustment cannot take place.

Innate Predisposition.—It should be pointed out that an anxiety theory of neurosis is a theory of the dynamics of neurosis. It does not presume to rule out constitutional differences and predispositions. We found it necessary in the last chapter to include constitutional and temperamental differences in our account of normal development. It would be arbitrary indeed to deny the possibility of innate predisposition to neurosis. Kahn claims that individuals should be conceived as differing widely in their natural susceptibility to fear.[1] This contention is perhaps strengthened by the findings of Hall, who found it fairly easy to produce by selective breeding two strains of rats one of which was in all situations much more timid than the other.[2] In addition to this conceivable factor of low anxiety threshold, there may be further innate qualities that predispose to this or that particular type of neurosis. Janet, it will be remembered, assumed an innate dissociative tendency as one of the contributing causes of hysteria; likewise he postulated a distinctly different predisposition in patients whose symptoms took the form of phobias, obsessions, and compulsions.

At present it is hard to say more than that such predispositions seem highly probable. The scientific task of isolating predispositions, woven as they must be into the whole tissue of life experience, has thus far moved very slowly. But in any event no one maintains that innate tendencies alone can produce neurosis. Even a predisposed person will not fall ill unless his life experiences put him under pressure.

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[1] Kahn, E., *Psychopathic Personalities*, New Haven, Yale University Press, 1931, pp. 200–210.

[2] Hall, C. S., "Temperament: a Survey of Animal Studies," *Psychological Bulletin*, 1941, Vol. 38, pp. 909–943.

Frustration and Conflict.—Granting that the anxiety theory deals with the dynamics of neurosis, it should be noted that other concepts have a certain claim to the central position we are here assigning to anxiety and defense. Some students of neurosis prefer to make *frustration* their basic concept; others believe that *conflict* is the indispensable element. This divergence of opinion has less to do with the facts than with the best way to conceptualize the facts. It is hard to imagine a neurotic process that does not entail frustration and conflict as well as anxiety and defensive operations. Argument centers on what is to be chosen as the truly peculiar and nuclear element—the pathogenic factor—in neurosis.

The work of Pavlov, who first demonstrated the possibility of producing an *experimental neurosis* in dogs, led to the hope that this question might be settled by crucial experiments with animals. Pavlov produced breakdowns by establishing conditioned responses to two signals, one always reinforced and the other never reinforced by food. The two signals were then gradually made so similar that the animals could no longer discriminate between them, with the result that ordered behavior broke down.[3] Research along similar lines has been carried forward by several workers in this country: Gantt with dogs, Maier with rats, Liddell with sheep, pigs, and goats, Masserman and Dworkin with cats, Hebb with chimpanzees.[4] Artificial breakdown in animals is of course only roughly analogous to neurosis in human beings. In the case of rats the disturbed behavior seems almost closer to epileptic seizures. *Experimental neurosis* is thus a presumptuous and somewhat misleading term, but it remains in widespread use. When an animal's disturbed behavior outwardly resembles a human anxiety state, it is fair enough to examine it for clues to the neurotic process.

Unfortunately there is still no answer from this source to the basic question we are here considering. It is impossible to create a breakdown situation in which frustration, conflict, and fear can be isolated. Take the situation used by Masserman: when the hungry cat is about to feed it is subjected to a sudden blast of air—an event that is apparently shattering to feline equilibrium as indeed it might be to human. The hunger drive is *frustrated,* there is *conflict* between the urge to eat and the urge to escape, and the resulting reactions (crouching, trembling, dilated pupils, rapid breathing, etc.)

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[3] Pavlov, I. P., *Lectures on Conditioned Reflexes*, New York, International Publishers, 1928, Ch. 36.

[4] For a summary of all but the most recent of these researches see Liddell, H. S., "Conditioned Reflex Method and Experimental Neurosis," and Finger, F. W., "Experimental Behavior Disorders in the Rat," these being Chs. 12, 13 in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders*, New York, The Ronald Press Co., 1946, Vol. 1

"obviously parallel those that accompany the subjective experience of normal and neurotic *anxiety* in the human." [5] Pavlov and his early followers described the conditioning procedure as if it were an impersonal learning situation involving conflict between two conditioned responses. Liddell, in contrast, considers it a traumatizing procedure leading to fright. Viewing the animal's situation a little more broadly, so that we include the long hours of monotonous and unsatisfying repetition that go with training, the restraint in the apparatus, and the dependent relation that is built up by the animal toward the experimenter, we can hardly avoid regarding even the Pavlov procedure as a severe shock.[6] The situation would be roughly analogous if a kindly school teacher in the middle of the second semester suddenly set an impossible problem and gave the children electric shocks when they failed to solve it.

In the absence of decisive evidence, the choice of concepts becomes determined by success in putting the known facts into an intelligible order. It is maintained here that the linked concepts of anxiety and defense perform this service with greater consistency than either frustration or conflict. In the following chapters we shall try to show that the origins of neurosis, the formation of symptoms, the varieties of developed neurotic personality, and the process of psychotherapy all lend themselves to understanding in accordance with a theory based on anxiety and defense. We therefore turn our attention to the study of fear in human beings.

Anxiety and the Breakdown of Ordered Behavior

Nothing is gained at this point by making a systematic distinction between *anxiety* and *fear*. Many distinctions have been proposed.[7] Roughly speaking, it is customary to use *fear* when the object of danger is clearly perceived, *anxiety* when the object is unknown or vaguely discerned. Such distinctions are more linguistic than psychological. Whatever the status of the arousing object, the basic emotional reaction is the same. In the literature on neurosis, *anxiety* is the term most often encountered, but it is used in a sense that includes all degrees of the fear reaction.

Course of the Fear Reaction.—We begin our detailed study of anxiety by tracing the course of the fear reaction from an initial

[5] Masserman, J. H., *Principles of Dynamic Psychiatry*, Philadelphia, W. B. Saunders Co., 1946, p. 127.
[6] Liddell, *op. cit.*, pp. 391–397.
[7] Goldstein, K., *The Organism*, New York, American Book Co., 1939, pp. 291–307; Symonds, P. M., *The Dynamics of Human Adjustment*, New York, D. Appleton-Century Co., 1946, pp. 136–138.

state of calm through mild anxiety to severe panic. This progression can best be observed under conditions in which an individual is exposed to real and lasting danger. Such a state of affairs is repeatedly encountered in modern warfare, and the best current descriptions have been given by military psychiatrists. One of these, Emilio Mira, who was chief psychiatrist for the Spanish Republican Army, differentiates six stages in the evolution of fear.[8] These stages, according to Mira, can be regarded as corresponding to "different phases of functional disintegration of the higher brain centers." A very similar conception is utilized by Grinker and Spiegel, who describe the increasing anxiety reaction as a progressive weakening of the ego with loss of its organizing and controlling functions.[9] Because we are dealing with a continuum of progressive disorganization, it is preferable not to mark off sharp stages, but the following account draws heavily on Mira's descriptions.

The earliest premonitions of danger may be barely conscious and entirely free from feelings of anxiety. The person is merely more vigilant than usual and less at ease. He shows that he is under the influence of fear only by limiting his activities and giving a wide margin to possible danger situations. He shows prudence and self-restraint. One can picture the change by thinking of the slower steps and more attentive observation displayed by a person on foot who finds the ground suddenly marshy, or the cautious driving of a motorist who discovers the road to be slippery. With an increase of danger, feelings of anxiety make their appearance. If these are not too intense, the person will be successful in maintaining outward calm and control. His normal functions will be carried on with little impairment. But the struggle to maintain control will prove increasingly costly. It will demand extreme concentration and meticulousness, or perhaps it will show itself in a suspiciously exaggerated display of confidence. This last reaction was characteristic of the bombardier, Pearson Brack (Chapter 2), when taken on a practice flight after his narrow escape from death.

Thus far the control of anxiety dominates the picture. It is important to notice that the presence of danger tends to rigidify behavior. Attention moves from the free floating to the concentrated; spontaneity is lost; certain features of behavior are exaggerated in order to maintain control. A small amount of danger, such as speaking to an audience, is often experienced as a stimulus and

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[8] Mira, E., *Psychiatry in War*, New York, W. W. Norton & Co., 1943, pp. 31–35.
[9] Grinker, R. R. & Spiegel, J. P., *War Neuroses*, Philadelphia, Blakiston Co., 1945, pp. 123–127.

challenge that causes a person to extend himself. Beyond this the effects of anxiety are for a while uniformly in the direction of lessened flexibility.

As danger mounts, control becomes increasingly difficult. The person's mind begins to be occupied incessantly with the danger. He can no longer inhibit the bodily signs of anxiety: perspiration, tremor, restlessness, fast-beating heart, quickened breathing force themselves upon him. Thought and judgment deteriorate, actions are erratic and poorly controlled, new acts are started before old ones are completed. As he finds it impossible to pull himself together, the person "experiences an extremely unpleasant sensation of losing his mental balance." Danger seems to be everywhere. When panic begins to reign, the conscious state resembles a nightmare, "consisting of a peculiar, irregular stream of delirious, distorted mental images, most of which are forgotten when the subject returns to normal." Scarcely aware of what he is doing, the panic-stricken person may rush wildly about, laughing, shouting, crying in rapid succession. These reactions sometimes lasted many days in soldiers exposed to prolonged fire. In some cases a stuporous and comatose state follows the peak of panic.

It is clear that the fully developed fear reaction has no value for continuing existence. It represents the collapse of everything that might serve to extricate a person from danger. The trembling musculature and clouded memory are of little service; above all, the mental confusion, the failure to observe and to test reality correctly, is a fatal handicap to further adaptive efforts. The experience of intense fear thus seems to accompany a more or less complete breakdown in the ordering of behavior.

The Experience of Panic.—Everyone knows what fear feels like when experienced in slight or moderate intensities. Few people, however, can remember the full force of their childhood panics, and fewer still, even of those who have been in great danger, can report the contents of acute anxiety in adult life. If we are to appreciate the dynamic role of anxiety in neurosis, we must realize the overwhelming nature of the experience of panic. The following excerpts describe a severe attack in a 36-year-old writer and teacher, William Ellery Leonard. In contrast to Mira's description, in which battle dangers precipitated the fear, there was in this case absolutely no immediate danger. Leonard was standing on a bluff looking out over a quiet lake, having left his walking companion in the woods behind. Painful recent events, the suicide of his wife for which most

of the community held him to blame, had been causing mounting apprehension and waves of anxiety. As a small child he had narrowly escaped being run down by a locomotive, and it was this that gave special significance to a train which passed along the opposite shore of the lake and brought the panic to its climax.[10]

> I stand looking out over the silent and vacant water, in the blue midday. I feel a sinking loneliness, an uneasy, a weird isolation. I take off my hat; I mop my head; I fan my face. Sinking . . . isolation . . . diffused premonitions of horror. "Charlie" . . . no answer. The minutes pass. "Charlie, Charlie" . . . louder . . . and no answer. I am alone, alone, in the universe. Oh, to be home . . . home. "Charlie." Then on the tracks from behind Eagle Heights and the woods across the lake comes a freight-train, blowing its whistle. Instantaneously diffused premonitions become acute panic. The cabin of that locomotive *feels* right over my head, as if about to engulf me. I am obsessed with a *feeling* as of a big circle, hogshead, cistern-hole, or what not, in air just in front of me. The train *feels* as if it were about to rush over me. In reality it chugs on. I race back and forth on the embankment. I say to myself (and aloud): "It is half a mile across the lake—it can't touch you, it can't; it can't run you down—half a mile across the lake."—And I keep looking to *make sure*, so intensely in contradiction to what the eye sees is the testimony of the *feeling* of that cabin over my head, of that strange huge circle hovering at me. . . .
>
> Meanwhile the freight chugs on toward Middleton. I rush back and forth on the bluffs. "My God, won't that train go; my God, won't that train go away!" I smash a wooden box to pieces, board by board, against my knee to occupy myself against panic. I am intermittently still shrieking, "Charlie, Charlie." I am all the while mad with the terror and despair of being so far from home and parents. I am running around and around in a circle shrieking, when Charlie emerges from the woods.

It should be added that this experience of panic was so intense and unbearable that it was almost immediately forgotten. Leonard remembered only that he had had some sort of attack on the bluff. The full memory was gradually recovered more than ten years later during states of relaxation induced to promote hypermnesia.

Experimental Studies of Disorganization.—In the interests of more precise knowledge, it is desirable to supplement field observations of this kind with experiments carried out under controlled conditions. Experimentation with anxiety in human beings is obviously

[10] Leonard, W. E., *The Locomotive-God*, New York, Century Co., 1927, pp. 304–307.

a precarious business. The subject's welfare requires that anxiety should not be too strongly aroused, but one must also avoid the fault of awakening so weak a replica of fear that his behavior has nothing in common with reactions to genuine threat. We shall examine two experiments that avoid both pitfalls, but first we shall glance at the animal experiments where such problems are less acute.

DISORGANIZATION IN ANIMALS.—Except in the case of rats, the signs of *experimental neurosis* in animals are, according to Liddell, "reducible to a fairly simple common plan. Experimentally neurotic behavior is stereotyped and varies from somnolence, inertness, and immobility to hypersensitivity and overactivity, carried in some instances to the point of manic excitement." [11] Gantt has described in detail the symptoms in a dog called Nick whose neurosis lasted for more than nine years.[12] Nick's troubles are typical enough to serve as a general pattern for the hypersensitive and overactive type of reaction. Possibly Nick was constitutionally predisposed: of three dogs treated in the same way, he was the only one to break down. After being subjected for a while to the difficult discrimination, he resisted being brought into the laboratory and whimpered and howled when there. He was restless, active, and one might say confused; sometimes he barked at food instead of eating it, and he forgot all he had learned about the signals used in the experiments. Disturbance at the autonomic level was shown by inhibited salivation, irregular elevation of heart and respiratory rates, a peculiar raucous breathing, frequent urination, erections without any reference to the presence of sexual stimuli. Social responsiveness was upset. The activity of a normal dog runs parallel to that of dogs in neighboring cages. Nick's ups and downs of activity no longer bore any relation to his neighbors. Sometimes the presence of the experimenter quieted him, but at other times he paid no attention to the experimenter's friendly advances and instead made up to strangers—an attitude with which many readers will sympathize. Gantt points out in conclusion that "once the disturbance is thoroughly established, therapy is difficult. Improvement has been seen with a complete change of environment—removal to farm life for eighteen months. Rest in the environment of conflict was unavailing." [13]

[11] Liddell, H. S., "Conditioned Reflex Method and Experimental Neurosis," *op. cit.*, p. 404.

[12] Gantt, W. H., "The Origin and Development of Nervous Disturbances Experimentally Produced," *American Journal of Psychiatry*, 1942, Vol. 98, pp. 475–481. Reprinted in Tomkins, S. S. (ed.), *Contemporary Psychopathology*, Cambridge, Harvard University Press, 1943, Ch. 32.

[13] *Ibid.*, p. 481.

AUTONOMIC DISORGANIZATION.—As we saw both in canine and human cases, the disorganization of behavior under stress affects those functions that are controlled by the autonomic nervous system. To borrow a picturesque phrase from Mira: "The anarchy present at the conscious level spreads to the internal organs as well."

Before amplifying these statements we must notice that they do not agree with Cannon's now classical emergency theory. Cannon offered the theory that strong emotions—he specifically named pain, rage, and fear—were accompanied by a consistent set of internal reactions which served to prepare the body for violent exertion such as fighting or flight.[14] He sharply distinguished the functions of the *sympathetic* and *parasympathetic* divisions of the autonomic nervous system. To the sympathetic he assigned the function of energizing for fight or flight, to the parasympathetic the stimulation of vegetative processes such as digestion; one might call them respectively a war ministry and a peace ministry. Under warlike conditions—that is, situations calling forth fear, rage, or pain—the sympathetic division discharged in such a way as to prepare the body for crisis, the parasympathetic being relatively inhibited and vegetative functions suspended.

When this theory is applied to the acute fear reaction, however, it is plainly inconsistent with both the behavioral and the introspective facts. Instead of being highly energized and prepared for violent action, the terrified person is tremulous, confused, weak to the point of falling, perhaps even paralyzed by fright. Far from being prepared to deal with the emergency, he is in the worst possible condition to meet it. Moreover, Arnold has recently assembled evidence which casts substantial doubt on the notion that sympathetic activity by itself has an energizing function.[15] That adrenalin serves such a purpose, as Cannon maintained, is now also in grave doubt.[16] A theory begins to take shape that the sympathetic overactivity postulated by Cannon might result in a visceral storm rather than a well-adapted energizing of the body.

The nature of this visceral storm becomes clearer in work more recent than Cannon's, especially that of Gellhorn and his associates.[17] From this work it appears that Cannon exaggerated, at least in his

[14] Cannon, W. B., *Bodily Changes in Pain, Hunger, Fear and Rage*, 2nd ed., New York and London, D. Appleton Co., 1929, esp. Chs. 2, 12.

[15] Arnold, M. B., "Physiological Differentiation of Emotional States," *Psychological Review*, 1945, Vol. 52, pp. 35–48.

[16] Rogoff, J. M., "A Critique on the Theory of the Emergency Function of the Adrenal Glands: Implications for Psychology," *Journal of General Psychology*, 1945, Vol. 32, pp. 249–268.

[17] Gellhorn, E., *Autonomic Regulations: Their Significance for Physiology, Psychology, and Neuropsychiatry*, New York, Interscience Publishers, 1943, esp. Chs. 14, 15.

reasoning, the antagonism between the sympathetic and parasympathetic divisions of the autonomic nervous system. Gellhorn has shown that the two divisions act with much more intimate cooperation. During strong emotion, or in animals following direct stimulation of the hypothalamus, there is extensive discharge over both divisions. The sympathetic predominates in this reaction, but the parasympathetic is also activated beyond its normal level. This arrangement still serves the purpose of energizing the body for crisis; in fact, it serves it better than the pattern proposed by Cannon. To take one example: the sympathetic, as Cannon showed, is responsible for the release of glycogen, thus heightening the concentration of sugar in the blood and making available to the muscles an increased source of energy. The blood sugar, however, cannot be fully utilized unless there is increased output of insulin, and this reaction is controlled by the parasympathetic division. The best preparation for violent muscular exertion is thus a burst of sympathetic activity closely followed by parasympathetic discharge.[18] Balance between the two systems is essential for an efficient emergency reaction.

In the light of these facts it is more plausible to assume that the bodily reactions accompanying acute fear represent a disastrous loss of balance. The stressful situation vigorously activates both divisions, but the sympathetic takes and keeps the lead so that an effective balance cannot be restored. In the early stages of the fear reaction, and in moderate excitement and anger, the body is probably effectively energized by joint sympathetic and parasympathetic discharges. But if the stressful situation lasts too long or reaches too great an intensity, efficient balance is lost, the sympathetic is inundated, bodily changes occur which are not only useless but harmful without parasympathetic aid, and behavior approximates the picture of helpless fright.

LURIA'S EXPERIMENTS: MOTOR AND ASSOCIATIVE DISORGANIZATION.—A Russian investigator, Alexander Luria, devised an ingenious technique for showing the disorganization of motor and associative behavior.[19] As a base-line from which to measure the effects of anxiety, he developed a standard situation calling for a controlled and organized response. Subjects were seated in an armchair with the fingers of each hand resting on a plunger. They were given a form of the word association test with instruction to respond to each word by saying the first word that came to mind

[18] Gellhorn, *op. cit.*, p. 221.
[19] Luria, A. R., *The Nature of Human Conflicts*, New York, Liveright, 1932, Chs. 1–2.

and simultaneously pushing down the plunger with the right hand; the left hand was to remain motionless throughout the experiment. Simple as it sounds, this action calls for good coordination and good timing: the subject must produce an associated word, depress and then release the plunger as he utters the word, and at the same time prevent his left hand from moving. The response thus easily qualifies as a piece of organized behavior. It is also readily measurable, the two plungers being so arranged as to make tracings on smoked paper.

Under normal circumstances it is not hard to perform this organized act with smoothness and regularity. Of course, some word in the list may touch upon an emotional complex and momentarily upset the subject. We are concerned here, however, with the general effect of anxiety on organized behavior. For this purpose Luria's most valuable experiment is one in which subjects were tested while awaiting an extremely important oral examination. With these subjects there could be no question of too shallow emotional involvement. They were plucked from a line where they stood awaiting an ordeal which was to decide whether or not they should continue their higher education. Most of them were in a state of at least moderate anxiety throughout Luria's test. They fidgeted in the chair, talked and laughed excitedly, and showed many other signs of agitation.

The disorganization of behavior associated with anxiety could be observed in the character of the word associations, in the motor processes, and in the coordination between verbal and manual responses. Normally the average reaction time in a word association experiment is about 1.5 seconds; for the anxiety-laden subjects it became 2.3 seconds. The variability of reaction times increased greatly, with some responses coming only after 8 or 10 seconds. Examination of the response words showed an unusually large number of disturbances in the associative process. Frequently the subject gave senseless associations, named objects around the room, repeated the stimulus word, or fell into the habit of giving the same response to every stimulus. "The effect," Luria states, "provokes a functional lowering of the associative possibilities." [20] This part of the experiment neatly substantiates our earlier statement that anxiety reduces the flexibility of behavior.

Disorganization of the motor process was shown by great irregularities in the smoked-paper tracings. By calm subjects the plunger was depressed and released in a single firm movement. In the

[20] Luria, *op. cit.*, p. 51.

anxious subjects, this movement was often badly shattered. The plunger was held down too long or let up slowly with signs of muscular tremor. Sometimes these irregularities were accompanied by disturbances in the left hand which increased its tremor or made some downward pressures of its own.

Particularly important was the disturbance of timing. On several occasions the motor response preceded the verbal response and remained in a disrupted state until the association was given, sometimes even longer. In other cases the plunger was correctly pressed and released, but there followed a whole series of extra pressures, irregular and somewhat tremulous, filling the space until the next stimulus word was called.

All of these disturbances reveal a breakdown in the regulating control that characterizes normal behavior. Luria explained his results by the hypothesis that during anxiety there is an excessive mobilization of excitatory processes which break through the more delicate inhibitory barriers and which cannot be sufficiently discharged by those small actions permitted in the experiment. The uneasy subject overreacts to all stimuli, just as a panic-stricken person overreacts to all sounds and sudden movements, however innocent, that take place around him. The uneasy subject fidgets in his chair, cannot stop talking, laughs too loudly, and then, when the experiment begins, cannot hold back his pressure on the plunger while he hunts for a word association. All of these instances show a loss of regulatory control: motor impulses rush to expression in a senseless way. One is reminded of Nick running about and barking at his food, and of Leonard breaking a box and rushing back and forth on the bluff. If the subject does succeed in restraining his motor impulse long enough to make his verbal response, then the piled-up excitation breaks out belatedly in a series of extra pressures or in unintentional activity of the supposedly resting left hand.

DIVEN'S EXPERIMENTS: INCUBATION AND GENERALIZATION.—Two further features of the fear reaction have been demonstrated in an experimental study by Diven.[21] Fear sometimes increases with the passage of time, even though the person is not continuously exposed to the danger. This phenomenon, known as *incubation*, is well known in everyday life. It is to prevent incubation that we urge a motorist to drive again, or a pilot to fly, as soon as possible after an accident. Another consequence of fright is *generalization:* in-

[21] Diven, K., "Certain Determinants in the Conditioning of Anxiety Reactions," *Journal of Psychology*, 1937, Vol. 3, pp. 291–308.

stead of remaining closely attached to the original threat, apprehension spreads to all kinds of related objects. These two phenomena were shown under controlled conditions in Diven's experiment.

In order to create stress, the experimental situation was made as awesome as possible. Without much explanation the subject was strapped into a formidable apparatus, one hand in the liquid electrodes used to measure the galvanic skin response, one foot in electrodes wired to what looked like a standard electric socket in the baseboard. He was told that the experiment had to do with muscular coordinations which could be measured only by placing his body in an electrical circuit with the apparatus. Practically all subjects confessed afterwards that these preliminaries made them distinctly uneasy.

The experiment proceeded with a form of word association test. The subject was instructed to give a series of associations to each word in the list, continuing until asked to stop. The stop signal was called at twelve seconds. In the word list there was a repeating element: six times the word *red* occurred, followed by the word *barn*. When the subject had associated to *barn* for twelve seconds, he was given a startling and somewhat painful electric shock through the electrodes on his ankle. Upon completion of the word list, a time interval was introduced, after which the whole procedure was repeated except that no electric shocks were given. For part of the subjects this time interval was only five minutes; for others, the second session was delayed twenty-four or forty-eight hours, allowing an opportunity for possible incubation.

Results concerning *incubation* come out of a comparison between the immediate second sessions and the delayed second sessions. The galvanic skin responses (*GSR*'s) provided the necessary quantitative index. The total amount of *GSR* activity throughout the session, regardless of conditioning to particular words, can probably be accepted as an index of the subject's general upsetness. In subjects who received the second (no shock) session immediately after the first, this index was smaller for the second session. In subjects who were forced to wait a day or two, the index was larger for the second session. General upsetness or apprehension was thus distinctly increased when a time interval elapsed before the subject returned to the dangerous situation.

The results bearing on *generalization* constitute one of the most striking results of Diven's experiment. Toward the end of the first session and throughout the second, the largest *GSR*'s occurred on the word *barn*—the actual signal for the shock—but significantly

above-average responses accompanied three other classes of words. These were (1) the word *red* which always preceded *barn,* (2) the word, whatever it might be, that followed *barn,* and (3) all words in the list having a distinctly rural association, such as "hay," "plow," "pasture," "sheep," in contrast to urban words like "pavement," "subway," "streetcar." The anxiety reaction was thus generalized to other signals related to the original signal either by *contiguity in time* (preceding or following it) or by *meaning* (belonging in the same area of experience, in this case the country). One subject, a foreigner, showed attachment of *GSR*'s to the preceding and following words but none to the rural words. It was found afterwards that because of his imperfect knowledge of English he had failed to catch the meaning of the word *barn.* In the great majority of the other subjects the meaningful associations of this word were utilized as channels of generalization.

Even more surprising than this result was the finding that the same generalization occurred when the subjects failed to realize consciously that *barn* was the actual signal. Of the fifty-two subjects who took part in the experiment, twenty-one were unable to say what word preceded the shock. This seems less remarkable when we remember that the shock was separated from *barn* by twelve seconds during which the subject gave a chain of word associations. It appeared, however, that failure to recognize *barn* consciously did not in any way prevent the attachment of anxiety to the rural words. This feature of the experiment illustrates *unconscious perception:* the signal character of *barn* is somehow apprehended, but the subject is not aware of this fact and cannot report it. If the generalization of anxiety can start from dangers unconsciously perceived, the possibilities for meaningful but unwitting elaboration of neurotic symptoms become virtually unlimited.

The phenomenon of generalization appears in clinical descriptions and has even been reported in some of the animal experiments. Liddell's sheep first displayed their anxiety only in the experimental room, but gradually their fear extended to other rooms and even to the living quarters, although no electric shocks were given in these locations.[22] In clinical practice it is noticed that phobias sometimes expand with the passage of time. One day the patient is afraid to go in the subway; the next day he is also unable to take the surface car and feels anxious when he walks under an arched gate. Perhaps the condition described by Grinker and Spiegel in men who had endured prolonged exposure to danger can be taken as the limiting case

[22] Liddell, H. S., in Hunt, *op. cit.,* p. 410.

of generalization where threat is felt practically everywhere. "The patient is actually intolerant of any but the most gentle stimuli from his environment. Even when absolute quiet reigns, he may be seized with a spasm of momentary trembling, as if shaken by some unseen danger." [23] Any sharp or sudden noise, even so small as the striking of a match, or any unexpected motion, makes the patient jump and tremble violently.

Recovery from Frightening Experiences

In the last section we examined the course of the fear reaction from the point at which danger is first perceived to the point at which behavior becomes totally disorganized. We studied the disorganization as it shows itself in animals subjected to experimental neurosis. We saw that effective autonomic patterns were disrupted in acute anxiety and that motor and associative behavior was thrown out of gear. The phenomena of generalization and incubation still further emphasized the far-reaching consequences of fright. Acute fear means collapse of the whole organization of behavior. The experience of panic is uniquely horrible. Neurosis occurs in order to avoid this kind of thing.

To continue our account of the dynamics of neurosis, we need now to consider this avoidance. The nuclear process involves both anxiety and *defense*. It is possible, probably typical, for a neurosis to be built up without actual moments of acute panic. It is constructed, one might say, straight out of the defenses used to prevent the occurrence of panic. How this works will be considered in more detail in the next chapter. For the present we shall continue to confine our discussion to the simplest cases, those in which catastrophic situations actually occur. But our attention will turn to the recovery from fearsome experiences—to the way a frightened organism comes to terms with what has happened.

Relearning After Fright.—Following a fright, the overwhelming impulse is simply to avoid the whole frightening situation. Perhaps the danger is so great that no other response is possible. Very often, however, the danger was only momentary (like a motor accident) or is such that, given a second chance, the person could really cope with it perfectly well. Furthermore, many dangers are incurred in the pursuit of vital interests which the person cannot sacrifice. The pilot whose plane crashes cannot afford to give up

[23] Grinker, R R. & Spiegel, J. P., *War Neuroses, op. cit.*, p. 5.

his livelihood. The active child does not want to surrender his explorations and adventures because on one occasion he has been frightened. Pride may be involved: the person is ashamed to continue being afraid. Then there are incubation and generalization to consider. If no action is taken, the anxiety may be experienced as getting worse and as spreading to so many related stimuli that the whole world seems to be unsafe. One has to come to terms with the circumstance of having been frightened. This means acting in direct opposition to the impulse to avoid. It means *renewed contact* with the threat, a *new appraisal* of its threatening character, and *new actions* to cope with it. It means, in short, new learning in the face of a strong motive to avoid new learning.

Obviously this is a precarious learning situation. It is nip and tuck whether there will be new learning or a renewed attack of anxiety which will make future new learning all the more difficult. The whole problem is beautifully illustrated in Masserman's studies of experimental neurosis in cats, studies that include the process of recovery. We give a few examples.[24]

Masserman's cats were trained to depress a switch that first set off a bell or light signal and then dropped a pellet of food into a food box. When this habit was well learned, the cat was subjected to a sudden air blast at the moment of feeding, this being repeated on several occasions until neurotic behavior (as described earlier in this chapter) became well established. Various procedures were then adopted to study the process of recovery. Three of these are of particular interest here.

(1) Solution of the conflict between fear and hunger was *forced* by placing the hungry cat in the cage and slowly pushing it toward the food box by means of a movable partition. All animals reached a state bordering on panic as they approached the scene of former air blasts. Some, upon seeing the food in the box, dove at it desperately and managed to eat; this put them on the way to recovery. Others became wildly panic-stricken, ate nothing, and left the situation in a state far worse than before.

(2) Another method, called *retraining,* consisted of petting, stroking, and feeding the cat by hand when it was replaced in the experimental cage. Under this treatment the cat gradually calmed down and by slow degrees recovered the possibility of feeding from the box and depressing the switch. It even learned to tolerate the air blast and eat in spite of it. But if the process were rushed and

[24] Masserman, J. H., *Principles of Dynamic Psychiatry,* Philadelphia, W. B. Saunders Co., 1946, pp. 135–142.

the signals and air blast reintroduced too soon, the cat was thrown back into its neurotic condition and further efforts at retraining were far less effective.

(3) The third method, *spontaneous working-through,* called for putting the hungry cat in the cage and leaving it entirely to its own devices. This procedure illustrates particularly well the fine balance between fear and the hunger-driven urge to overcome fear. At first the animal ignored the switch, even refusing to eat a pellet of food placed upon it. As hours went by, however, the cat became increasingly restive and would approach the switch, touching it very gently. The first time the switch was depressed sufficiently to set off the bell or light signal, the cat would hastily retreat and make no effort to secure the pellet in the food box. After a while, growing bolder, it would depress the switch freely and feed without signs of alarm. Reintroduction of the air blast somewhat renewed the neurotic behavior, but in time the animal could learn that even this was harmless.

Defensive Obstacles to Relearning.—The cats just described practiced defenses against a renewal of anxiety, but they did not continue their defenses long enough to prevent relearning. Let us suppose that one of these defenses had become rigidified so that its abandonment was impossible. Suppose the cats had continued to ignore the switch, resolutely "denying" its existence; or suppose they had continued to retreat hastily when the bell rang, never eating the food that fell in the box. Under these circumstances relearning would have been impossible. Recovery from the experimental neurosis could not have taken place.

This freezing of defenses is highly characteristic of the neurotic process in human beings. We shall examine an unusually clear example, the *case of Patrick,* reported by Anna Freud and Dorothy Burlingham from their work in children's nurseries during the Second World War.[25]

Patrick was an English boy, just over three years old, living with his parents in London when the heavy air raids began during the summer of 1940. He was evacuated to the country, but was sent back after a few days because he fretted so much for his mother. Then he came down with measles and was put in the hospital—a second separation. When he recovered he was taken to the Hampstead Nursery, the doctor having directed that after illness he should

[25] Freud, A. & Burlingham, D. T., *War and Children,* New York, Medical War Books, 1943, pp. 99–104, 122–123.

not go to the subway station where his parents were regularly sleeping. His mother, as she left him at the nursery, urged him not to cry and promised to visit him.

Patrick put on a brave front but kept telling everyone that his mother would come for him. She would put on his coat, and take him home. If contradicted, he broke into violent grief which none of the staff could assuage. In the course of two or three days his self-reassuring behavior became increasingly rigid: compulsive nodding of the head as he stated that his mother would come, and a growing list of garments that she would put on him. "She will put on my overcoat and my leggings, she will zip up the zipper, she will put on my pixie hat," he said over and over again. When asked if he could stop this monotonous talk, he became silent, but his moving lips showed that he was repeating the reassuring sentences to himself and his gesturing hands enacted the putting on of the clothing. He would not play with the other children, but stood in a corner moving his head, hands, and lips, a tragic expression on his face. He refused almost all food except milk.

Patrick's mother meanwhile had come down with influenza and could not visit him for more than a week. When she arrived, his stereotyped behavior stopped, but he clung to her tenaciously and followed closely at her heels. She alone was allowed to wash him and put him to bed, and for several nights she slept next to him in the air-raid shelter. In a few days his anxiety was reduced so that he could play with the other children and tolerate short absences of his mother. The length of these absences could then be gradually increased up to the point where the mother resumed her usual life. Some months later she was again obliged to go to the hospital. This time Patrick endured the separation with scarcely a sign of anxiety.

One of the points illustrated by this case is the *incubation* of anxiety. Within a short space of time Patrick experienced three separations from his mother. Only on the third occasion did his behavior take the ominous form we have described. Of more central concern for our present discussion is the fact that Patrick's *defenses* against the anxiety of separation actually *prevented him from overcoming that anxiety.* If he had been able to take his food, begin play with other children, trust himself however tentatively to the mothering ministrations of the staff, he would have found that he was in no danger and that life contained rewarding possibilities. Freud and Burlingham point out that when children have lived several months at a nursery they sometimes come to regard their parents' visits as an unwelcome interruption to their play with the

group.[26] Patrick was at first kept from this relearning by the intensity of his anxiety and the compelling force of his defenses. The nodding head, repeated words, and stereotyped gestures of dressing —his symptoms—arose directly from his attempts to reassure himself that he was not deserted and that his mother would return. They constituted an assertion that she would return and a denial of her continuing absence. Naturally they did not change the actual situation nor do away with his anxiety. Yet they kept him just short of panic and made him feel just enough better so that he could not stop repeating them. Thus his attention and energies could not be freed to reappraise the situation and take new action of any kind.

We are now in a position to clarify our general theory of neurosis. The nuclear neurotic process takes its start when serious threat is present and when conditions are just right to freeze some of the defenses. Because they are staving off unbearable anxiety these defenses cannot be relaxed, but they prevent reappraisal of the threat and new action in regard to it. The conditions that are just right to freeze defenses probably bear a close relation to the severity of threat and the intensity or anticipated intensity of anxiety. Patrick's sense of threat reached the requisite level only upon his third separation from his mother. It is also probable that all of the more primitive defenses such as are called forth by these desperate circumstances have the character of obstructing relearning. In order to serve as defenses when rational appraisal fails they have to deny, conceal, or in some way distort the true import of the situation. Patrick's defense was a simple *denial* that his mother was not reappearing before his eyes. Pearson Brack *repressed* and thereby concealed and denied the fact of his own anxiety, thus making it impossible to change the sequence of events that ended in his fainting. L. Percy King *projected* the bitter conflict between sex and pride, thereby denying the presence of such tendencies in himself and making it impossible to rectify his peculiar judgments about reality. In each case the defense stood squarely in the way of renewed contact with the true situation and thus effectively blocked relearning.

Neuroses Precipitated by Acute Fright

We are now in a position to apply what we have learned about anxiety and defense to the problem of *traumatic neuroses.* A more suitable designation for these breakdowns would be *neuroses of*

[26] *Ibid.*, p. 124.

traumatic onset; they are in any event neuroses precipitated by acute fright. It seems fair to say at the outset that these neuroses do not differ in their fundamental character from the more chronic neuroses that may build up quite slowly in the course of an outwardly uneventful life. Both are based on nuclear processes of anxiety and defense. Very often the symptoms are of a quite similar character. Neuroses of traumatic onset do not constitute, therefore, a separate class of neuroses, except in respect to the suddenness of onset. It is this very suddenness, and the transparency of the surrounding conditions, that gives them special value in the study of the neurotic process.

The immediate response to a traumatic event—a plane crash, a prolonged bombardment, a disaster of some kind—consists of varying degrees of the fear reaction. Soldiers brought to the hospital after severe fighting may be in a condition of wild panic and delirious excitement or they may be comatose and paralyzed. As these acute reactions disappear, some of the victims move slowly but steadily back to a normal condition. With others events take a different course. During a period that may be a week or that may extend over several months the acute reactions give place to a stabilized and consolidated neurosis. The patient is better than he was at first, but his recovery is only partial and his life continues to be badly crippled. Why do these patients fail to recover from their acute fright?

Kardiner's Description of Traumatic Neuroses.—Several hundred patients of this kind, veterans of the First World War, were studied by Kardiner between the years 1922 and 1925. By that time their neurotic condition was thoroughly stabilized, and treatment of any kind was not at all easy. In describing the cases, Kardiner draws an important distinction between the presenting *pattern of symptoms* and certain *secondary character changes.* The symptom syndromes appear in the greatest possible variety, but the secondary character changes are more or less uniform for all cases.[27]

Among the symptoms are all varieties of hysterical phenomena: anaesthesias affecting parts of sensory systems, paralyses affecting parts of the motor system. There are also many disorders in functions controlled by the autonomic nervous system, the psychosomatic disorders that we shall study in a later chapter. Particularly interesting because they are sometimes so readily traceable to the original

[27] Kardiner, A., *The Traumatic Neuroses of War,* New York, Paul B. Hoeber, 1941. An excellent summary of this difficult monograph is given by Kardiner under the title "The Neuroses of War," reprinted from *War Medicine* (1941, Vol. 1, pp. 219–226) in Tomkins, S. S. (ed.), *Contemporary Psychopathology,* Cambridge, Harvard University Press, 1943, Ch. 12.

fright are two classes of symptoms called by Kardiner *defensive rituals* and *syncope* (periodic attacks of unconsciousness). One patient, for example, was unable to go to sleep at night even five years after the trauma unless he carried out a ceremonial which consisted of lying flat on his stomach, nose in the pillow, hands at each side of his face, holding his breath as long as possible. If he did not lie in this position, he experienced dream-like images that threw him into violent anxiety. This ritual proved to be a literal repetition of his frantic attempts to protect himself and adjust his gas mask during the night gas attack that precipitated his breakdown.[28] Another patient experienced the following sequence of events whenever rain fell upon him: itching in the face, breathlessness, fainting, waking with his face swollen and scratched. This sequence repeated the events of a long rapid advance in heavy rain when the patient was felled by a superficial wound, lay unconscious, and awoke with his face burned by mustard gas which had leaked through his defective mask.[29] In each case the patient acts on certain occasions as if the original danger still existed unchanged. This last statement is more than a manner of speaking. The patient has applied such rigid defenses against even recalling the trauma that he has never been able to reappraise the original situation. While he knows that he is now at a veterans' clinic in time of peace, some defensively warded off and unassimilated part of him still behaves as if threat were present.

When we turn to the secondary character changes, more or less common to all patients, one of the outstanding facts is the presence of terrible nightmares which either faithfully reproduce the original traumatic event or develop new situations in which the patient is deserted and utterly helpless. These nightmares, sometimes called "battle dreams," again display the failure to reappraise the original danger. Occurring as they do in sleep, when defenses are relaxed, and throwing the patient into renewed anxiety, they accomplish nothing in the way of new learning. The other secondary character changes can all be understood as evidences of lowered efficiency and shattered self-confidence. Decreased control is shown in the patient's irritability, his oversensitiveness to sound, his difficulty in preventing outbursts of rage or of tearfulness. Lowered competence expresses itself in the inability to perform sustained work and in the general impoverishment of interest. The patient's energies are badly divided. He is still carrying on a struggle to feel

[28] Kardiner, *The Traumatic Neuroses of War*, pp. 15–20.
[29] *Ibid.*, pp. 46–48.

safe, and he does not have enough energy left to conduct a normal life.

Defensive Inhibition.—The key to understanding neuroses of traumatic onset is the concept of defensive inhibition. The basic principle is extremely simple: as Kardiner says, "an activity which fails or causes pain tends to become inhibited." [30] Under circumstances of acute danger, inhibition operates on a vast scale and in indiscriminate fashion. It may attack functions indispensable for further adaptation: for example, paralyzing the legs because the patient was running at the time of the trauma. On the mental side, the inhibition rests on remembering the traumatic situation. If the scene is remembered, it will cause another panic—as indeed it does when during the night the defenses weaken enough to permit a battle dream. An indiscriminate area of the patient's experience and adaptive equipment becomes defensively inhibited, warded off from further participation in his ongoing life processes. If this defensive reaction becomes frozen and consolidated, a new adaptation has to be effected with whatever remains of the uninhibited personality. What remains is inadequate, weak, subject to occasional terrifying eruptions from the warded-off memory traces of the catastrophe. The patient does not dare renew his contact with the memory traces. As a result, the situation is never reappraised.

Undoing the Defense.—These ideas about defensive inhibition sound a little metaphorical. But they seem justified by what has been learned during two wars concerning the treatment of such cases. They are difficult to treat if the whole neurotic structure has had time to harden, especially if, in addition, the patient has established a parasitic relation to government funds. Even when successful, the process is slow and laborious, and sometimes the whole effort is a failure. Kardiner reports success with one case in which over a period of fifteen months he slowly aided the patient to see the connection between his symptom and the traumatic experience, to appreciate the protective devices he was using, to realize that all his defensive actions had miscarried, to grasp that he perceived the world not as "a free and familiar place in which he operated with confidence" but as "a realm filled with all varieties of hazards and dangers against which he felt helpless." The patient suffered as these insights developed, but eventually achieved recovery. Kardiner adds, however, that "the success of treatment in this case was the exception and not the rule." [31]

[30] "The Neuroses of War," in Tomkins, *op. cit.*, p. 197.
[31] Cf. Tomkins, *op. cit.*, pp. 200–201.

The results are quite different if therapy is applied early, before the neurotic pattern is consolidated. The most advantageous time to cure a traumatic neurosis is within a few days of the terrifying experience, although cure is possible a good deal later. The principle involved is a simple one: to make the person resume contact with the traumatic experience, now represented by memory traces, so that he can reappraise the danger that is now actually past and relax his defensive inhibitions against it. The therapist, according to Grinker and Spiegel, "introduces the ego to its recent past." This can be done by direct encouragement or by inducing vivid recall in hypnosis, but it is best accomplished by what is called *narcosynthesis,* based on the use of sodium pentothal, a technique we have already described in the case of Pearson Brack (Chapter 2). This drug may possibly dampen the force of the anxiety reaction, but in any event it favors extremely vivid recall and reliving of past experiences. The drug alone is of little avail unless the therapist takes an active part in the proceedings. "He must make contact between the partially restored ego and the anxiety situation. Left to itself, the ego would never establish contact with this past experience; the resistance remains too strong." [82] On the one hand the therapist prods the patient to remember, even helping to describe the scene and participating as a character in the drama. On the other hand, if anxiety develops too intensely, he can give comfort and support and remind the patient of the present safe situation. In this way the past experience is not only recalled, but recalled at a pace and with an encouragement that allows the associated anxiety to be tolerated. Thus the person can gradually win in his new struggle to come to terms with fright, and the freezing of a defensive system with its toll on his energies becomes unnecessary.

Two historically honorable concepts, *dissociation* and *abreaction,* described in the first chapter of this book, receive a certain justification in this account of traumatic neuroses. Janet's dissociation was intended to describe just such a separation between the personality and part of its memories as occurs in respect to the traumatic event. Breuer and Freud's abreaction, with its emphasis on releasing the pent-up affect connected with some past event, applies descriptively to the cures that occur in narcosynthesis. Both concepts, however, receive new meaning and make better sense when brought into relation to the nuclear process of anxiety and defense. The reason for dissociation, the force that produces separation, is defense against

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[82] Grinker, R. R. & Spiegel, J. P., *War Neuroses,* pp. 136–137.

danger. Dissociation is thus to be conceived as a sign of defensive inhibition. Similarly, abreaction is of therapeutic value because it occurs under circumstances that permit a relaxation of defense. Abreaction is to be conceived as a sign that defensive inhibition is breaking down.

Defense Mechanisms

The concept of defense was introduced by Freud in some of his earliest writings. Before long he substituted repression, which became for a while one of the keystones of his thinking. Later he reversed his position to the extent of reinstating defense as the general concept, with repression standing as one of the defense mechanisms alongside of projection, reaction formation, regression, turning against the self, and some four or five others. Anna Freud, in her book on defense mechanisms, takes the same general position, but recognizes that repression is entitled to a somewhat special status. She points out, for instance, that other defenses are very often combined with repression, and she entertains the possibility that "other methods have only to complete what repression has left undone." More specifically, she puts the problem as follows:

> Theoretically, repression may be subsumed under the general concept of defence and placed side by side with the other specific methods. Nevertheless, from the point of view of efficacy, it occupies a unique position in comparison with the rest. In terms of quantity it accomplishes more than they, that is to say, it is capable of mastering powerful instinctual impulses in face of which the other defensive measures are quite ineffective . . . It is also the most dangerous mechanism. The dissociation from the ego entailed by the withdrawal of consciousness from whole tracts of instinctual and affective life may destroy the integrity of the personality for good and all . . . The consequences of the other defensive methods are not less serious, but even when they assume an acute form they remain more within the limits of the normal.[33]

Clearly, there is something about repression that differentiates it from the other defense mechanisms. It is more fundamental, more drastic, more primitive than the rest. That this should be the case becomes intelligible from our description of neuroses precipitated by acute fright. The defensive inhibition that results from acute fear corresponds in many respects to repression. It can properly be said that the terrified soldier represses all memories connected with the

[33] Freud, A., *The Ego and the Mechanisms of Defence*, London, Hogarth Press, 1937, pp. 52–55.

traumatic event, and that during the pentothal interview the repression is lifted. Repression, therefore, is to be conceived as a direct manifestation of what we have discerned to be the basic protective device: defensive inhibition. For this reason we shall classify repression, along with denial, as *a primary* defensive process. Other defense mechanisms will take their place as secondary processes serving to fortify the primary defense and adjust the person to its consequences.

The Primary Defensive Process.—The primary defensive process is inhibition. Inhibition is, of course, a constant and indispensable feature of all ordinary activity in the nervous system. Even such relatively simple acts as walking cannot be performed without synchronized inhibitions of certain muscle groups. Defensive inhibition is no different in principle from what goes on all the time; it is simply an *intense, indiscriminate* inhibitory response called forth by serious threat. We have seen that under conditions of mounting anxiety a person's behavior progressively loses its inhibitory controls, becoming disorganized and indiscriminate. The panic-stricken person performs senseless acts, like breaking up boxes, and is unable to localize the source of danger which seems to be everywhere. As the threat passes and inhibitory action becomes possible, it takes the same senseless and indiscriminate form. Perhaps the hands that were breaking up the box become paralyzed, perhaps the whole situation is forgotten. Defensive inhibition is not a discriminating response to danger; it is a desperate and primitive response.

DENIAL.—In considering the case of Patrick, we suggested the possibility that all primitive defenses achieve their purpose simply by a denial of the existing threat. If the person cannot escape or attack the threat, the only bearable alternative is to deny it. Thus a small baby carried into a room full of strangers may simply gaze at the door until he musters courage to peek at some of the unknown faces. Anna Freud devotes a section of her book to what she called the "preliminary stages of defence"—the ways in which a small child avoids outside dangers.[84] She describes two varieties of denial, one using fantasy, the other using words and acts. Denial in fantasy is well illustrated in the case of a timid child, who imagined that he owned a tame lion which he could easily control but which terrified everyone else. This fantasy was of great importance to the child; it was carried through endless variations and became his constant

[84] Freud, A., *The Ego and the Mechanisms of Defence*, especially Chs. 6–7.

companion and support. Denial in word and act was well shown in Patrick's stereotyped words and gestures asserting that his mother was about to return. These simple mechanisms of denial remain available to a child only so long as he can tolerate the side-by-side existence of a play or pretend world and a real world. As his power of reality-testing grows, he can no longer deny real facts in the interests of everyday defense. But in acute emergencies, when reality-testing breaks down his defenses, he may regress to the basic unadorned process of denial. Everything is inhibited which might tell him of the presence of threat.

REPRESSION.—The concept of repression is ordinarily reserved for a particular kind of denial: the forgetting, or ejection from consciousness, of memories of threat, and especially the ejection from awareness of impulses in oneself that might have objectionable consequences. Repression thus refers to the denial of that in oneself —memories or impulses—which, if not held in check, would create some kind of threat. When denial is applied directly to external dangers, as in the case of Patrick, the word "repression" is not customarily used. But the similarity of all these denials is obvious. Equally obvious is their basic character as defensive inhibitions.

Under certain circumstances it has proved possible to demonstrate repression in laboratory experiments. Obviously the investigators could not evoke acute anxiety, but there is no objection to supposing that milder stress will call out mild defensive inhibition. In Diven's experiment, cited earlier in this chapter, repression was shown in regard to the words the subjects could remember. If asked to recall the word list when they came back on the second day to what they feared might be another session of electric shocks, the subjects recalled a predominance of "neutral" words having no connection with the signal for shock. If asked to recall again when the session was over and the experiment announced to be at an end—when they were safe—the subjects recalled a predominance of "traumatic" words related in some way to *barn,* the signal for shock. When the "traumatic" words were reminders of an unavoidable impending threat, they were harder to remember; when threat was withdrawn, the difficulty in remembering them disappeared.[35] Both Rosenzweig and Alper have investigated subjects' recall of a series of tasks on part of which they failed. When the situation has been presented casually as helping the experimenter to select some tests, the subjects recall

[35] Diven, K., "Certain Determinants in the Conditioning of Anxiety Reactions," *Journal of Psychology,* 1937, Vol. 3, pp. 291–308.

more of the uncompleted tasks. When the situation has been presented in the light of an important competition in which self-esteem is challenged, the subjects tend to recall a larger proportion of successes.[36] Malamud and Linder's experiments, described in the last chapter,[37] show repression—failure to describe obvious details in emotionally charged pictures—followed by reappearance of the repressed tendencies in dreams the following night.

Secondary Defensive Adjustments.—Close inspection of the other defense mechanisms shows that they quite regularly presuppose an element of denial or repression. In other words, they consist of defensive inhibition followed by secondary adjustments that serve to strengthen the inhibition and bring the person to terms with it. These secondary adjustments are part of the repertory of normal behavior. They become defense mechanisms only through their linkage with defensive inhibition which causes them to have the characteristics of excess and rigidity.

PROJECTION.—The deluded schizophrenic patient, L. Percy King, provides us with a classic example of projection. His security was founded on the idea of being a highly superior person. This security was threatened by any shortcomings in himself—his sexual timidities and peculiarities, his arrogance, his contempt for others—that might cause him to be ridiculed by his acquaintances. He therefore became defensively blind to these qualities in himself. This defense proved insufficient. He felt himself superior and worthy of admiration, but he was confronted by the cold fact that others seemed completely indifferent to his excellencies. This residual problem, or problem consequent on the initial defense, was met by the secondary adjustive device of projection. He seized and magnified every sign of indifference or hostility until he built up the elaborate system of persecutory delusions which we studied in the second chapter. So successful was this secondary adjustment that it eased the burden placed upon repression. He could become aware of all kinds of sexual impulses, once he had assured himself that they arose from the electrical activities of his pursuers.

Projection is usually defined in some such way as the attribution of one's own thoughts, feelings, and impulses to other persons or objects in the outside world. Its basis lies in the fact that our own

[36] Rosenzweig, S., "The Experimental Study of Repression," in Murray, H. A., *Explorations in Personality*, New York, Oxford University Press, 1938, pp. 472–490; Alper, T. G., "Memory for Completed and Incompleted Tasks as a Function of Personality: An Analysis of Group Data," *Journal of Abnormal and Social Psychology*, 1946, Vol. 41, pp. 403–420.

[37] See page 191.

feelings tend to influence our perception of the world. Murray performed an experiment in which children were given two opportunities to judge the emotions being expressed in a series of photographs. Between the first and second judging, the children played a scary game of "murder," with the result that they found the faces markedly more malicious when seen the second time.[38] Sears used a method in which subjects rated themselves and each other on various personality traits. When subjects lacked insight into their own traits, they tended to give unduly high ratings on these traits to their acquaintances.[39] It is out of such raw materials—such motivationally colored perceptions—that the projective process is constructed. It becomes a defense when the recognition of one's own feeling entails anxiety and evokes protective inhibition. Projection then has so much work to do in maintaining the defense that it may reach the pathological proportions of a loss of reality testing.

Other Mechanisms.—Projection can serve as a model for all the secondary defensive adjustments. We shall briefly mention some of the more important ones. At several points in our discussion of maladjustments, we referred to the mechanism of *reaction formation.* This means the development of tendencies or traits that are the very opposite of tendencies we do not like in ourselves. To take a simple example, suppose a man comes to realize that he is very dependent and, feeling a bit ashamed of this discovery, resolves to be scrupulously self-sufficient in all respects. He may carry his independence somewhat to a fault, but it does not reach the proportions of desperate defense. Normal development often proceeds in just this way. Suppose, however, that his reaction formation is preceded by defensive inhibition: dependence means for him utter degradation, awakens anxiety, and is repressed from his awareness. Now the reaction formation serves the purpose of a daily denial of threat. He has to be self-sufficient in order to avoid fear, and his reaction formation will probably become extremely rigid. He will be one of those people who cannot even ask for a match.

Two further defensive processes are shown in the case of a young woman briefly described by Anna Freud.[40] The central problem was a jealous hatred of her mother, which, however, she dared not express lest she lose her mother's love. The first protective maneuver

[38] Murray, H. A., "The Effect of Fear Upon Estimates of the Maliciousness of Other Personalities," *Journal of Social Psychology,* 1933, Vol. 4, pp. 310–329.

[39] Sears, R. R., "Experimental Studies of Projection: I. Attribution of Traits," *Journal of Social Psychology,* 1936, Vol. 7, pp. 151–163. This and Murray's study are reprinted in S. S. Tomkins (ed.), *Contemporary Psychopathology,* Cambridge, Harvard University Press, 1943, Chs. 41–42.

[40] Freud, A., *The Ego and the Mechanisms of Defence,* pp. 47–50

was a *displacement* of the negative feelings onto another woman. "Her mother continued to be a love-object, but from that time on there was always in the girl's life a second important person whom she hated violently." This hatred entailed less anxiety than hating her mother, but it still caused her suffering. Next she *turned inward* the aggression that was felt toward others. "The child tortured herself with self-accusations and feelings of inferiority, and did everything she could to put herself at a disadvantage and injure her interests, always surrendering her own wishes to the demands made on her by others." That this could be a solution shows the force of her anxiety lest her mother desert her, but after a while it too became unbearable. To relieve herself of such a burden of guilt, she resorted to projection and began to imagine herself the innocent victim of hate and persecution by others.

One further group of secondary defensive adjustments deserves mention because of its central importance in obsessional neurosis. To the group as a whole we can give the name *intellectualization,* referring to the tendency to take emotional conflicts into the sphere of intellect, divest them of affective and personal meanings, and work on them as problems in metaphysics, religion, political theory, etc. The word *rationalization* has been applied to this type of defense, though usually not in its original meaning of "making rational" but in the debased sense of "making excuses." Special forms of intellectualization have been called *isolation* and *undoing.* The details of these processes can best be left to the later chapter in which we study obsessional neurosis. At this point it is sufficient to notice again that we are dealing with a normal adjustive process which becomes a rigid mechanism only by association with a primary defensive inhibition. The whole attempt to understand the world means capturing it in the realm of intellect and making allowance for possible distortions that spring from emotions and personal meanings. Only when intellectualization is preceded by the defensive inhibition of threatening personal tendencies and is prostituted in the service of concealing such tendencies, can we call it a pathological mechanism.

SUGGESTIONS FOR FURTHER READING

The most thorough attempt to work out a general theory of neurosis will be found in Otto Fenichel's *The Psychoanalytic Theory of Neurosis* (New York, W. W. Norton & Co., 1945), especially Chs. 7–10. Fenichel's exposition is detailed and complex, but it gives the central place to anxiety and defense. A shorter account is given by I. Hendrick, *Facts and Theories of Psychoanalysis* (New York, Alfred A. Knopf, 1939), Ch. 7. A. H. Maslow's

paper, "Conflict, Frustration, and the Theory of Threat" (*Journal of Abnormal and Social Psychology*, 1943, Vol. 38, pp. 81–86), weighs the concepts most often used in a theory of neurosis.

Most of the work on experimental neuroses in animals is to be found in monographs and journal articles. A very good impression of it can be gained from two more accessible sources: J. McV. Hunt's *Personality and the Behavior Disorders* (New York, The Ronald Press Co., 1944), Vol. 1, Chs. 12–14, and S. S. Tomkins' *Contemporary Psychopathology* (Cambridge, Harvard University Press, 1943), Chs. 31–35. To be recommended also is J. H. Masserman's survey and report of new experiments, *Behavior and Neurosis* (Chicago, University of Chicago Press, 1943), and his weaving together of animal experiments and clinical concepts in *Principles of Dynamic Psychiatry* (Philadelphia, W. B. Saunders Co., 1946), especially Chs. 8–12. For experiments with human beings under conditions of stress (often called "experimental psychopathology"), reference is again to Tomkins (Chs. 40–42) and Hunt (Chs. 9–10). A. R. Luria's book *The Nature of Human Conflicts* (New York, Liveright, 1932) is full of stimulating ideas and observations, but the reader must be prepared to show great patience with an extremely cumbersome style of writing. The contents of a valuable monograph by R. R. Sears is well expressed in its title, *Survey of Objective Studies of Psychoanalytic Concepts* (New York, Social Science Research Council, 1943).

For the neuroses of traumatic onset the reader is referred again to the fascinating book by R. R. Grinker & J. P. Spiegel, *Men Under Stress* (Philadelphia, Blakiston, 1945) and to their earlier publication, *War Neuroses* (Blakiston, 1945). A. Kardiner's monograph, *The Traumatic Neuroses of War* (New York, Paul B. Hoeber, 1941) is difficult but rewarding reading; it is best preceded by Ch. 12 in Tomkins, which will serve as a lucid introduction.

The best book on defense mechanisms is Anna Freud's *The Ego and the Mechanisms of Defence* (London, Hogarth Press, 1937).

CHAPTER 7

NEUROTIC CONFLICT AND ITS EFFECT ON PERSONALITY

Let us suppose that a man in his middle thirties goes to consult a psychiatrist in order to obtain relief from attacks of anxiety. Let us suppose, further, that his country has not been at war during his adult years so that he has never been in military service nor exposed to the dangers of combat. He is satisfied with his occupation which yields a good income. He is happily married and enjoys his children. Of what is he afraid?

Our example may not be typical, but there are certainly many cases of neurosis in which the outward circumstances of life are just as placid and just as fortunate as in this one. It is cases of this kind that account for the contempt that is sometimes felt toward neurotics. The patient's neighbor, who lives in a much smaller house and cannot afford a car, who has been lame since childhood, whose job situation is always precarious, whose wife is in poor health and whose children are having difficulties in school, will be pretty scornful when he hears about those anxiety attacks. He will probably wish that the patient had some real problems, like his own, to worry about. That the patient is privileged to worry about nothing will fill him with profound envy.

No one who has seen a neurotic patient in the grip of anxiety will feel envious. If the neighbor could change places with the patient for a few days, he would probably be glad to go back to his outwardly harassed life. Even when the patient does not experience attacks of anxiety, his fatigues and bad moods and the discouraging sense of constant inner frustration are anything but enviable. But we may well press the question: of what is he afraid? Against what dangers is he defending himself? According to the theory of neurosis developed in the preceding chapter, this man is struggling with a vital threat, is experiencing eruptions of panic, and is using defenses that tie up his energies and prevent him from continuing his normal life. Where lies the vital threat?

Childhood Origins of Neurotic Conflict

The first step of the answer is that the threat occurred in childhood. The patient is afraid, let us say, that his mother is going to desert him. But this raises the further question: why is he afraid of this thirty-year-old threat that is no longer in the least dangerous? In reply we can say that when the threat became so serious in childhood as to create real panic, it was subjected to defensive measures that violently denied it and that warded it off from any further learning. The radical defenses applied in infancy prevented the patient from learning that separation from the mother was not a threat to life but rather something that in the course of time he could learn to tolerate. He grew up with the blocked-off idea that desertion by the mother was a vital threat. In this his behavior is analogous to that of the untreated victims of traumatic neurosis described in the last chapter. These men acted as if battle danger still existed. The danger of being gassed was present every night to the veteran who could not fall asleep until he had performed the ritual gestures of burying his face, holding his breath, and adjusting his mask. To our hypothetical patient, the danger of desertion remains actively present, though warded off from consciousness.

Just as the veteran does not go through the streets dodging bombs at every corner, the patient does not have to conduct an hourly defense against the threat of desertion. He learns to substitute a bond of love for the physical presence of the mother, and to displace his dependence onto other symbols of security, such as his wife, his friends, his bank account. But his life must be built up in such a way as to minimize the possibility of being directly and forcibly reminded of the threat of desertion. This limits the freedom and spontaneity of his whole development. His growth is pervaded by the necessity of avoiding situations that resemble desertion. Outwardly he may do very well, making a good adjustment to his exaggerated fear. But he is always vulnerable to a primitive desertion stimulus, just as the combat veteran remains vulnerable to sudden loud sounds. Perhaps the impending death of his aged mother serves as a sufficiently primitive stimulus. Perhaps something happens to one of his displaced security symbols: his wife is chosen president of the women's club and has less time for him, or his bank account is slightly pruned by a business recession. Threats to symbols may be trifling in themselves, but they touch the blocked-off infantile terror and the patient arrives at the psychiatrist's office feeling like a child who is about to be deserted by his mother.

In the last chapter it was stated that the core of a neurosis lies at the point where anxiety has blocked or distorted the learning process so that new learning essential to adjustment cannot take place. The blocking or distortion comes about because of the application of a primary defensive process which prevents new contact with the threat. In the following words, Alexander and French describe this relation between neurosis and the learning process:[1]

> In normal development, patterns from the past undergo progressive modification. One learns from experience by correcting earlier patterns in the light of later events. When a problem becomes too disturbing to face, however, this learning process is interrupted and subsequent attempts to solve this problem must, therefore, assume the character of stereotyped repetitions of previous unsuccessful attempts to solve it. A neurosis may be defined as a series of such stereotyped reactions to problems that the patient has never solved in the past and is still unable to solve in the present. In other words, a neurosis is the result of an interrupted learning process.

The Nuclear Neurotic Process in Childhood.—It is undoubtedly true that some adult neuroses have their origin in violently frightening childhood events. The nuclear neurotic process in such cases is no different from what we described in connection with neuroses of traumatic onset. The theory has long since been abandoned, however, that all neuroses, or even a majority of neuroses, take their start from traumatic events. The nucleus can be formed *more gradually. It can develop out of a chronic situation that exists* between the child and his parents rather than out of dramatic moments of crisis. Threat of desertion or violent punishment never quite materializes, but if the child senses these things as real possibilities he will take defensive measures sufficiently strong to interrupt the learning process.

How this works is well described by Karen Horney, who attaches particular importance to the child's struggle with his own aggression.[2] She makes the statement that "hostile impulses of various kinds form the main source from which neurotic anxiety springs." In order to retain his parents' affection, the child may have to inhibit many of his desires, but the most serious threat to the parental relation comes from his own anger over these frustrations. At the moment of frustration he himself wants to hurt his parents and injure the relation, and his expressions of his momentary hate do more than

[1] Alexander, F. & French, T. M., *Psychoanalytic Therapy*, New York, The Ronald Press Co., 1946, p. 74.
[2] Horney, K., *The Neurotic Personality of Our Time*, New York, W. W. Norton & Co., 1937, Ch. 4.

anything else to alienate their affections. Thus it becomes a matter of vast importance—a life-saving measure—not to express these hostile feelings. But if parental frustrations continue, the hostile feelings are again aroused, and the only safe solution is to repress them.

It is easy to see how the child's repression of his hostility would lead at once to rather far-reaching limitations. In order to sustain his defense and prevent the hostile impulses from breaking through the protective inhibition, it would be necessary to avoid parental frustration as much as possible. It would be necessary to do only what the parents liked. It would become impossible to stand up for one's rights. An unjust punishment would have to be accepted, favoritism toward a sibling would have to be overlooked or even taken as a true sign of one's inferiority and worthlessness. The child's development under these circumstances is badly cramped. In order to maintain the repression of his hostility, and thus avert the threat of parental desertion, he has to do exactly what will please his parents. Repression of his hostility leads to the checking, if not actual repressing, of many more of his own desires.

Horney's interpretation of this nuclear process was originally derived from Freud. But whereas Freud emphasized the special importance of repressing the sexual need in order to avoid parental punishment (threat of castration or some similar violent act), Horney gives central importance to repressing the aggressive tendencies in order to avoid parental rejection and desertion. Doubtless there are cases to fit each formulation. Horney's account gains somewhat greater generality from her deduction that the mere fact of repressing hostile impulses brings about a situation in which anxiety tends to increase. A vicious circle is created which makes matters progressively worse. If hostility is repressed, the child places himself in a weak position. He cannot defend himself or demand justice. He must put up with it if others encroach upon his wishes, and this allows them to do so *more* and *more*. Furthermore, in order to maintain the repression of his own hostility, he can hardly prevent the adjustive mechanism of projection from coming into play. He perceives his own hostility as an attribute of other people. But this only makes him feel still weaker, a helpless person in a hostile world. In order to prevent himself from alienating his parents' affection, he has sacrificed the very feelings that would enable him to stand up against others.

Danger Situations of Childhood.—It is easier to appreciate the force of the nuclear neurotic process if we examine what constitutes

danger for a small child. A good deal has been written about birth as the earliest traumatic event and as the first occasion of profound anxiety. Conceivably, a severe birth experience might lower the threshold of the fear reaction, thus predisposing the person to later anxieties, but there is really no satisfactory evidence for such a contention. A better point of departure for one's reasoning is the actual helplessness of the infant. He cannot supply his own most basic needs, and if he were left alone, his continued existence would be threatened within a very few hours at the most. Freud pointed out that "the situation which the infant appraises as 'danger,' and against which it desires reassurance, is therefore one of not being gratified, of an *increase of tension arising from non-gratification of its needs*—a situation against which it is powerless." [3] We are so used to thinking of danger as external that we tend to forget the close association in infancy between danger and the non-gratification of internal needs.

The infant experiences need satisfaction chiefly from his mother or from whoever feeds him and regularly attends to his wants. The presence of the mother or nurse is soon learned to be the best guarantee of security. Separation from the mother can thus easily become a serious danger signal. At the outbreak of the Second World War, with the threat of large-scale bombing of cities, much fear was felt concerning the shattering effects of air raids on children's feelings of security. Experience showed that for small children, at any rate, the danger of separation from the family circle had a far more devastating effect than the bombings. Most children up to the ages of six or seven took the raids quite calmly so long as their mothers were with them, whereas many emotional difficulties resulted from the attempt to place them in safe areas away from their parents.[4]

It is because of this firm linkage between security and parental support that events in the family circle have so vital a bearing on the child's sense of security. Freud and his followers repeatedly emphasize weaning, toilet training, punishment for sexual activity, sibling rivalry, and the jealousies contained in the Oedipus and Electra situations as outstanding sources of threat in childhood. Whether or not we agree with Freud on the erotic character of these situations, it is plain enough that they can easily arouse anxiety be-

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[3] Freud, S., *The Problem of Anxiety*, New York, W. W. Norton & Co., 1936, p. 100.
[4] Freud, A. & Burlingham, D., *War and Children*, New York, Medical War Books, 1943, p. 37; Pritchard, R. & Rosenzweig, S., "The Effect of War Stress upon Childhood and Youth," *Journal of Abnormal and Social Psychology*, 1942, Vol. 37, pp. 329–344.

cause they threaten in one way or another the central point of the child's security, his relation to his parents. It must be recognized, furthermore, that just as the infant is helpless to provide for his own wants, the child is relatively helpless in regard to parental relationships. If he feels that his parents are being unfair in favoring a sibling, for example, there is very little that he can do about it. He is especially helpless in the face of parental quarrels and the sort of events that lead up to divorce. Whenever he feels helpless in the face of a threat, he is at the mercy of fear and may be able to ward it off only by defensive processes that interfere with further development.

Conditions Favoring Repression of Hostility.—Horney has described a particularly devastating kind of parent-child relationship. In the childhood history of neurotic patients she finds that "the basic evil is invariably a lack of genuine warmth and affection." [5] One must hesitate to endorse so sweeping a generalization, but the situation described by Horney is undoubtedly a suitable one for setting in motion the nuclear neurotic process. She continues as follows:

> A child can stand a great deal of what is often regarded as traumatic —such as sudden weaning, occasional beating, sex experiences—as long as inwardly he feels wanted and loved. Needless to say, a child feels keenly whether love is genuine, and cannot be fooled by any faked demonstrations. . . . More frequently than not, in my experience, the essential lack of warmth is camouflaged, and the parents claim to have in mind the child's best interest. Educational theories, oversolicitude, or the self-sacrificing attitude of an "ideal" mother are the basic factors contributing to an atmosphere that more than anything else lays the cornerstone for future feelings of immense insecurity.
>
> Furthermore, we find various actions or attitudes on the part of the parents which cannot but arouse hostility, such as preference for other children, unjust reproaches, unpredictable changes between overindulgence and scornful rejection, unfulfilled promises, and, not least important, an attitude toward the child's needs which goes through all gradations from temporary inconsideration to a consistent interfering with the most legitimate wishes of the child, such as disturbing friendships, ridiculing independent thinking, spoiling its interests in its own pursuits. . . .

The parental attitude here described contains an element of rejection, but for the child it is more of a trap than outright rejection.

[5] Horney, K., *The Neurotic Personality of Our Time, op. cit.*, p. 80.

which would at least allow him to hate his parents for their unjust behavior. When the parents do not give love, but at the same time do not allow themselves to perceive this fact and pretend to be acting in the child's best interests, they allow no outlet for the child's aggression. They pose as right and make him feel in the wrong. Because they are not really interested in him, they do not follow his day-to-day development nor perceive his problems and preoccupations. Hence they frequently frustrate him, but they cannot tolerate his resulting aggression. The situation is a perfect one to generate the neurotic nuclear process by forcing the child constantly to repress his aggression.

The following example shows the emotional trap in which a child can be placed when other concerns of the parents override his vital needs. A mother was giving a large costume party, and her plan called for a little tableau in which her four-year-old son should appear as Cupid, coming down the stairs carrying a bow and arrow and otherwise clad in the traditional costume of Cupid. The child violently objected, feeling genuine anxiety at going down among so many costumed strangers. The mother was unable to sacrifice her tableau, so she applied arguments such as doing it for her sake and not disappointing the guests. At this point the child realized that his interests and his terror were of no importance; he was simply being used for his mother's enjoyment. Fury arose, but anxiety stamped it down. He was suddenly overwhelmed by the need to keep anything he could of his mother's affection. That purpose could not be served by standing up for his rights. It could be served only by surrendering and going downstairs into the nightmare. This incident played a part in what became a fairly severe adult neurosis.

Our discussion thus far has allowed us to expand somewhat our conception of the nuclear neurotic process. In the last chapter it was presented as an outcome of the defenses applied in acutely frightening situations. Now we can see that a similar nucleus can be established more gradually. It can originate from the defenses applied to the chronic threat that the parents will withdraw their interest and support. Returning to the question raised at the beginning—"Of what is the adult neurotic patient afraid?"—we must now add that he may be afraid of his own impulses, especially his aggression, but perhaps also his sexual and other tendencies. He is afraid of them because in childhood they imperiled a precarious parental relationship, and he has never been able to learn that they no longer do so. The problem is still one of anxiety and defense. But we see it now as embedded in the vitally important parent-child rela-

tionship, and as further complicated by the child's own impulses becoming signals of danger.

It is impossible, however, to answer fully the question of neurotic anxiety until we study what happens after the establishment of a neurotic nucleus in childhood. The development of personality does not stop, but it goes forward in such a way as to create a protective organization against the recurrence of vital threat.

Neurotic Trends and Protective Organization

In order to understand neurotic protective organization, we shall begin with an analogous but much clearer problem. Suppose that a child is afflicted with infantile paralysis and recovers with substantial loss of locomotion. His whole development must now take place in such a way as to allow for his limitation. In building up competence and seeking the esteem of others, he will be unable to use athletic achievement. Social adjustment must be accomplished without his being able to dance or to drive a car. Some interests will be closed to him because they demand prolonged standing. This particular defect does not preclude a well-rounded and even distinguished career, but it nevertheless illustrates with simple clarity the effect of a limitation on the process of development.

When a neurotic nucleus is established in childhood, further development must proceed so as to take account of this limitation. The defense of warding off all memories of childhood danger situations, and all impulses that might recreate those dangers, may serve well enough at the time, but it leaves the person in a vulnerable position. New situations may forcibly remind him of the danger. His aggressive, sexual, or other tendencies are bound to be aroused. Repression is not a permanent solution, and he has to build up his life in such a way as to forestall the arousal of what is repressed. Taking as an example a child reared in the unloving but complacent atmosphere described by Horney, we can say that this child has got to develop in such a way that he will never, so far as possible, offend his parents. The surest way to do this is to subordinate his own wishes to those of his parents. As his world expands outside the family circle, he becomes vulnerable to additional threats. Rejection by his teachers, by his playmates and friends, later by his wife and employers and business associates, has the power to call up severe anxiety. He has to please them all. Any coolness, inconsideration, or belittlement becomes a thing to be avoided at all costs. His whole pattern of traits and tendencies is colored by this necessity. It

sounds like a bad pun, but we might truly say that an infantile paralysis grips any tendencies in himself that might get him into a situation strongly reminiscent of the danger experienced in childhood. One can see the far-reaching limitation that affects his human relationships. He must never offend others, and they must always treat him well. The many traits and tendencies that he develops in order to bring about this result constitute his protective organization.

Neurotic Trends.—The principal constituents of the protective organization are traits and tendencies, with their associated skills and satisfactions, that serve the purpose of preventing further contact with dangers resembling those of childhood. We shall refer to these traits and tendencies as neurotic trends. A neurotic trend should not be conceived as wholly different in character from a normal or healthy tendency. It is rather an exaggeration and rigidifying of an ordinary way of behaving. Nowhere is it more important than here to bear in mind the continuity between healthy and neurotic behavior, and nowhere in our study is one more likely to have attacks of the "medical students' disease" described in an earlier chapter.[6] Neurotic trends are exaggerations of certain tendencies that are well-nigh universal in human behavior. They become exaggerated in the service of anxiety.

These points can be made clearer by examining Horney's recent attempt to classify neurotic trends.[7] Believing that the important neurotic trends all have to do with attitudes toward people, she proposes that they should be grouped under the three headings: moving toward people, moving against people, and moving away from people. Moving toward people, also called a compliant trend, implies that the person feels a certain helplessness and tries to win the affection and esteem of others so that he can lean on them for support. Moving against people, also called an aggressive trend, means that the individual strives to surpass and defeat others, making himself strong enough to disregard their possible hostility. Moving away from people, detaching oneself from others and building up a more or less independent existence, has the effect of avoiding whatever threats may be contained in human relationships. Unless we want to add a fourth category of moving harmoniously with people, these three trends of Horney's pretty much exhaust the attitudes it is possible to take toward other people. There are times when each one of the three is fully appropriate and highly desirable. Neurotic trends

[6] See page 58.

[7] Horney, K., *Our Inner Conflicts: A Constructive Theory of Neurosis*, New York, W. W. Norton & Co., 1945, Chs. 2–5.

are thus not brand new ways of behaving toward people. They are exaggerated and rigidified versions of tendencies that appear in everyone.

Neurotic trends are thus distinguished from the normal, not by their quality but by their intensity. Normal people differ a great deal in the balance they establish among moving toward, moving against, and moving away from others. Our study of normal development would lead us to expect this on several grounds. We would expect different patterns to result from different kinds of parental encouragement and from the social opportunities afforded by the neighborhood and the available groups. We would even expect temperamental differences to be influential. Horney's three trends correspond rather closely to the social traits associated with Sheldon's three components of temperament: moving toward people with viscerotonia, moving against people with somatotonia, moving away from people with cerebrotonia.[8] A considerable overemphasis upon one or another trend is not inconsistent with reasonably good adjustment. We cannot call one of these trends neurotic, then, unless in addition to having been favored by temperament and environmental influences, it is being seriously overworked in the interests of defense.

Criteria for Judging a Trend to Be Neurotic.—There are three criteria by which defensive overworking can be recognized. (1) The first is indiscriminateness: a given attitude is assumed not only when appropriate but even in the most unsuitable circumstances. A person who craves affection and approval, for instance, must have it *from everyone, even from bus drivers and store clerks who are of no* real importance in his life. He may even require it from his children and pet animals. The trend has a compulsive intensity that does not permit it to be adapted to circumstances. (2) Another attribute of neurotic trends is their insatiable character. The person seems never satisfied; he does not reach repose, but always needs a little more of the same kind of satisfaction. The man who moves toward people wishes that even a very congenial evening had been a little more congenial. The man who seeks triumphs wishes that even a signal success had been a little more glorious. The person who manages to separate himself from all close ties wishes that he could also be free from minor personal contacts. (3) The blocking of neurotic trends creates disproportionate frustration, probably with signs of anxiety. If aggressive competitiveness, for instance, is serving as a neurotic

[8] See pages 147–150.

trend, to be beaten in some competitive enterprise will throw the person into a state of desperation. For him the defeat means vital threat.

Neurotic Conflict.—Even if a person's life history loads him with neurotic trends, he will try his best to achieve some kind of workable integration. He is under the same influences that prompt a healthy person to function as a unified and harmonious individual. His task, however, is much harder. Because of their compulsive intensity, neurotic trends tend to block and exclude other tendencies. As Horney points out in her discussion of moving toward, against, and away from people, neurotic trends are incompatible with good social adjustment. If any one of these three attitudes is lifted to neurotic intensity, it more or less wrecks the chances of using the other two. Yet because the other two represent more or less universal human needs, it is not really possible to subordinate them completely. A person whose anxiety in human relationships can only be held in check by a neurotic trend of seclusive withdrawal does not thereby obliterate his wishes for affection, esteem, and glory. These wishes needle him from time to time; he cannot feel satisfied with the limitations imposed by his chief neurotic trend. If a second trend is also reinforced in the interests of defense, the situation is still more difficult. He feels anxious if he cannot have seclusion and he feels anxious if he cannot have competitive success. The very intensity and indiscriminateness of neurotic trends make it almost impossible to harmonize them with each other and with the rest of the person's tendencies. The result is chronic conflict: *neurotic conflict,* because one at least of the conflicting tendencies is an insatiable neurotic trend.

Threat to Protective Organization.—It is only when we take account of neurotic trends, the attempt to integrate them into a protective organization, and the neurotic conflict that is almost certain to result, that we can properly return to our initial question: Of what is the adult neurotic individual afraid? If we study the present pattern of tendencies and examine the current problems that are giving him trouble, we shall usually be right in saying that he is afraid his protective organization is going to be broken in some way. Circumstances have pulled him out of his favorite neurotic trends. His established techniques for making himself feel safe are no longer successful and have to be changed.

The situation of having to change one's established patterns of life is a frightening one for anybody. When a person has to leave his

native land and establish himself anew in an utterly foreign culture, it is understandable that he feels considerable anxiety. It is fair to say, therefore, that an adult neurotic is afraid of having to change. If his protective organization has depended heavily on the two trends of seclusive withdrawal and submissive compliance, and if these are now failing so badly that his situation can no longer be endured, he is faced by the necessity of behaving along more assertive and competitive lines. Quite properly we can say that one reason he is afraid to do this is that he does not know how. He has acquired no practiced skills in argument, in sales talk, in pushing his own interests, or in whatever form the newly required behavior may take. Everything of this kind has been inhibited and crowded under in his pattern of neurotic trends. At the age of thirty-five, let us say, he starts as a novice to learn ways of behaving in which everyone around him is at least reasonably skilled.

In addition to being afraid about his lack of practiced skills, a person who has to change his habitual way of life may also dread the loss of his most treasured satisfactions. Although he has been the victim of neurotic trends and their conflicts, his life has not been without satisfactions, and these constitute its meaning and value to him. An outside observer might say that the satisfactions were limited and that a far richer life would be possible. But it is hard for the person himself to see how new and untried ways of behaving are going to yield him satisfactions equal to his accustomed ones.

But these obstacles to new learning, genuine as they are, do not suffice to explain the predicament of the neurotic patient. They may dominate the immediate picture of his complaints, they may make it hard for him to budge out of his state of chronic conflict, but they do not account for the terrific resistance to change that is characteristic of the neurotic personality. The protective organization has not been rigidified entirely for its own sake, or entirely through habituation and inertia. The added factor, the specifically neurotic factor, that contributes to rigidity and blocks new learning, is that the person is still afraid of childhood dangers. He has done no relearning in regard to his aggressive impulses, for instance. Therefore, if he now tries to give them expression, it feels to him as if his parents were going to be angry and leave him destitute of all human support. Any attack on his protective organization carries the threat that he will be precipitated again into the dangers and panics of childhood. It is not incorrect, therefore, to say that the adult neurotic patient is *basically* afraid of the danger situations of his childhood, even though he is more *immediately* afraid that his well-prac-

ticed protective organization will be cracked open and that he will have to change his way of life. It takes high-powered anxiety to make a neurosis. Acute combat stress or similar traumatic situations can do it in adults. Otherwise only the panics and apprehensions that occur in the helpless years of childhood are sufficiently high-powered.

Examples of Neurotic Trends

In the last section we were concerned to round out the description of the dynamics of neurosis, including the development of protective organization and the conflicts occurring within it. We were therefore niggardly in our description of neurotic trends. Horney's rough threefold grouping served for the time being, but actually it is impossible to classify neurotic trends under a few headings. They are full of individuality, and they can take a variety of forms barely suggested by the notions of moving toward, against, and away from people. Any listing of neurotic trends is bound to be unsatisfactory and incomplete. In order to understand how such things work, it will be more useful to describe a few samples, without making any pretense to completeness.

Need for Affection.—That a striving to obtain affection could serve as a neurotic trend was early recognized by Freud and his followers. The neurotic need for affection has been best described by Horney.[9] To have affection is certainly a good thing in itself. Such a striving, therefore, qualifies as neurotic only when it meets the three criteria previously described: it is indiscriminately compulsive, it is insatiable, and when frustrated it gives rise to disproportionate despair if not outright anxiety. This intensity, this overdriven character, comes from the fact that the striving for affection is also serving as a striving for security. The person must have affection, not only because it is good in itself but also in order to feel safe.

Horney points out that the neurotic individual who seeks his security in this particular trend keeps working himself unwittingly into situations of conflict. He is in great need of love from others, but he is more or less incapable of giving anything in return. The original neurotic nucleus contained a repression of hostility in the interest of retaining parental affection. Lurking within him, but kept very firmly out of his awareness, is a resentful distrust of other people. Emergence of this hostility into consciousness would con-

[9] Horney, K., *The Neurotic Personality of Our Time*, *op. cit.*, Chs. 6–8.

stitute a basic threat, calling up the original danger situations in which anger had to be repressed lest it offend the parents. But in every relationship from which he seeks to gain affection, this dangerous hostility is stimulated. He needs too much affection; he cannot tolerate the other person's being interested in some third person, and he cannot bear to be the object of any demands or criticisms. In other words, he expects a degree of blind devotion that he is highly unlikely to obtain from anyone, and he is therefore continually frustrated. He continues, however, to think of himself as loving the other person. Unable to become aware of the mixture of hostility in his feelings, he can never allow for them, outgrow them, perceive his deficiencies as a giver of love, and achieve in his relationships a reasonable balance of give and take. "In short," says Horney, "for a person who is driven by his basic anxiety and consequently, as a means of protection, reaches out for affection, the chances of getting this so-much-desired affection are anything but favorable. The very situation that creates the need interferes with its gratification." [10]

Because rejection was originally a danger signal, the neurotic person is highly sensitized to it. As a result he overacts in indiscriminate fashion to anything that may be considered a rebuff. If an appointment has to be changed, or if he is kept waiting a few minutes, his equilibrium will be badly upset. Going further, he may anticipate rejection wherever there is the least possibility of receiving it. "A person may, for example, ask a question angrily, because in his mind he has already anticipated a refusal." [11] It will be hard for him to take the initiative in seeking affection because he is so acutely sensitive to the possibility of being rejected. This is typical of the self-defeating conflicts that arise out of neurotic trends. He must have affection, but at the same time he hardly dares seek it. If he is lucky enough to find an affectionate relationship, he will almost inevitably wreck it by his sensitiveness, demandingness, and failure to give anything in return. Under these circumstances it is obvious that the whole development of personality will be badly impoverished. The vital problems of friendship and love can never be made to come out right.[12]

Vanity—In the historical introduction we mentioned the work of Alfred Adler, who first showed the importance of feelings of inferiority and the compensatory striving for superiority. If we

[10] *Ibid.*, p. 114.
[11] *Ibid.*, p. 136.
[12] The subtle ramifications of a neurotic trend can be fully appreciated only by reading a detailed individual case. In her book, *Self-Analysis* (W. W. Norton & Co., 1942), Horney gives such a case, centering around a young woman's "morbid dependency" on a man. See pp. 47–52, 75–88, 190–246.

assume that feelings of inferiority are associated with anxiety, Adler's notions fit perfectly into our present account of neuroses. The striving for superiority can then be considered a typical neurotic trend developed for the sake of feeling secure.

Adler was most adept at tracing the roundabout workings of this striving. Reading his work today, one is apt to be troubled by his lack of systematic thinking: almost every neurotic mechanism and neurotic trend is lumped together under the striving for superiority. But this should not obscure the shrewdness of his clinical insights. We select for description a neurotic trend (or character trait, as he called it), which can reasonably be described as vanity.[13]

The goal of this neurotic trend is to obtain the recognition, admiration, and applause of other people. Security demands that one should be highly esteemed and should receive a constant flow of appreciation from others. The desire for recognition is indiscriminate and insatiable. The person dreams of great triumphs. He needs the applause of everyone, and he is desperate if, instead, he remains obscure and unnoticed. Vanity is not a pleasant trait. It must be disguised from others and from oneself as "ambition," "energy," or something similar. But the intense preoccupation with what people are thinking of him, and with the impression he is making on them, causes the person to neglect the essence of things for their semblance. Wanting what he does to be impressive and dramatic, he may lose sight of its real worth and do it in a cheaply showy fashion. He will try to dribble the basketball all the way down the court and make the final shot himself, rather than passing to a teammate who is in a better position to shoot the basket. His neurotic trend seriously interferes with cooperation and social feeling. It is therefore likely to end in self-defeat: the man who will not play the game with others ends by becoming an object of contempt.

Adler observed the connection between vanity and anxiety. "We may suspect," he said, "that anyone whose vanity is well marked has little sense of his own worth."[14] He also observed that "there is a great deal of hostility in these people."

> Social hostility often expresses itself in the assumption of a sharp, critical manner. These enemies of society are forever blaming, criticizing, ridiculing, judging, and condemning the world. They are dissatisfied with everything. . . .
>
> The vain character is satisfied with elevating himself over the rest

[13] Adler, A., *Understanding Human Nature*, New York, Greenberg, 1927, pp. 191–220.

[14] *Ibid.*, p. 197.

> of humanity by a trick, and etching the character of others with the sharp acid of his criticism. . . . It indicates actually what the point of attack of the vain person is: it is the worth and value of his fellow man. The deprecation tendency is an attempt to create the feeling of superiority by the degradation of one's fellows. The recognition of another's worth is equivalent to an insult to the vain one's personality. From this fact alone we can draw far-reaching conclusions, and learn how deeply rooted in the personality of a vain individual is his feeling of weakness and inadequacy.[15]

Like other neurotic trends, vanity tends to impoverish the personality. It injures the capacity for friendship, blinds the person to the legitimate needs of others, makes for progressive isolation from humanity. It may push toward great accomplishments, but at the same time tends to spoil the real greatness of any such effort. A vain person may fall in love with someone who blindly admires and adores him, but a relationship founded on this basis is not likely to endure. Even the blindly worshipping wife gets tired of telling her vain partner that he wipes dishes better than anyone else in the world, especially if he keeps deprecating the way the dishes were washed. Neurotic vanity can almost never be satisfied. Its goal is to make oneself a special person whose superiority will evoke constant admiration. By its nature it is foredoomed to fail.

Invalidism.—As a variant of vanity, Adler described what is essentially a neurotic trend toward illness. In such cases vanity is restricted to the family circle; the patient gives up the attempt to secure recognition from the world at large and concentrates on establishing a favored position at home. There is some shifting of the goal. The person settles for attention and sympathy rather than applause, compensating himself by the opportunity afforded to dominate the household and make its other members suffer.

Adler illustrated neurotic invalidism by the following case.[16] The youngest of several sisters, always in delicate health as a child, was accustomed to much pampering attention. As she grew older, this attention decreased, but she noticed that her mother, when occasionally sick, was able to dominate the household very completely. Before long the daughter began to find it not unpleasant to feel badly from time to time. As Adler expressed it: "Soon she acquired so much training in being sick that she could easily be ill whenever she desired it, and especially when her heart was set on attaining some special object." She developed many subsidiary techniques for re-

[15] *Ibid.*, pp. 198–199.
[16] *Ibid.*, pp. 200–207.

maining the center of attention. If her mother did not have the breakfast tray at her bed on time, she would awaken her husband to find out what was the matter with her mother. If the husband was delayed in returning from work, he would find his wife suffering an attack of violent anxiety. Everyone soon learned that it was easier to be punctual. If she went out to a social gathering or to the theater, she would soon feel ill and have to be taken home. Finally, she could leave the house only if some member of the family escorted her. Thus she managed for a while to satisfy the neurotic trend that required the constant presence of solicitous people sacrificing themselves to her welfare.

It is hardly necessary to comment on the impoverishment of personality that results from so forceful a neurotic trend, nor to point out that the situation can hardly be maintained throughout the patient's life. An interesting question arises, however, concerning the production of the various illnesses—the anxieties, headaches, faint feelings, etc., that seemed always available when the patient needed them. We can understand this phenomenon if we bear two points in mind. (1) We must assume—differing here from Adler—that there was a basis of real anxiety. To be neglected and unnoticed was a childhood danger signal embedded in the nuclear neurotic process and thus never unlearned. The anxiety reaction, with its manifold bodily accompaniments, was thus easily arousable. Most people try their best to suppress the anxiety reaction, but for this patient there was a definite advantage in letting it develop at least to the point where palpitations, sweating, trembling, changes in blood pressure, slowing of digestive functions, etc. would make their appearance and serve as a means of worrying the household. Portions of the anxiety reaction were thus used to simulate heart attacks and other disorders. (2) In our study of hypnotism, we saw that hypnotic behavior could be conceived as vividly imagined behavior. We saw, also, that in hypnosis the imagining of situations might produce bodily reactions not ordinarily under volitional control, such as sweating in a suggested hot climate and shivering in a cold one. When sickness satisfies a neurotic trend, it is much to the patient's interest to imagine ailments, and strongly motivated imagination can produce surprising results even without hypnotic technique. The combined forces of vivid imagination and the bodily accompaniments of anxiety could easily produce bodily upsets sufficient to suggest apoplexy or heart attacks and terrify both patient and household. They could do so, moreover, without the patient's being in the least aware that his motives were involved.

Generalized Inhibition.—In view of the prominent part played by protective inhibition in the nuclear neurotic process, it is not surprising that the same sort of defense should sometimes be extended widely throughout the personality. In contrast to trends like the neurotic need for affection or neurotic vanity, where a positive tendency is taken up and intensified because of its service in overcoming childhood anxiety, the inhibitory trend represents a direct extension of the defensive process. This occurs most readily when the patient's own impulses have repeatedly gotten him into situations of threat from his parents. The child learns to consider all impulse and all strong feeling as dangerous. He extends the defense as he grows older and as new stimuli threaten to arouse his impulses. Anna Freud points out that during puberty, when the strengthening of the sex need makes the whole problem of managing impulses suddenly more difficult, one sometimes sees a generalized defense taking the form of asceticism.[17] All bodily pleasure may be renounced: intake of food is cut down to a bare subsistence level, only the lightest clothes are worn in cold weather. The renunciation may include anything that stirs feeling, such as music, dancing, or the theater. As a phenomenon of puberty, this defense generally breaks down after a while, in some cases even swinging to its opposite of libertine gratification. But occasionally the attitude remains as a more or less enduring and extending neurotic trend.

In persons who show the inhibitory trend, impulse and deep feeling are experienced as danger signals, more or less regardless of their particular character. The person must always be very well controlled. He does not like emotional storms in others, in the movies, or even in books and music. Fenichel illustrates this neurotic trend with the extreme case of a man who hated almost everything in life—his work, friends, family, amusements—and felt happily at ease only with his hobby of mathematics, a field in which no emotions were involved.[18] In less extreme form, the defense may be carried on by the technique of not perceiving the feeling element in life. The patient criticizes the vocal technique when a sad song is sung, or tries to figure out how the camera was placed to take a scene that forms the emotional climax of a movie. Generalized inhibition of this kind tends to limit very greatly the range of experiences the person can allow himself to have. It is particularly disastrous to intimate human relationships, where feeling is always

[17] Freud, A., *The Ego and the Mechanisms of Defence*, London, Hogarth Press, 1937, pp. 167–172.

[18] Fenichel, O., *The Psychoanalytic Theory of Neurosis*, New York, W. W. Norton & Co., 1945, p. 477.

important and where impulsive outbursts cannot always be avoided. Like other neurotic trends, it imposes so many restrictions that a well-balanced and rewarding life becomes impossible.

The Conscientious or Rigid Student.—A neurotic trend that starts in childhood and conditions the whole course of development has a far-reaching effect on personality. It is easy to see how it pervades all human relationships, but the ramification by no means necessarily stops at that point. The subtle influence of neurotic trends is well shown in studies of college students by Munroe.[19] These studies include not only the personal and social behavior of the students, but also a careful analysis of their academic performance. From a large number of students, Munroe is able to single out two small groups in each of which there is striking consistency between behavior and academic performance and unmistakable evidence of a basic insecurity. The neurotic trend invades and colors the academic performance. These students were not suffering from acute neurosis; they were able to get along all right at college. Nevertheless their behavior shows enough relation to problems of anxiety and defense to warrant using them as an illustration of neurotic trends.

In the first group belong what Munroe calls the conscientious or rigid students. These young women—the study was made in a women's college—exemplify the trend toward generalized inhibition, though not to the extreme degree described in the previous section. Munroe describes their earnestness, their desire to do well, the high standards they set for themselves, their self-control and reliability, all combining to make them appear model students. But she notes the somewhat excessive character of their desire to please and to enjoy the approval of those around them. Back of this is to be observed a marked timidity in trusting their own impulses, feelings, and judgments. When their social life is examined, one is impressed by the lack of genuinely warm human contacts. Finally, it is evident that they are frequently under strain and tension, every so often giving way to black moods of discouragement.

Interpreting these characteristics, Munroe says that "the important thing about these girls seems to be that they are afraid." The source of their fear is "their own spontaneous impulses." This basic fear "leads to constant effort at control and restraint and conscious amelioration."[20] Control is so vitally necessary, and is practiced in such an indiscriminate fashion, that certain penalties in-

[19] Munroe, Ruth L., *Teaching the Individual*, New York, Columbia University Press, 1942, esp. Chs. 6–10.
[20] *Ibid.*, pp. 209–210.

evitably follow: "the more-or-less constant strain under which they live and the feeling of emptiness and futility which now and again overtakes them." [21] It is a constant effort to meet the rigid standards of control imposed by this neurotic trend.

Of particular interest is the reflection of all this in the school work. These students like subjects which can be passively absorbed or learned according to set rules. They like to amass information and arrange it neatly. They want the instructor to do the thinking for them, and they excel in reproducing his thoughts. They learn what is presented, but they cannot be said to make it their own in the sense of using it in new combinations or generating new ideas. Often they have difficulty in relating one course to another. If asked for their own opinions or urged to work out an interpretation of their own, they are thrown into real confusion. Desperately they look for somebody to quote. The courses they really hate are those in which they may be asked to express themselves, write original compositions, or take stands on issues. Ideal for them is a lecture course from an instructor who likes to see his ideas reappear in the examination papers. For a term paper they prefer a small, well-defined problem which can be brought to a neat conclusion.

The Temperamental or Scattered Student.—We shall fail badly in our understanding of neurotic trends if we assume that they always produce outwardly rigid behavior. Munroe's second group of students is distinctly on the flighty side. In their academic work these young women are almost the direct opposites of the previous group. They hate rules and cannot amass systematic information. It is almost impossible for them to read a book all the way through, still less to make notes on it or even to return to it on a later occasion. When interested, however, they work with great excitement and personal involvement. They are particularly fond of writing papers, and these have the characteristic of being weak on facts and critical judgments, strong on generalities and personal feeling. Their work may be said to have an obvious autobiographical character. Interest is determined by the pressure of inner feeling. The work which results certainly displays no lack of feeling but it contains no stable and enduring study of reality and shows no power to subject oneself to either fact or logic. Usually these students change their courses and shift their fields of concentration as often as the college allows. They soon exhaust the emotional possibilities of any one field.

[21] *Ibid.*, p. 215.

Different as these students are from the previous group, their behavior can be similarly understood as a reaction to fundamental insecurity. "Basic emotional needs," Munroe says, "are unsatisfied, fundamental problems unsolved"; and she further describes the student as "persistently worried" and "constantly absorbed in the effort to solve problems of cardinal importance to her as a human being." [22] The clue to understanding the scattered behavior of these young women is found when we realize that their academic enthusiasms are simply aspects of imperious neurotic trends. One girl, for instance, was found to have a neurotic need for affection; another was engaged in a continual struggle not to submit to any domination or restraint, such submission being her own particular signal of childhood dangers. These girls' interest in their studies is entirely dependent on seeing an opportunity to express a neurotic trend and work on the problems it creates. The first girl, let us say, becomes excited about child psychology because it allows her to pour forth her feelings about affection and rejection; she will write a paper denouncing with great eloquence the tactics of rejective parents. The second girl becomes passionately involved in the cause of the American Indians, whose fate it was to submit to the domination and restraint of their white conquerors. Many human interests, of course, take their start from personal problems of some kind. But when the personal problems have the force—the indiscriminate and insatiable intensity—of neurotic trends, the attempt to solve them through academic interests is likely to go astray. To help the American Indians means dedicating oneself to a long course of study and training. The student's needs are too urgent to endure this postponement. After the first great burst of interest, she discovers that the Indian problem has done little to reduce her own tensions. Interest abates until she discovers some new arena in which restraint and rebellion fight a battle. The urgency of the neurotic trend fires keen interest but cancels it again before any enduring and constructive work can be accomplished.

It is certainly not to be denied that temperamental traits and the nature of intellectual endowments play a part in making one student rigid and another scattered. Such factors probably play the decisive part in determining what kind of reaction a person will make to a nuclear neurotic problem. Granting this, however, it is enlightening to see how the neurotic trend creeps into the academic performance, and especially how its force and rigidity cripples the development of thriving, creative intellectual interests.

[22] *Ibid.*, pp. 265–267.

General Consequences of Neurotic Protective Organization

Our sampling of neurotic trends shows that they can take a variety of forms. On the face of it there would appear to be no general characteristics of the neurotic personality. A neurotic individual can be rigid or scattered, vain or excessively modest, an invalid or a healthy athlete, a person who seeks affection or a person who secludes himself from his fellow men. Such diversity is characteristic of personality in general. Neurotic defensive maneuvers, usually starting in childhood, can become associated with almost any aspect of development. Underneath this diversity, however, the neurotic nucleus has a fairly simple pattern. Because he has not been able to outgrow the danger situations of childhood, the person develops in a world that offers unusual threat to his security. A disproportionate part of his energies must be devoted to security. This is the cause of the impoverishment that we have mentioned in connection with each neurotic trend. The maintenance of a protective organization occurs at constant cost. When we see the problem in this way it becomes legitimate to speak of certain general consequences of neurotic protective organization.

We have already met this problem in our study of neuroses of traumatic onset.[23] We noticed that in addition to the diverse symptoms there were certain constant features called *secondary character changes*. In practically every case there were nightmares, representing the breaking through of the repressed memories of danger. There were also diffuse signs of lowered efficiency and lowered competence which could be understood as resulting from the division of the patient's energies. We envisaged the patient as having a great deal of energy tied up in the struggle to feel safe; as a consequence, all the rest of his life had to be conducted with seriously diminished resources.

The neurotic whose troubles date from childhood is in much the same situation as regards energy resources. Disproportionate energy is put into neurotic trends and into the task of integrating a workable protective pattern. The general consequences of neurotic conflict can be discussed under three headings: fatigue, disturbing tensions, and chronic dissatisfaction.

Fatigue.—It is not true that all neurotic individuals go around in a drooping, exhausted condition. Some are highly energetic and appear most of the time to be more active than the average. Never-

[23] See above, pages 235–236.

theless, fatigue in some form is one of the universal problems of the neurotic personality. Fatigue is an unpleasant and inefficient state. It interferes with concentration, initiative, the making of decisions, and it lowers the whole level of interest in things. Neurotic conflict, with its drain on energy resources, tends to increase all these manifestations. Fatigue may be present in chronic form, so that the person feels tired even in the morning and gets little refreshment out of vacations or periods of rest. In other cases the general level of activity is unimpaired, but the person has spells of fatigue that are extremely unpleasant. This can be characterized as episodic fatigue in contrast to the chronic form.

Neurotic fatigue can entail a good deal of suffering. The difficulty in concentrating and persisting in tasks has the effect of making the ordinary affairs of life laborious. Instead of running themselves off with comfortable efficiency, they seem to require a distinct and unpleasant expenditure of effort. The impairment of interest may be particularly discouraging, especially if the person is in a line of work where interest and zest are important. Both the rigid and the scattered student have distinct problems of exhaustion. The rigid student has occasional black moods of discouragement, and the scattered student, between bursts of enthusiasm, experiences a lack of interest that makes life seem hardly worth living.

Disturbing Tensions.—Even the most successful protective organization cannot be uniformly effective. The things that are being held in check intrude themselves from time to time in a fashion that can be very disturbing. Many neurotic individuals complain of a feeling of restless tension even at times when they also experience fatigue. This is perhaps the most generalized form in which the tendencies thwarted by protective organization make themselves felt. Another characteristic neurotic phenomenon is to have spells of irritation and frustration that do not seem sensibly related to existing circumstances. Fears also may contribute their part to making the neurotic's life disagreeable. Without really reaching panic, he may find himself bothered by fears of accident, fears of death, fears of going insane. The fear of going insane is particularly common. It bears no relation to any real likelihood of going insane, but rather expresses in a symbolic way the person's dread of the confusion and anxiety that would overwhelm him if the protective organization broke down.

Tension manifests itself most clearly in disturbances of sleep.

To sleep well requires genuine relaxation. An uncomfortable bodily position, an unusual noise, tension in the bladder, in fact anything that interferes with relaxation tends to disturb sleep. We have already considered this principle in our study of dreams. The neurotic individual has difficulty in relaxing, not because of external or physical stimulation but because of his conflicts and underlying anxiety. The disturbers of sleep are rarely so clear as in the battle dreams of soldiers which literally revive the scene of overwhelming danger. Nevertheless the dreams of neurotics are full of trouble and often of anxiety. Neurotics sleep badly and dream frequently because their unsolvable problems will not let them alone. Although there are occasional exceptions, disturbance of sleep is one of the most universal burdens of the neurotic personality.

Chronic Dissatisfaction.—Neurotic conflict tends to wax and wane, depending on the extent to which it is stimulated by external circumstances. Neuroses have their good and bad periods. But running through all these ups and downs there is a thread of chronic dissatisfaction and hopelessness. Such a result comes inevitably from the nature of neurotic trends. They tend to be insatiable. Even when circumstances permit them a large amount of gratification, they do not lead to enjoyment and repose. They are serving in the cause of defense as well as enjoyment. The childhood danger still exists for the patient, and no amount of defensive action can fully silence its threat. Furthermore, it is likely that a number of natural desires, possibly even some imperious bodily cravings, become blocked by neurotic trends. The neurotic nucleus might have nothing to do with sex, for example, but adequate sexual satisfaction would be blocked if a neurotic trend toward seclusive withdrawal became dominant in the patient's life.

The eternally unsatisfied need for security and the other needs that become blocked in the protective organization tend to create a constant feeling that life is not rewarding or fully satisfactory. As time goes on and the situation does not improve, the person becomes increasingly discouraged. He may change his job, move to another place, get married or divorced, but these alterations do not relieve him of the burdensome consequences of neurotic conflict. If he begins to realize that the obstacles to happiness are within himself, he still cannot see any way to change or remove those obstacles. His feelings of discouragement and futility are apt to trouble him more and more.

Precipitating Factors in Neurotic Breakdown

Before proceeding further, we must stop to clear up the confusion that exists with respect to the words *neurosis* and *neurotic*. We have talked about the nuclear neurotic process, neurotic trends, neurotic conflict, and, by implication throughout this chapter, the neurotic personality, but we have not yet come to the neuroses as such. This confusion in terminology is rooted in history. Prior to the working out of the psychogenic point of view, the neuroses were regarded as a class of diseases, each having its characteristic complex of symptoms and each caused, presumably, by some specific derangement of function in the nervous system. Hysteria was a neurosis, and such things as compulsions and obsessions formed another neurosis; anxieties and phobias constituted a third. So long as the somatogenic theory was the accepted pattern, it was conceived that a person could "have" hysteria or he could "have" an anxiety neurosis in just the same way that he could "have" pneumonia. He was either sick or well; he either "had" it or he didn't. Whether he was an eccentric and unhappy person before he "had" hysteria was completely irrelevant. It is still customary to say that a person has a neurosis only when he has hysterical symptoms, compulsions, and obsessions, phobias and anxiety attacks, or some other highly focalized, crippling outcome of the whole neurotic process.

The psychogenic theory changes this all around. The acute neurosis with its symptoms is now seen as the end result of a long process of development. The trouble starts with what we have called the neurotic nucleus, a process by which anxiety, typically in childhood, is subjected to such radical defense that a new evaluation of the danger cannot be made. The trouble continues with the formation of neurotic trends, tendencies that are exaggerated in the effort to maintain security. Neurotic trends are likely to conflict with each other and with other tendencies in the personality, a situation that we have called neurotic conflict. Integrative efforts continue, however, and the person steadily builds for himself a protective organization, becoming a full-fledged neurotic personality. At any point along the way the situation may get out of hand: anxiety may increase, and the defenses may become more desperate. The person feels much worse, and it is usually at such a point that symptom formation occurs. We shall refer to this as *neurotic breakdown*. In the older terminology it is at this point that the person starts to be sick and to "have" a neurosis. In our present understanding, the neurotic breakdown is a sort of climax that occurs when the protec-

tive structure is seriously threatened and can no longer be maintained intact. Neurotic breakdown brings the person's troubles to a head in dramatic form. But the troubles must be there in the background. Neurotic breakdown occurs only on the basis of an already existing neurotic personality.[24]

In many cases, of course, a neurotic breakdown never occurs. People with considerable neurotic burdens often work out a way of life that meets reasonably well their special needs for security and still makes room for usefulness and a living wage of happiness. Others seek professional help because the general consequences of neurotic conflict, especially the chronic dissatisfaction and discouragement, wear them down as they get older. Such cases as these can be properly conceived as neurotic personalities without acute symptoms. They have neurotic trends, conflicts, and protective organization, but they stop short of neurotic breakdown. It is a fairly common practice to speak of these people as having a *character disorder*. In our terminology, character disorder and neurotic personality mean the same thing.

Failure of an Established Equilibrium.—What causes a character disorder to eventuate in neurotic breakdown? Under what circumstances does the protective organization collapse? These questions can be answered, following Fenichel, by the general statement that circumstances have brought about the failure of an established equilibrium.[25] Such failure can be produced by alterations in the strength of any of the important forces that serve to maintain the existing equilibrium. The possibilities can be schematically covered as follows.

(1) *There is an intensification of the reminders of childhood dangers.* Fenichel says: "Most precipitating factors are experiences that are (objectively or subjectively) somehow similar to the childhood events that gave rise to the decisive conflicts." [26] (a) It may be that newly arising dangers literally resemble the childhood ones. For example, the individual finds himself working for a boss who threatens to fire him, much as his father used to threaten punishment. (b) More commonly, the intensification affects certain striv-

[24] A possible exception to this rule is breakdown and symptom formation under acute prolonged combat stress. While the majority of persons having neuroses of traumatic onset show a history of neurotic trends, like the case of Pearson Brack in Chapter 2, there may be some cases in which no such history exists.

[25] Fenichel, O., *The Psychoanalytic Theory of Neurosis*, New York, W. W. Norton & Co., 1945, pp. 454–457. Fenichel acknowledges indebtedness to earlier papers by Freud and by James Strachey on the same subject.

[26] *Ibid.*, p. 457.

ings in the person which created childhood threat for him. We considered such a case in an earlier chapter: a young man who had received frightening threats for sexual play in childhood, and had renounced all interest in sex throughout his boyhood, began to have anxiety attacks when puberty brought an irrepressible strengthening of the sex need and its associated interest.[27] Similarly, a person might get into a line of work that was full of irritating frustrations, offering constant stimulation to the aggressive impulses that once made him dread parental rejection.

(2) *There is a weakening of defensive processes.* (a) Prolonged overwork, exhaustion, sickness and anything else that depletes the person's energies may have the effect of weakening his defenses. Breakdown under the stress of war was often preceded and presumably facilitated by long periods of exhausting strain. When depleted in this fashion, the person becomes less able to deal with any difficult problems, including that of maintaining a protective organization. (b) Defense can also be weakened when circumstances block the working out of an important neurotic trend. Suppose that security is being sought through extreme dependence on a partner: the departure or death of this partner then constitutes a sudden withdrawal of the means whereby anxiety was prevented from developing. Similarly catastrophic will be the effect of a business failure on someone who has built personal security on a neurotic trend toward competitive success.

(3) *There is an intensification of defensive processes.* The very opposite change, the strengthening of defenses, can also have the effect of destroying a precarious neurotic equilibrium. Heightened threat is successfully controlled by increasing the defenses, but the burden of carrying so much protective organization proves to be itself intolerable. One might draw the parallel of a nation increasing its armaments, lest an enemy nation disrupt its internal economy, only to have that economy disrupted anyway by the burden of such expensive armaments. The heightening of neurotic trends increases the conflicts among them, decreases the satisfaction of other needs on which they encroach, and increases the general consequences of protective organization: fatigue, disturbing tension, chronic dissatisfaction.

An Example of Neurotic Breakdown.—A single example cannot illustrate all of these possibilities, but it can give us a more vivid

[27] See above, page 123.

idea of how neurotic breakdown comes about. The following case is taken from Malamud.[28]

A married man of twenty-eight was in a motor accident. He sustained minor scratches and was otherwise apparently unhurt, but he emerged from the accident completely blind. The absence of any injury that could be responsible for loss of vision led to a diagnosis of hysteria. It was discovered that the accident occurred while he was driving to the maternity hospital to see his wife and first-born child. His first remark to the psychiatrist was that he could not tie his wife down to a blind man and would now divorce her.

This strange sequence of events becomes intelligible if we work out the patient's history and discover the personal meaning of the situation that so startlingly made him blind. First we discover a clear *neurotic trend* in the patient's previous behavior, an exaggerated trend toward independent self-sufficiency. He early separated from his parents and established an independent life for himself, resolving at the same time that he would never marry. He was attracted to women, but kept all relationships at a purely sexual level and discontinued them at the first hint of deeper feeling and especially at the faintest threat of marriage. His history showed that the purpose of this neurotic trend was to hold in check all feelings of dependence on women. The mother had been extremely domineering and the father weakly submissive. While we cannot precisely recover the *neurotic nucleus* in this case, it evidently had something to do with the parental relationship. Dependent longings entailed unwilling submission to the mother's iron rule, a thing to be hated and feared because it made one resemble the weak and helpless father. Therefore dependent longings constituted a danger, and the neurotic trend toward self-sufficiency served to hold them in check.

The patient's neurotic trend was not allowed to prevent the satisfaction of his sexual needs; it functioned merely to prevent his relationships from satisfying anything besides sex. His safety lay in his freedom to walk out of any relationship. An equilibrium was established which worked well enough for several years. *Disturbance of the established equilibrium* began when his sexual adventures brought him in contact with a woman who in certain respects reminded him of his mother and stimulated his dependent longings. This was so satisfactory that he permitted the relation to develop. He sought her advice and allowed her to make decisions. He grew

[28] Malamud, W., "The Psychoneuroses," in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders*, The Ronald Press Co., 1944, Vol. 2, Ch. 28.

increasingly uncomfortable—anxiety was evidently stirring—but he finally consented to marriage on the condition that they would never have children.

One can say at this point that he had suspended his neurotic trend in order to gratify dependent longings, but he kept the guarantee that he could escape at any time if this new equilibrium proved unbearable. His tension and discomfort shows that it was only just bearable. Then suddenly his avenue of escape was blocked: his wife became pregnant. He demanded an abortion, but she refused. Throughout the pregnancy he was increasingly uneasy. He did not know why he felt this way, but in the course of later analytic treatment he recovered memories that showed how earnestly he had hoped the pregnancy would not mature and how tenaciously he clung to the notion that escape from the marriage would still be possible. When his wife went to the hospital his anxiety came into the open, taking the twisted form of terror lest something happen to the mother or child. Finally he learned that both were well, and that he could see them. He jumped into the car and drove toward the hospital. Then the accident happened, and he was unable to see them.

Knowing about the patient's past and his chief neurotic trend, we can understand that the successful birth of the child pushed him to the point of panic. His protective organization collapsed; he prevented acute panic only by the completely primitive defense of denial. Protective inhibition fell on the function of vision, throwing it wholly out of action. A neurotic personality passed into *neurotic breakdown* with the production of a typically hysterical *symptom syndrome*.

In the next chapter we shall study the symptom syndromes of neurosis, trying to understand how symptoms come into existence. This case can serve as one of our illustrations. Why was blindness the symptom? The patient certainly believed that blindness gave an excuse for divorcing his wife, even though she had a child to support. If this idea was in his mind before the motor accident, it might have influenced the direction taken by defensive inhibition. Then there is the question of seeing or not seeing the child: perhaps he had hoped that he would never live to see this day, to see the proof of his now permanent bondage. Such thoughts might have the effect of focalizing the danger on seeing, so that going blind became the only way to prevent contact with the threat. This is sheer speculation, of course, but when we think of Diven's experiments [29]

[29] See above, pages 227–229.

in which the anxiety reaction was displaced along lines of meaningful, associative connection, it does not seem impossible that defensive inhibition should follow similar channels. The motor accident itself raises interesting questions. Was his anxiety so acute that he did not know what he was doing? Was his vision already beginning to fail? Were his guilt feelings so strong that part of him wanted an accident to happen by way of punishment? Did he unwittingly try to kill himself rather than endure further anxiety? Again we can only speculate and suggest possibilities. The lawful processes that produce neurotic symptoms are difficult to unscramble. But in the next chapter we shall look for whatever lawfulness can be found.

SUGGESTIONS FOR FURTHER READING

The outstanding indebtedness of this chapter is to the writings of Karen Horney, who more than any other worker has tried to trace the complex ramifications of neurotic defense throughout the personality. The most relevant books at this point are *The Neurotic Personality of Our Time* (New York, W. W. Norton & Co., 1937) and *Our Inner Conflicts: A Constructive Theory of Neurosis* (New York, W. W. Norton & Co., 1945). There is considerable similarity between Horney and Alfred Adler, who described the equivalent of neurotic trends under the heading of "character traits" and whose concept of a "style of life" is close to that of protective organization. Adler's *Understanding Human Nature* (New York, Greenberg, 1927) satisfactorily describes his outlook.

Much of the material discussed in this chapter is treated by Freudian writers under the heading "character disorders." Fenichel's compendium, *The Psychoanalytic Theory of Neurosis* (New York, W. W. Norton & Co., 1945), brings together in well-organized though highly concentrated form the extensive material on this topic; see Ch. 20.

Erich Fromm in *Escape From Freedom* (New York, Farrar & Rinehart, 1941) makes a significant application of ideas concerning neurotic defense to political and social problems. See especially Ch. 5 on mechanisms of escape.

CHAPTER 8

THE SYMPTOM SYNDROMES OF NEUROSIS

Symptoms are the surface phenomena of neurosis. They are the focalized outcome of a long series of events. For this reason they cannot be understood by themselves; there are perhaps no phenomena in nature that make so little sense as neurotic symptoms when these are studied without reference to their underlying determinants. It is on this account that we have postponed them to the present chapter. The neurotic nucleus, defense mechanisms, neurotic trends, conflict, protective organization, and neurotic breakdown must all be understood before it is possible to perceive lawfulness in symptom formation.

Theory of Symptom Formation

A person who has managed to synthesize neurotic trends into a workable protective organization may live his life at a relatively mature level. But when circumstances destroy his established equilibrium, he is thrown back to a more primitive level of defense. The intensified anxiety is childlike, and the defenses become similarly childlike. Neurotic breakdown occurs when the patient is driven out of his protective organization and forced back upon the neurotic nucleus. In this sense it is proper to say that the patient *regresses* toward childhood. His attempts to regain equilibrium will occur at a regressed level. The processes back of symptom formation are therefore of a distinctly primitive character.

Sources of Neurotic Symptoms.—The symptoms of neurosis are derived from various elements of the nuclear neurotic process. They can be conceived as reflecting either (1) the anxiety reaction itself, or (2) the defensive processes, or (3) the impulses in the patient that create anxiety. Naturally it is not uncommon to find that two or even all three sources have been utilized in the production of symptoms.

(1) The most important elements of the *anxiety reaction* are its various involuntary bodily processes, such as trembling, sweating,

speeded pulse, rapid breathing, slowing of digestive processes. In studying the case of Pearson Brack, we noticed that his symptom of fainting was a direct product of the anxiety reaction, the anoxia occurring as a result of rapid shallow respiration. Similarly, when we considered neurotic invalidism in the last chapter, we saw that portions of the anxiety reaction formed the chief material out of which the patient magnified his more or less imaginary ailments. One authority, T. A. Ross, gives the central place to the anxiety reaction as the source of neurotic symptoms.[1]

(2) The second source of symptoms is the *defensive processes* used to ward off anxiety. These may consist of direct inhibitions, as in the case of the man described in the last chapter, who was struck blind while driving to the maternity hospital. Most hysterical symptoms contain a large element of direct inhibition. The defensive processes may take the slightly more elaborate form of phobias or of stereotyped ritualistic acts. The case of the child, Patrick, (Chapter 6) demonstrated the rigid repetition of acts which constituted a denial of the existing threat. In obsessional neurosis the symptoms consist largely of defensive processes displaced into the sphere of thinking. Obsessional symptoms often become highly complex, but their derivation from defensive processes is not thereby obscured.

(3) Symptoms are sometimes colored by the impulse which is the source of danger: the *anxiety-linked* impulse. It can be observed that while the symptom is mainly defensive in character, it also permits some indirect gratification of the prohibited need. This sort of compromise is represented in the following phobia: a woman patient could go on the street only when accompanied by a relative; otherwise she was terrified that she would faint. It turned out that the street had the personal meaning of sexual temptation, being a place where she might be picked up by a man. Her phobia constituted a defense against this danger, but if she went out accompanied by a relative she could safely enjoy erotic fantasies whenever an attractive man passed by.[2]

This analysis of the sources or materials out of which neurotic symptoms are made constitutes a first step in the search for lawfulness. The process of symptom formation is tremendously complicated by individual associations and personal meanings. It is

[1] Ross, T. A., *The Common Neuroses*, 2nd ed., Baltimore, Wm. Wood & Co., 1937, esp. Chs. 4–6.

[2] This case is reported by F. Alexander in *Psychoanalysis of the Total Personality*, Nervous & Mental Disease Publishing Co., 1930, pp. 60 ff.

necessary to know that for one patient the act of seeing is directly connected with the existing threat, and that for another the sexual fantasies have become channeled into the idea of being picked up on the street. But behind all this personal coloring it is usually possible to discern that the symptoms are offshoots of the nuclear neurotic process: portions of the anxiety reaction, portions of the defense, or expressions of the anxiety-linked impulses.

Primary Process and Secondary Gain.—Although they are made of these primitive materials and primarily serve the purpose of carrying on the struggle to control anxiety, neurotic symptoms sometimes seem designed to achieve certain effects on the environment. One of the most common results of symptom production is that the patient enters the status of a sick person rather than a nervous or foolish or irritating or selfish one. He may now be excused from work and receive sympathy and service from the household. If on dangerous military duty, he may be sent back to a position of safety or even honorably discharged. Adler was particularly fond of pointing out these gains from illness, as we saw when discussing neurotic invalidism. Perhaps a need to dominate is served by the symptom: fear of going on the street forces some member of the household to accompany the patient at the latter's pleasure. Perhaps aggressive tendencies are satisfied: failure to perform the sexual act satisfactorily serves to disappoint and frustrate the partner. Thus in various ways the symptoms seem to have a certain strategic value, bettering the patient's external situation and providing scope for the satisfaction of thwarted needs.

It is by no means true that neurotic symptoms always serve a strategic purpose of this kind. They are quite as likely to cause the patient nothing but suffering, and to put him at a disadvantage in his adjustment to the world. Symptoms that bring no external advantages remind us that the primary forces involved in symptom formation are internal. The struggle with heightened anxiety is the focus; effects on the environment have a secondary character. To make this distinction explicit, Freud introduced the notion of *secondary gain.* The *primary process* in symptom formation is simply the nuclear neurotic process, sharply intensified by the breakdown of protective organization or by sudden external danger. The symptoms appear—one might say that they are pushed into existence—as part of the struggle between anxiety and the regressed or primitive defensive processes. The primary gain derived from them is the increased control of anxiety. In contrast, *secondary gain*

consists of whatever advantages are found to accrue from the fact of having symptoms: gains from illness and other effects on the patient's environment.

Logically the distinction between primary process and secondary gain can be drawn sharply. Secondary gain has no part in producing the symptoms in the first place. The patient does not develop symptoms in order to enjoy these advantages, any more than a maimed war veteran, to borrow Freud's illustration, "has his leg shot away only that he may thereafter live in indolence on his pension." [8] It is undoubtedly an aid to clear thinking to draw this sharp logical distinction, but we must immediately follow Freud in admitting that the line becomes badly blurred when we study actual cases. Anticipations of the effect a symptom will have on the environment sometimes enter into the primary process whereby the symptom is formed. This is particularly true of hysterical symptoms. We suspected it to be true in the case of the man who became blind on his way to see his wife and newborn child. Logically speaking, the primary process in his case would be the direct inhibition of vision, preventing him from seeing the child who signified his permanent imprisonment in marriage. Secondary gain would come from the fact that, as a blind man, he could honorably seek divorce rather than being a burden on his wife. Can we say that anticipations of this secondary gain played no part in producing the symptom? Much the same doubts arise in connection with war neuroses. Hysterical symptoms that began under combat stress were sometimes preceded by a half-conscious wish to sustain some injury that would result in withdrawal from danger. In actual practice, then, the logical distinction between primary process and secondary gain cannot be sharply maintained.

It is hard to talk about symptoms, especially when we are thinking about secondary gain, without making their formation sound like a conscious and volitional process. The production of a neurotic symptom is in no sense to be conceived as consciously planned strategy. Symptoms are manufactured to avert impending panic. If a certain foresight of secondary gain creeps into the process, it is involuntary, unconscious, and never half as sensible as a rational plan would be. The man who became blind and hoped to use this as an excuse for dissolving his marriage could certainly have thought of some better way to deal with his problems if he had been sufficiently free from anxiety to engage in rational planning. When symptoms and ailments are consciously feigned, we do not speak of neurosis

[8] Freud, S., *The Problem of Anxiety*, New York, W. W. Norton & Co., 1936, p. 33.

but of *malingering*. It is not very difficult in practice to differentiate between the two.

Classification of Symptom Syndromes.—Observers have always been impressed by certain natural groupings among the symptoms of neurosis. There appear to be three nodal points: *anxiety states, obsessional neurosis,* and *hysteria.* Almost every attempt at classification acknowledges these three very general categories. Mixed forms sometimes occur: in particular, anxiety states at one period may give place to obsessional conditions or hysterical symptoms at another. In the majority of cases, however, the symptoms cluster within one of the three main categories. It almost never happens that a hysteria turns into an obsessional neurosis or vice versa, and some patients persistently have anxiety attacks without any further elaboration of symptoms.

Apart from these three nodal points, the classification of neurotic symptoms is a matter of endless dispute. A good example of the confusion is afforded by *phobias.* Janet began the practice of classifying them with obsessions. He found them associated with obsessions more often than with hysteria. This led him to the hypothesis of an underlying nervous weakness, *psychasthenia,* which was the root cause of both phobias and obsessions. The Freudian school took an entirely different tack with regard to phobias. Freud believed them akin to hysteria because of an underlying similarity in the basic conflict and the point in libidinal development to which the patient regressed. He gave phobias semi-independent status, however, with the designation *anxiety hysteria.* Both Janet's concept of psychasthenia and Freud's concept of anxiety hysteria are still widely used. The disagreement between them lies in the realm of theory and interpretation rather than bare clinical fact. Phobias occur in patients with obsessions, as Janet observed, but they are not unknown in hysteria and in patients who otherwise have only anxiety attacks. In such a situation it is wiser to give up the attempt at classification and simply try to understand phobias in their own right.

There is no sense in taking the problem of classification too seriously. Classification is important when one is trying to isolate different forms of disease and thus orient the search for specific tissue changes. It is far less important when the underlying factors are of the sort described in the two preceding chapters. A neurosis can be well understood and effectively treated, even though its symptom picture is so mixed as to defy classification. While it is perhaps not an ideal situation to have no agreed-upon classification, it is not the

serious handicap that it would be in the study of disease. The important thing is to study the crucial processes of anxiety and defense.

The divisions used in the rest of this chapter recognize the three nodal points already mentioned: anxiety states, obsessional neurosis, hysteria. They recognize the difficulty of classifying phobias by leaving them with their own heading. For convenient exposition we shall separate from the main body of hysteria those symptoms that take a more "mental" form—amnesias, fugues, and multiple personalities—in contrast to the "bodily" symptoms such as paralyses and anaesthesias. These *dissociated conditions* repay a study that is out of proportion to their frequency because they often reveal the process of symptom formation with transparent simplicity. They are not sufficiently different from the rest of hysteria to warrant separation on any other ground.

Anxiety States

On first thought, it might seem that anxiety states constitute a refutation of the whole anxiety theory of neurosis. If a neurosis, with all its elaboration and all its cost to the personality, comes into existence to prevent anxiety, how can one of its symptoms be the very anxiety it is supposed to prevent? This apparent dilemma is no more real than the one we met in an earlier chapter when we studied dreams. The function or purpose of dreams is to preserve sleep, but sometimes the dream is unsuccessful and does not achieve its purpose. Similarly, a neurosis can sometimes be unsuccessful, with the result that anxiety breaks through all defenses and appears in its undisguised form as fear bordering on panic.

Partial Failure of Defenses.—Anxiety attacks can be considered as representing a partial failure of adequate defenses. Even in the face of highly disquieting fear, the patient does not produce defenses sufficient to bind and suppress his fear. The situation is not, however, equivalent to a total collapse with regression to the condition of a terrified child. Such collapse and regression were sometimes seen in men who were exposed to prolonged severe combat stress.[4] They bear little resemblance to the anxiety states that occur in civilian neuroses. These take a less sweeping form: the patient is panic-stricken but not disintegrated; from time to time he is flooded by terror, but he struggles with it, brings it somehow under

[4] For examples see W. McDougall, *Outline of Abnormal Psychology*, New York, Chas. Scribner's Sons, 1926, pp. 285–292; and R. R. Grinker & J. P. Spiegel, *War Neuroses*, Philadelphia, Blakiston, 1945, pp. 4–14.

control, resumes his daily life until another attack breaks through, gets himself to a doctor's office if the attacks continue. The anxiety attacks are temporary eruptions of panic. Defenses are insufficient to prevent the eruptions, but the person fights them and stamps them down.

It is characteristic that the patient is not aware of any reason for his terror. He may feel that he is going insane, that he is trapped amidst dangerous forces, or that something dreadful but unnameable is going to happen. The diffuseness and indefiniteness of the danger are the most trying features of the attack. The cartoonist Steig represents this by drawing a little gesticulating demon on the end of a stick attached to the back of a person's head—whichever way the victim turns, the demon is out there behind him, never in sight.[5] This circumstance indicates that part of the defense is being maintained. Repression still effectively prevents the patient from remembering the childhood danger situations or from becoming aware of the danger-linked impulses in himself. It is, then, only the anxiety that escapes from control and breaks through the defenses. Even at their worst, anxiety attacks represent only a partial failure of defenses. Neither the primitive defenses of childhood nor the adult protective organization give way completely.

An Illustrative Case.—In order to make our description concrete we shall summarize a case reported by H. V. Dicks.[6] A man of forty came for treatment on account of severe anxiety attacks characterized especially by fear of enclosed places, difficulty in breathing (especially at night), and a most unpleasant sense of impending disaster. He had always been contemptuous of psychology and sought the aid of a psychiatrist only as a desperate last resort. He had just resigned after a distinguished career in the Government service. Considering the Government's policy too liberal, he made his resignation a matter of principle. He was living at home and considering starting out as a novice in a new profession when the anxiety attacks began to overwhelm him.

Working back through his career it was discovered that he had had some earlier bouts with anxiety. The most recent occasion was at the time of demobilization following the First World War, in which he served as battalion commander and was decorated at a very early age. This circumstance well illustrates the lack of rela-

[5] Steig, W., *About People*, New York, Random House, 1939, drawing entitled "Anxiety," p. 105.

[6] Dicks, H. V., *Clinical Studies in Psychopathology*, Baltimore, Wm. Wood & Co., 1939, pp. 27–28.

tion between neurotic anxiety and real danger: it was when demobilized and safe that the patient had attacks of anxiety. Previous to these attacks he had had another round of trouble when he entered college as a freshman. For a while he could not sit in lectures; if he went at all he took a seat next to the door so that he could leave at any time. Before this there was one attack at the age of seven when he had to sit through a church service under dimly lighted Gothic arches. Various anxieties connected with the Oedipus situation were uncovered, but they showed few links with the contents of his anxiety attacks. Finally the chain of incidents was completed by the patient's recalling a scene that took place in infancy when he had an attack of bronchial pneumonia. He was lying in a cot, coughing and nearly suffocating, in acute panic but at the same time furiously angry with his mother, who stood by unable to relieve his distress. The images included a tent over his cot and various other details. From outside sources it was possible to verify that he had had bronchial pneumonia at the age of eighteen months, and that a tent over the bed was one of the measures used for treatment.

The form of the patient's anxiety attacks—the breathing difficulty and fear of enclosures—was apparently set by this nuclear panic. His attack in church would seem to have been stimulated by the heavy arches (reminding him of the tent) and the necessity to sit still (helpless restraint). But we can understand his later attacks, especially the ones that sent him for treatment, only if we know something about the development of his personality. The patient was the eldest son and also the eldest of his circle of cousins. His parents encouraged him strongly to take the role of a big boy. He successfully assumed this role, becoming proud and markedly independent. Identifying himself with authority and the moral code, he emerged as the leader and disciplinarian of his younger relatives. This pattern was continued in school, won again in college, given much scope when he served as an army officer, and carried on while he was in the Government service. He became an energetic and successful man with a strong need for superiority. One can discern, however, that his career had something of the overdriven quality that characterizes neurotic trends and a protective organization. It was when activity, success, and superiority were blocked that he gave way to anxiety attacks: when he lost his school distinction and became a "nobody" at college; when he lost his military distinction and became a "nobody" at demobilization; when he lost his distinction as a Government official and became a "nobody" without a vocation.

This case illustrates the early establishment of a neurotic nucleus as the result of one tremendously frightening experience. We may presume that this incident was reinforced by other frights, but its determinative significance is shown by the way it colored the symptom picture nearly forty years later. The incident involved not only terror but the frustration of dependence on the mother and anger at this frustration. As the patient's personality developed, it was encouraged to take a form that happened to serve admirably as a means of counteracting his neurotic liability. His pattern emphasized independence (rejecting the useless dependent longings), activity (preventing a passive state of helplessness), and power (the opposite of being unable to influence his mother). These strivings were effective, yielded gratification, and led to a constructive life. There was only one flaw: when they were all blocked, so that he was reduced to the status of a "nobody," he developed not just the frustration that anyone might feel under such circumstances, but more than that—acute anxiety attacks. The flaw was a small one. If circumstances had permitted him to advance steadily as a Government official, having his own way and directing others until he became at last a respected elder statesman, his attacks at demobilization might have been the last and he would have been counted a well-adjusted man.

Problem of the Choice of Neurosis.—When it is possible to work out the history of a case with the fullness and coherence of the one just studied, one feels as if one had reached an explanation of the patient's neurosis. The patient's own sense of certainty often strengthens such a feeling, and a successful therapeutic result still further fortifies one's confidence in the historical reconstruction. But the phenomenon has been explained only in a very limited sense. Even granting that the reconstruction is flawless, which may be far from true, the patient's neurosis has been explained only in the sense that one event has been related to another in an intelligible sequence and that the whole thing has been envisaged as a compromise between the growing personality and its need for security. What have not been explained are the things that did not happen. Why did the patient develop no phobias to keep him from getting into the crucial situation of being a "nobody"? Why did he develop no delusions of grandeur to help him through such situations? One can easily think of various neurotic devices that seem to fit the circumstances well enough. These ways of dealing with his problems were not chosen by the patient. Phobias and delusions seem not to have been available to him. In order to have a full explanation of the case,

we would need to be able to state why certain alternative solutions were not available.

The problem thus raised is generally referred to as the problem of the choice of neurosis. The central question can be phrased as follows: how does it come about that the patient develops just this kind of neurotic symptoms, rather than some other kind? Why hysteria rather than obsessional neurosis? Why anxiety attacks rather than hysteria? Then, pressing the question into a narrower focus, why a hysteria in the form of blindness rather than in the form of deafness? Let us admit from the start that expressions such as "choice of neurosis" and "choice of symptoms" are singularly unhappy, suggesting as they do a conscious and volitional process of choice. The production of neurotic symptoms is not in the least a conscious act.

Questions of this kind can be raised about any form of neurosis. In the case of anxiety states, the most searching question has to do with why such intense anxiety simply breaks through and periodically floods the patient without setting in motion a variety of secondary defenses that restore his security. Why do the defenses permit such a painful break-through of the very feelings most defenses are designed to hold in check? The answers to such questions depend on being able to generalize from a great many case histories. One has to be in a position to make reliable general statements about a good-sized group of cases in which neurotic breakdown took the form of straight anxiety attacks, comparing these statements with those that apply to a good-sized group of phobia patients, a group of obsessionals, a group of hysterics, etc. There are two obstacles: the fact that adequate histories are not publicly available in sufficient numbers, and the fact that so many neurotic patients defeat the simple purposes of science by having several different kinds of symptoms.

Such statements as can be made are therefore hardly more than clinical impressions. As regards the choice of anxiety states, the following possibilities have been suggested.

(1) *The character of the nuclear situation* might make a difference in the type of defenses originally adopted. A small number of intensely frightening childhood situations which, however, were not chronic nor oft-repeated, might lead to an unusually complete and almost successful repression. As a result the problem of security would not be constantly urgent, secondary defenses would not have to be elaborated, and the individual would develop with relative stability. Only under just the right conditions could the danger situation be revived, and then there would be little to stop the breakthrough of anxiety. The only factual finding that can be adduced in

support of this possibility is the claim of the psychoanalytic group, reported by Fenichel, that the child's witnessing of parental sexual intercourse (the so-called "primal scene") occurs as a frequent and important memory in "anxiety hysteria," more so than in the obsessional and hysteric forms of neurosis.[7] Witnessing the "primal scene" qualifies as an event that awakens intense anxiety with anger, and it is not likely that the child would be permitted to repeat this experience on many occasions. In our illustrative case the early fright from near-suffocation meets the conditions of intense but not repeated terror.

(2) *The character and success of the neurotic trends* might make a difference in the availability of symptom patterns. Dicks makes quite a point of the frequency with which patients who suffer from anxiety attacks show a strong drive toward power. This power drive is channeled into a socially acceptable form by identification with authority and parental moral values.[8] The personality thus becomes organized in such a way that there is a minimum of exposure to feelings of guilt, helplessness, and anger. The person is confident in his rightness, active in his dealings with everybody. He takes out his anger in the form of indignation at the frailties and failings of others. In short, the personality is so strong that it does not have to make costly sacrifices for defense, but it is all the more vulnerable on those rare occasions when childhood dangers are reactivated.

(3) *Temperamental peculiarities* might contribute to the availability of different types of symptom. The clinical impression is widely shared that patients with anxiety attacks tend to be active, energetic, expressive, and outgoing people. There is a clear relation, of course, between these traits, which presumably have a certain innate basis, and the types of neurotic trend that will be developed. One could also bring in speculations, following Janet, about temperamental prerequisites for hysteria and obsessional neurosis. If it is legitimate to assume that each of these forms of neurosis requires a special constitutional predisposition, we might then say that the anxiety patient lacks both capacities and is thus forced to produce his symptoms in the more direct form of anxiety attacks.

These speculations are highly unsatisfactory. They are not supported by sufficiently accurate or convincing facts. Some anxiety patients do not seem to fit any of the three possibilities we have dis-

[7] Fenichel, O., *Outline of Clinical Psychoanalysis*, New York, W. W. Norton & Co., 1934, pp. 57–59.
[8] Dicks, *op. cit.*, p. 31.

cussed. Thus in bringing up the problem of the choice of neurosis, we have raised questions that cannot now be answered. It should be recognized, however, that problems of this kind exist and that until future research can solve them we cannot perceive the full lawfulness of neurotic symptom formation.

Phobias

A phobia can be defined as a morbid dread of an object, act, or situation. The word "morbid" differentiates it from a normal fear, and is inserted to indicate that we speak of phobia only when the thing that is feared offers no actual danger. When a patient shows great fear of something that is in fact perfectly harmless, we have to assume that the real threat lies somewhere else. The phobic object is serving as a symbol or a distant reminder of some danger that is extremely real to the patient, even though its origin may have been in childhood.

Phobias cannot readily be classified. They have sometimes been named according to the object or situation that is feared. At one time medical writers favored attaching Greek prefixes to indicate every possible object of morbid dread. A few of these fancy names, such as claustrophobia (morbid dread of closed or constricted spaces), have become harmlessly lodged in the scientific vocabulary. In older medical literature there were literally hundreds of them: for instance, melissophobia (morbid dread of bees), gephryophobia (morbid dread of crossing water), parthenophobia (morbid dread of virgins), homilophobia (morbid dread of sermons). The list becomes endless because there is really nothing that cannot be an object of morbid dread. Lest the reader become a victim of onomatophobia (morbid dread of names), he should be assured that this pretentious vocabulary is now largely obsolete.

Phobia as a Defense.—If a phobic patient comes in contact with the object of his fear, he is thrown into a severe anxiety attack. To this extent phobias resemble anxiety states; there is at times a break-through of panic. The phobia, however, offers one great advantage over diffuse anxiety. The patient can arrange to avoid contact with his phobic object. It is impossible to escape from danger when it is felt to be everywhere around you. The focusing of danger upon a single external object or situation immediately restores the possibility of constructive action, even if this consists of no more than keeping away from the threat.

The dynamics of phobia are neatly illustrated in the following incident.[9] A boy of ten, who suffered from various neurotic difficulties, was brought for treatment to a child guidance clinic. Mother and child sat close together in the waiting room until the boy was asked to go into the psychiatrist's office while the mother went elsewhere to talk to the social worker. After a visible attempt at self-control, the boy began to cry, saying "I'm just scared and I don't know what it is." Plainly he was experiencing diffuse anxiety at separation from his mother and at being in a strange room with an as yet strange man. After a while the child spied a brief-case and said, suspiciously, "What's in that—what's behind it?" It was suggested that he go and investigate, which he did while muttering, "Maybe there is a gun." Discovery that the brief-case held no threatening contents made it possible for the young patient to smile and relax for the first time. It is quite clear that localizing the fear on a definite object constituted a step in overcoming his anxiety. It restored his mobility; instead of remaining frozen to his chair, he became free to avoid the brief-case or to investigate it. His choice of the second alternative completed the overcoming of his fear.

Channels of Displacement.—The mechanism at work in the formation of phobias is displacement. Anxiety is displaced in order to find a less terrifying and more avoidable object. It makes one feel less helpless to be afraid of a brief-case than to be just plain afraid. Displacement is particularly serviceable when the source of danger is an impulse or need that has been linked with anxiety in childhood history. There is no escape from an internal impulse or need, but if the fear can be focalized on an outside object the chances of avoidance seem much better. Displacement must be presumed to occur along associative channels. We examined the general operation of this process when studying Diven's experiment.[10] In that investigation the anxiety response was conditioned to the word *barn*, which served as a signal for painful electric shock. It became conditioned also to contiguous words in the word list and to words that bore a meaningful relation to barn in the sense of having rural associations. We saw that this generalization occurred even when the subjects were not conscious that *barn* was the true danger signal. Associative connections served as effective guides for generalization, even when the subject was unaware of the whole process. Going back

[9] Allen, F. H., *Psychotherapy with Children*, New York, W. W. Norton & Co., 1942, pp. 169–171.

[10] See above, pages 227–230.

to an example used earlier in this chapter—the woman who was afraid to go alone on the street lest she faint—it is easy to see that sexual desires and the idea of finding a partner on the street might have been linked together in half-conscious revery or in dreams forgotten upon awakening. Links of this kind are constantly recovered during psychoanalytic treatment. Associative channels are thus prepared which serve as avenues for displacement when sexual pressure increases and its associated anxiety and guilt threaten to overwhelm the patient. So far as the patient's awareness is concerned, she knows only that she feels suddenly faint on the street. It is most frightening, so she does not run the risk of going on the street again.

Phobias are only partially explained, however, by pointing out the general fact of channeling along associative lines. They are not fully explained even when we allow for very personal meanings and even symbolisms that are peculiar to the individual patient. Just as in normal thinking we call up ideas that are relevant and appropriate to our present need, so the phobic patient fastens upon associations that neatly substitute for his real source of threat. If a phobic patient had been terrified by something that happened in a barn, he would not, in a fashion analogous to Diven's normal subjects, become vaguely uneasy about everything rural. He would come down hard on a single item, such as hay. Panic would seize him at the sight or smell of hay. This would keep him out of barns and out of the country without constantly making him think of barns. The whole trouble would be safely concentrated on hay.

A remarkable example of the process of displacement is to be found in Freud's case of the five-year-old boy, Hans.[11] This case was an important milestone, not only for its demonstration of childhood sexual interests, but also for its untangling of the roundabout lines of association that made a path from nuclear fear to phobic symptom. The child was in the midst of the Oedipus conflict, and his nuclear fear was of the angry punishment he anticipated from his father because of his possessive feelings and actions toward his mother. His fear did not present itself in this form, but rather in the form of a phobia of horses on the street. This was an avoidable threat, whereas the father could not be avoided. The connecting lines passed through all kinds of childhood scenes, fantasies, and ruminations. Hans played with his father, who pretended to be a horse; he saw a horse with a black muzzle that reminded him

[11] Freud, S., "Analysis of a Phobia in a Five-Year-Old Boy," 1909, reprinted in *Collected Papers*, International Psychoanalytic Press, 1925, Vol. 3, pp. 149–289.

of his father's mustache; he played with other children, pretending that he was a horse, and fell down in the course of the play; he saw a horse fall down and struggle with its feet. All these and many other elements entered the associative tissue, until at last he was in panic at seeing horses on the street and hearing the sound of their feet. With the achievement of this symptom he was no longer afraid of his father.

Expansion of the Phobic System.—From what has been said it might seem that the formation of a phobia was an ideal solution to all problems of neurotic anxiety. It would indeed be a perfect scheme if the phobia could only be prevented from expanding. Internal dangers, especially those linked with strong recurrent needs, will not let the patient off so easily. The danger continues to be present. The patient avoids the phobic situation but cannot thus achieve full peace of mind. Before long some other situation is felt to be dangerous, and the patient has two phobias. In the end he has had to keep employing his phobic mechanism so extensively that he is back in the state of being more or less afraid of everything.

Not all phobias expand indefinitely. Sometimes a phobic system becomes stabilized and serves fairly well as an enduring defense. The tendency to expand, however, is a very natural consequence of the displaced or substitutive character of the phobic symptom. Avoiding the phobic object does not usually mean taking any effective action against the real threat. The fundamental problem remains unsolved and the phobic mechanism does not really bind the anxiety.

Ross describes a case in which a man became phobic for the number 13.[12] The real fear proved to be that he would recall some juvenile sexual escapades with a superstitious maid who believed in the bad luck associated with 13. This chapter in his history had been repressed as his personality developed along lines of superiority and morality. The case illustrates particularly well the expansion of a phobia. The patient began by staying in bed on the thirteenth day of the month so that he would not come in contact with calendars and newspaper dates. Soon he discovered that "twenty-seventh" contained thirteen letters, and he was condemned to bed two days each month. He next began going to work by a roundabout route to avoid the thirteen-letter sign, "Peter Robinson," that hung prominently on the direct route. Presently he experienced uneasiness when people said, "Oh, good morning," or when they said, "Good

[12] Ross, T. A., *The Common Neuroses, op. cit.*, pp. 219–223.

afternoon" without the "Oh" that would have given the greeting a safe fifteen letters. He began hopping over the thirteenth step in a flight, counting his own footsteps, counting the streets he passed, until finally he had time for nothing but avoiding the number thirteen. One laughs over the case, but the patient was not fencing with will-o'-the-wisps. His phobic defenses later broke down. He remembered the sexual adventures and became exposed to deep sources of anxiety. As a result he was for some weeks deeply depressed and dangerously suicidal. His recovery from this still worse state occurred at the cost of reinstating a good part of the phobia.

Obsessional Neurosis

There are two names for the symptom syndrome to which we now turn our attention. Some workers prefer the designation *obsessional neurosis*, others prefer *compulsion neurosis*. Sometimes it is proposed to subdivide the syndrome into conditions dominated by obsessional thoughts and conditions in which compulsive actions predominate. The underlying processes are probably too similar to justify the separation.

Characteristics of the Symptoms.—An obsession is an idea or desire which forces itself persistently into the patient's mind in what he experiences as an irrational fashion. A compulsion is an act actually carried out, which similarly forces itself upon the patient. Obsessive ideas and compulsive acts are often closely linked: for instance, the obsession that there may be dangerous germs on one's hands leads to the compulsion of handwashing. Minor obsessions and compulsions are familiar in everyone's experience. We keep wondering whether we turned off the gas burner, or we knock on wood after mentioning our good fortune. These everyday phenomena resemble neurotic obsessions and compulsions to the extent that they are sensed as irrational. We know they are foolish, but they seem to have a little push of their own and it is easier to let them have their way. In neurotic obsessions and compulsions, this quality is greatly magnified. The ideas and acts are like foreign bodies, forcing themselves upon the patient yet experienced as no part of the self. Moreover, they often betray that they are working in the service of defense. If the patient tries to stop his obsessive ruminations or his compulsive rituals, he is plunged into an attack of anxiety.

Obsessional symptoms occur in great variety. The patient's

mind may be full of thoughts about infection and disease, making it necessary for him to wash his hands a hundred times a day and to take precautions that would put a modern hospital to shame. He may have rituals in regard to dressing or going to bed which make these actions laborious and time-consuming. He may be troubled by intrusive blasphemous thoughts when he is trying to concentrate on his prayers. Orderliness may become the demon in his life, committing him to an endless task of straightening, arranging, recording, and filing. Particularly trying are obsessions concerning harmful and violent acts: the patient is invaded by ideas of burning the house down, cutting his wife's throat, strangling his children, throwing himself in front of a truck. The danger that such acts will be carried out is small to the vanishing point, but the patient has no feeling of control over them and constantly fears that he will turn them into realities. The lives of obsessional patients are easily reduced to ineffectiveness and misery. Their energies are tied up in symptoms, and they are filled with doubt, vacillation, uneasiness, and helplessness. Occasionally an attack of anxiety breaks through.

Close scrutiny of the contents of obsessive symptoms shows that they can be classified under two headings: (1) Part of the symptoms give expression to aggressive and sexual impulses. Murderous hostility, destructiveness, dirtiness, and sexual urges in a crude and violent form reveal themselves in the content of obsessional thoughts. It is as if the suppressed *antisocial impulses* returned in this guise to plague the patient. (2) The rest of the symptoms give expression to *self-corrective tendencies.* Orderliness, rituals, cleanliness, propitiatory acts, self-imposed duties, and punishments all testify to the patient's need to counteract and set right his antisocial tendencies. Guilt feelings are his almost constant companions. Perhaps he reads in the paper about a murder that was committed many miles away. So strong is his guilt that he becomes obsessed with the idea that he committed the murder and deserves terrible punishment. The division of the symptoms into these two classes, *antisocial impulses* and *self-corrective tendencies,* gives an immediate insight into the nature of the underlying conflict. Nowhere is the Freudian concept of the super-ego more applicable. The childish conception of evil joins battle with the childish conception of righteousness and punishment.

Obsessional symptoms sometimes have a sudden onset, but very often they make their appearance gradually. In this neurosis it is not easy to draw the line between focal symptoms and a gradually

developed neurotic trend. When the symptoms develop gradually, it is almost always the self-corrective ones that make the first appearance. The symptom picture is first occupied by derivatives of the defensive process. Only later do signs of the anxiety-linked impulses creep into the scene.

Distinctive Features of Obsessional Neurosis.—Although the obsessional syndrome frequently overlaps with others, especially with phobias, it has a number of characteristics which roughly differentiate it from the other patterns.

(1) The elements of the underlying conflict are more fully represented in consciousness than is the case in any other neurotic syndrome. The antisocial tendencies and the self-punitive tendencies can be read in the patient's obsessions and compulsions. The representation in consciousness is of course somewhat peculiar, falling far short of a frank recognition of one's tendencies. There is much symbolizing and disguising, and in any event the patient does not experience the tendencies as a part of his ego. They have a peculiar status. The patient knows that his obsessions and compulsions are *inside him*; he does not use projection and attribute them to external forces. Yet they feel to him like foreign bodies, not part of the tissue of the self. They intrude themselves from unknown parts of his mind. Apparently the mechanism of repression plays a less drastic part in obsessional neurosis. Its place is taken by this semi-detachment of the impulses from the self.

(2) Secondary defenses are very highly developed. The struggle between anxiety-linked impulses and defensive processes is carried on in the realm of intellect. In this realm it is possible to make an extensive use of displacement. The patient finds himself ruminating on the philosophical implications of the dichotomy between love and hate rather than perceiving that he has certain hateful impulses toward someone whom he loves. The treatment of obsessional patients is often badly delayed by this tendency. The patient raises theoretical objections to the physician's way of conducting the treatment and tries to get into a long argument on basic assumptions. We shall shortly give an example of the mechanisms of isolation and *undoing*, which also play a part in the patient's intellectual defenses.

(3) Overt anxiety is moderately well avoided. There is an undercurrent of uneasiness, but acute anxiety attacks are infrequent. Obsessional neurosis is not as successful as hysteria, however, in doing away with anxiety.

(4) It seems generally agreed that aggressive impulses occupy an unusually large place in the obsessional patient's basic conflicts. Sexuality is by no means excluded, but hostility is so predominant that it may be considered the central issue.

(5) Certain character traits appear to be particularly common among obsessional patients. These patients seem to favor a certain pattern of neurotic trends. Generally they show a great interest in orderliness and cleanliness, which they carry to extremes. They are also conscientious and idealistic; they want to be never angry, always kind and considerate of others. All of these traits are socially desirable if not carried to extreme lengths, but their force in the patients suggests a strong reaction formation against aggressive, destructive, messy tendencies. Two other traits often appear in the pattern: stubbornness and stinginess. For all their idealistic outlook the patients do not want to be hurried or directed, and they hate to have others make demands on them. The whole pattern of traits suggests that the crucial childhood difficulties had to do with giving up autonomy, submitting to adult demands, and coping with the anger that resulted from parental interference. Strict Freudians refer to this pattern as indicating fixation at the anal-sadistic stage of libidinal development.

Example of the Mechanisms of Isolation and Undoing.—It is hard to convey the degree to which the obsessive patient's actions and thought processes become clogged unless we use an actual illustration.[18] A boy of seventeen had severe conflict over masturbation. His pastor gave a talk denouncing the practice, and advised that one should never associate with a boy who masturbated. The patient knew a boy who masturbated, and he now found it difficult to keep away from him. But when he passed him on the street he felt distinctly uneasy. The first symptom was a little ritual consisting of turning around and spitting whenever he passed the wicked boy. This is a perfect example of undoing: the patient cleansed himself and expressed rejection immediately after permitting the danger of contact. The symptom was insufficient, however, to deal with the anxiety generated by these threatened contacts, and the next defensive strategy was a phobia. The patient had a morbid dread of meeting the bad boy, avoiding the possibility as much as possible. The phobic system soon began to expand until it included the whole section of the city in which the other boy lived. The

[18] Fenichel, O., *Outline of Clinical Psychoanalysis, op. cit.*, pp. 160–164.

patient made a compulsive stipulation that no member of his own family should enter that section.

From this point the symptoms invaded his thinking more and more fully. A severe obsessional neurosis took the place of the phobias. The patient found himself thinking about the forbidden section of the city. Even this contact in thought had to be prevented. He developed an elaborate technique of *isolation:* he would stand still and fix upon an image of the forbidden region until the image was bereft of all meaningful connections and stood all alone in his mind. To effect one of these isolations took quite a while, often as much as an hour. Before long he was dividing the whole world into good and bad, which increased the scope of his isolations. Even language fell into the two categories, so that he had to choose carefully lest a good and bad word make contact by being in the same sentence. The whole thing became so laborious that he deliberately thought about the forbidden things in order to strengthen the images and make their isolation easier. Thus the anxiety-linked impulses crept stealthily back into the symptoms.

This excerpt from a case history has been given only to illustrate the mechanisms of undoing and isolation and the general blocking of normal thought processes that occur in obsessive patients. The reason for his extreme anxiety on the subject of masturbation must be assumed to lie somewhere in the boy's childhood history. We shall now examine a longer excerpt from another history in order to show the neurotic process in relation to the whole development of personality and to specific crises occurring in the course of life.

An Illustrative Case: Peter Oberman.—Peter Oberman had the misfortune to lose his faith in both of his parents at about the same time. While small he enjoyed his mother's affectionate and watchful care and the week-end visits of his father, who was a traveling salesman. Growing independence soon taught him to regard his mother as an object of contempt. She was an extremely timid woman who felt the world to be a dangerous place in which one must be constantly on guard against sickness, injury, accidents, and kidnappers. She constantly restrained him with images of danger, and as he became an active boy of eleven he resented the resulting overprotection. With a boy across the street he began to study electricity and radio. His mother, who greatly feared electricity, expressed her apprehension, and this was the last straw for Peter. He saw the full absurdity of her timid ways and began to treat her as a fool.

At this juncture his father changed jobs and was at home a great deal. He interested himself in his son's affairs with which he seriously interfered. Very close with his money, he would occasionally buy expensive presents for which he would expect the deepest gratitude, but they were never the right presents. When Peter wanted a photography set, his father got him a pool table; when he wanted a bicycle, he was given a moving-picture outfit. His father deplored his taste in radio programs and forbade him to listen. If Peter came home a minute later than the expected time, he had to brace himself for a veritable tirade. He was terrified, and he could see that his mother also was terrified by his father's insistence and anger. Furious at the domestic dictatorship, he never quite dared to resist it. At length things came to a more severe crisis. He frequently saw his mother in tears, comforted by his grandfather. The father had fallen in love with another woman and was spending nights away from home. Peter's emotions were deeply involved in the tangle; he swore at his father and used obscene language about the other woman. The father, now harboring some guilt feelings of his own, would stalk away in silence.

Both of Peter's identification figures thus crumbled into the dust of his contempt. From neither could he expect esteem or really considerate love. He turned to his grandfather, lately a widower, who occupied the apartment downstairs. The lonely old man responded warmly, and soon there was an active sharing of interests. The grandfather, a scholarly man, was an ardent admirer of Marx and the doctrine of economic determinism. He and Peter followed with intense interest the progress of the war in Spain. The grandfather bestowed much affection and praise, and at the same time inspired the eleven-year-old boy with ideas about science and the social order which must have been somewhat beyond his understanding.

Since he had rejected his mother and his father, since the atmosphere at home was completely intolerable, it became for Peter Oberman an overwhelmingly important matter not to lose his grandfather. The old man had suddenly become his only source of reliable affection. The idea of losing him aroused a desperate anxiety. But he was old; like the grandmother, he might die. Peter began to be visited by anxious thoughts which seemed to force themselves into his mind. He had images of the house catching fire; he was afraid it would be struck by lightning or shattered in a high wind. He thought of various ways in which harm might come to his grandfather, and then he began to develop symptoms which had the char-

acter of magical acts designed to prevent this catastrophe. If the thought crossed his mind that the house might burn, he felt compelled to touch something in order to avert the danger. If he had such a thought while stepping on a crack, he had to step on the crack again to cancel the thought. Soon he needed to perform extra touchings for good measure, and sometimes he would spend nearly an hour going through one of these operations. When people began to notice his peculiar behavior, he developed a technique for discharging all the unlucky thoughts of the day in the privacy of his bedroom at night. If he pointed four times (a lucky number) to the southwest (a lucky direction), he could counteract the danger. But he never felt satisfied. He had to point $4 \times 4 \times 4 \times 4$ times, 256 times, and this took half an hour. He invented short cuts like stamping his foot to stand for groups of numbers, but in the end no time was saved. If the ritual could not be completed, he felt absolutely miserable. He was at the mercy of *obsessive thoughts* and *compulsive actions,* all of which had the significance of *undoing* the harm contained in a destructive thought.

It may seem paradoxical that Peter should entertain destructive thoughts that included his grandfather, the very source of his remaining security. It becomes less strange when we consider the circumstances from the point of view of an eleven-year-old boy whose faith in his father and mother has lately been shattered. He well knew that his father could show loving affection, yet quickly withdraw it and let him down. He well knew that his grandfather represented in a sense a false security, because he was old and would presently die. The trouble was that he needed love so badly that he could not resist the grandfather's affectionate interest, yet it was a restraint, an unwelcome restraint, for an eleven-year-old boy to spend so much time with an old man and hear him talk endlessly about barely comprehensible subjects. Though for the most part he could not stand the thought of his grandfather's dying, there were times when part of him secretly desired this event.

When Peter was twelve his grandfather did die. The fatal ailment was attributed by relatives to distress over the father's love affair—a further proof of the father's power to destroy Peter's happiness. Peter's grief was uncontrollable. His tearfulness lasted for several months, and his digestion was badly upset. He wanted to preserve his grandfather's apartment just as it was, and when this proved impossible he photographed every room from every angle, not even omitting the toilet, keeping the negatives locked up where no harm could befall them. He began a diary in which was recorded

every incident that in any way reminded him of his lost protector. But his feeling of weakness and helplessness was now so great that he required more far-reaching reassurance. His maturing intellectual powers seized upon ideas received from his grandfather and developed the notion of a universal determinism, the understanding of which would give him complete control over everything. He dedicated his life to the laws of the electron and the atom, which he conceived as universal laws applicable to society and man as well as nature; his grandfather had already schooled him in economic determinism. Then he began to draw up life plans for himself, listing his liabilities and assets, taking hours to get every detail in perfect order. At fourteen he read Einstein, believing that if he could understand this writer he could understand anything.

This turn of events represents the launching of a neurotic trend. To restore some measure of confidence in himself, he developed a compensatory striving for superiority in the special form of omniscience. Through understanding, through familiarity with the basic laws of nature, he was going to control everything, including his father and his own tempestuous emotions. That a boy with superior intellectual gifts should become interested in philosophy between twelve and fourteen and should be attracted by sweeping generalizations is not in itself extraordinary. In Peter's case, however, curiosity was a secondary motive; he was using philosophy to compensate himself for a feeling of weakness, to make himself feel masterful and omnipotent. His preoccupation with ideas and future plans was more than a natural unfolding of real powers; it was a desperate measure designed to avert anxiety. As a result he overdid it, set his goals too high, and spent fruitless hours struggling to work out an unchallengeable system of truth. It is this excess, this rigidity, that distinguished his neurotic trend from a straightforward expression of healthy impulses.

When Oberman reached college, his condition had considerably improved. At high school he had done well, achieved some social participation, and contrived to overcome his compulsive rituals. His neurotic trend gave sufficient security without wrecking his social adjustment. The new environment, however, revived several of his problems, and the threat of compulsory military service touched off many of his early childhood fears. His first course in philosophy challenged the naturalistic system he had worked out for himself. He spent so much time trying to revise his thinking and free it from contradictions that he neglected his regular studies, lost appetite, and, as he himself put it, "walked around in a daze all summer."

When in company with his classmates he found himself showing off, giving a "big line," trying to impress with his superior knowledge, even telling lies in his struggle to put himself foremost. Any little failure brought on protracted daydreams of omnipotence. One day he bungled a recitation in elementary German: for hours he day-dreamed about a future invitation from the university to give a series of lectures in German. The neurotic trend was speeded up and stiffened to a point where it was again indistinguishable from obsessive symptoms.

Impending military service awakened a host of fears. He was afraid of being kicked around at training camp, of being torpedoed on the transport, above all of physical injury. His relations with his father had not prepared him to react well to authority. Anxiety mounted steadily, so that after two months in training he arrived at complete neurotic breakdown. Separated from the service, he sought professional help for a thorough treatment of his neurosis.

Dissociated Conditions

We turn now to a group of disorders generally classed with hysteria, but characterized by peculiarities especially in the realm of memory. Whether we are dealing with a brief amnesia, a more extended fugue, or a fully developed double or multiple personality, the central feature of the disorder is a loss of personal identity. The patient forgets who he is and where he lives. He loses the symbols of his identity and also the memories of his previous life that support a continuing sense of selfhood. The phenomenon is familiar through newspaper reports of cases of amnesia. Perhaps the patient is so confused by the loss of memory that he approaches a police officer to ask for help. In other cases—these are the ones technically called *fugues*—he may go on for quite a while functioning as an adequate new person, perhaps with a new name. There are reports of cases in which a patient has remained in a fugue state for months and even years. Conceivably, such a change might be permanent, but we would have no access to such cases.

It is a little unfortunate that the term *amnesia* has been captured by the press for just this particular type of memory disorder. Literally, *amnesia* means any kind of pathological forgetting, whether caused by drugs, brain injuries, old age, or psychogenic factors. The cases we are considering here represent a particular type of amnesia, the forgetting of personal identity. This particular pattern seems to be wholly psychogenic in character. The forgetting is

somehow connected with neurotic conflict and represents an attempt to do something about that conflict.

Amnesia for Personal Identity.—We begin with an example reported by McDougall, remarkable for its transparency.[14] A color-sergeant was carrying a message, riding his motorcycle through a dangerous section of the front. All at once it was several hours later, and he was pushing his motorcycle along the streets of a coastal town nearly a hundred miles away. In utter bewilderment he gave himself up to the military police, but he could tell absolutely nothing of his long trip. The amnesia was ultimately broken by the use of hypnosis. The man then remembered that he was thrown down by a shell explosion, that he picked up himself and his machine, that he started straight for the coastal town, that he studied signs and asked for directions in order to reach this destination.

It is clear, in this case, that the amnesia entailed no loss of competence. The patient's actions were purposive, rational, and intelligent. The amnesia rested only on his sense of personal identity. The conflict was between fear, suddenly intensified by his narrow escape, and his duty to complete the dangerous mission. The forgetting of personal identity made it possible to give way to his impulse toward flight, now irresistible, without exposing himself to the almost equally unbearable anxiety associated with being a coward, failing his mission, and undergoing arrest as a deserter. When he achieved physical safety the two sides of the conflict resumed their normal proportions and his sense of personal identity suddenly returned.

If we try to characterize the patient's state of mind during the amnesic period, the most we can say is that he was powerfully dominated by a single motive. As far as he could recall the experience, he simply thought of nothing except reaching the town from which men embarked for home. Every action and thought was subordinated to this supreme goal. The state of mind was not unlike that of a person extremely preoccupied with an absorbing task, oblivious to other circumstances. But it went beyond this to the extent that the normal state was resumed abruptly, much like waking from a dream. It is interesting to observe the parallels between this amnesic condition and the artificially induced state of hypnosis. The hypnotized person carries out acts with a diminished feeling of voluntary participation. His sense of personal identity is in abeyance, though not lost. If he is told to act like someone else, he can do so with

[14] McDougall, W., *Outline of Abnormal Psychology, op. cit.*, p. 258.

great vividness. The hypnotic state is so different from the normal that he issues from it with a sense of waking up, sometimes with amnesia for the hypnosis. We can say that hypnosis effects an artificial quieting of the sense of personal identity and of volition; in contrast, the color-sergeant's extreme fright effected a violent repression of all this in favor of the single-minded drive to escape.

In wartime there are many cases of amnesia and fugue which, like the preceding one, originate under traumatic conditions. In civilian life the same phenomenon occurs under less violent circumstances, but generally in connection with what amounts to an emotional crisis in the patient's life. Abeles and Schilder in a study of sixty-three cases found that "some unpleasant social conflict, either financial or familial, was significant in the immediate cause of the amnesia," although behind these immediate conflicts "deeper motives are found." [15] A more detailed report of five cases from the Menninger Clinic has the special advantage that the precipitating events and the content of the amnesic period were carefully recovered in all their personal meaning to the patient. [16] From this report we select the following illustration.

A man of twenty-nine had developed a high ideal of independence and manliness. He had been induced, however, to take work in his father-in-law's business, where he found himself dissatisfied and poorly paid. He was sometimes unable to meet family expenses, and was greatly humiliated to be extricated by his father-in-law on these occasions. One day, again in difficulties, he drove with his family to the town where his father-in-law lived, but could not bring himself to ask for the needed loan and turned the car homeward. He became so preoccupied with the thought of finding a new job and making money, that by the time he reached home he no longer knew who he was nor recognized his wife and children in the car. Taken to the hospital, he spoke only of his new job. He falsified reality to the extent of interpreting everything in the hospital as though it were the operation of a business firm. Two days later he emerged spontaneously into his normal state, not remembering the amnesic episode. Shortly afterward he recalled the episode, including the suicidal despair that had filled him at the thought of asking his father-in-law for more help.

In considering the case of the color-sergeant, we likened the amnesia to an hypnotic state. This case of the business man suggests

[15] Abeles, M. & Schilder, P., "Psychogenic Loss of Personal Identity," *Archives of Neurology and Psychiatry*, 1935, Vol. 34, pp. 587–604.

[16] Geleerd, E. R., Hacker, F. J. & Rapaport, D., "Contribution to the Study of Amnesia and Allied Conditions," *Psychoanalytic Quarterly*, 1945, Vol. 14, pp. 199–220

similarities to dreams and sleepwalking. "Sleepwalking is not sharply differentiated from fugue states, and there is a striking similarity in the psychological make-up of persons who develop fugues and of sleepwalkers." [17] In dreams, suppressed wishes come to expression in hallucinatory form, but the person does not have to accept responsibility for the foolish things he dreams. In amnesic states and fugues, suppressed wishes come to expression in the form of real actions, but on condition that the person lose his identity and hence his responsibility for them. The business man desperately wanted to get a better job and regain his sense of manliness and independence. Hemmed in as he was by family debts and responsibilities, such a plan was completely impracticable. When the fantasy grew too strong for him, he could tolerate it only by forgetting his identity, thus forgetting the wife and children whose presence made the fantasy so impracticable.

In summary it can be stated that the psychogenic loss of personal identity, such as occurs in amnesias and fugues, represents another way of coping with neurotic conflict. The loss of identity is a defense against intolerable conflict when some powerful need or wish becomes uncontrollable. As is so often true, the wish is ordinarily suppressed because the patient is what he is, occupying a certain social position and having certain responsibilities and obligations. When the wish is so strengthened, usually by some external crisis, that he can no longer keep it suppressed, his personal identity has to be ejected from consciousness. Both the patients we have described were dominated by a single wish during the amnesic period, and this is generally true of amnesic patients. It is interesting to speculate on the possible significance of an external crisis in such cases. Possibly the drastic defense of repressing personal identity can be used only under conditions of shock, when circumstances *very suddenly* build up the strength of a normally controllable need. On the other hand some workers favor the theory that amnesia and fugue occur only in a person constitutionally predisposed to such a solution. A special aptitude or a special weakness—call it whichever you like—may determine the readiness to meet crisis by repression and dissociation.

Multiple Personalities.—A psychiatrist may live out a long and active professional career without encountering a single case of multiple personality. Such cases are not at all common. Taylor and Martin combed most of the literature in 1944, and found only

[17] *Ibid.* p. 213.

seventy-six reported cases.[18] Nevertheless multiple personalities are worthy of attention because of the important problems they raise.

Multiple personalities can be considered as more extreme forms of what we saw in amnesias and fugues. In well-developed cases there is a loss of personal identity, but instead of the amnesic period being dominated by one imperious wish, it becomes an arena in which a whole new personality develops. The patient feels like a different person, and he gradually builds up the memory system of a different person. A second independent personality does not spring into existence all at once. The second sense of personal identity can be created only out of accumulated memories. But once the second system has begun to round itself into a separate self, the person may begin to function as two individuals. Today he is Mr. X, who has no memory of anything Mr. Y has ever done. Tomorrow he may be Mr. Y, who has no recollection of anything Mr. X has ever done. One can imagine the hopeless confusion this creates not merely for Mr. X and Mr. Y but for everyone with whom Mr. XY comes in contact.

The study of multiple personalities in a way recapitulates the history of abnormal psychology. At first it was looked upon as a queer nervous weakness. Later the emphasis was placed on dissociation. Cures were attempted by using hypnosis to reassociate the dissociated fragments. When Morton Prince wrote *The Dissociation of a Personality,* in 1905, describing the celebrated Miss Beauchamp who had three main personalities, he emphasized the dramatic changes from self to self, the ensuing complications, and the problem of synthesizing the different selves by making them aware of each other's memory systems.[19] Fifteen years later he carefully reconsidered the case in the light of the newly developing dynamic psychology.[20] He showed that one of the personalities had "existed" for a long time as the rebellious and playful fantasy life of an otherwise very prim and proper child. This meant that when, in early adult life, the patient reached a severe neurotic breakdown, there already existed in her a long-standing semi-independent series of memories that served as the nucleus for one of her new selves. He also showed that each of Miss Beauchamp's three personalities could

[18] Taylor, W. S. & Martin, M. F., "Multiple Personality," *Journal of Abnormal and Social Psychology,* 1944, Vol. 39, pp. 281–300.

[19] Prince, M., *The Dissociation of a Personality,* New York, Longmans, Green & Co., 1905.

[20] Prince, M., "Miss Beauchamp: The Psychogenesis of Multiple Personality," *Journal of Abnormal Psychology,* 1920, Vol. 16, No. 1. Reprinted in Prince's *Clinical and Experimental Studies in Personality,* edited by A. A. Roback, Cambridge, Sci-Art Publishers, 1939, pp. 185–268.

be conceived as representing a group of strivings, with their associated attitudes and values, such as would offer a certain inherent contradiction even in the most healthy person. One personality embodied a series of saintly virtues, another a strong independent ambition, another an impish and playful quality. In short, Prince conceived that Miss Beauchamp developed separate personalities where a healthy person would simply have conflict of motives. Much more recently the case has again been reconsidered by McCurdy, who views the several personalities in the light of reactions to the physician.[21] Dr. Prince was the center of the patient's world during several years of treatment. In her saintly personality she was submissive and respectful toward him. Her impish self was slangy, saucy, teasingly affectionate. The ambitious and independent side of her represented rebellion against his dominance and made its first clear appearance at a time when there was conflict between patient and doctor. McCurdy suggests that these more contemporary motives lay behind the different personalities, and that the apparent separateness of the selves was encouraged by the constant use of hypnotism for treatment.

It is well to be skeptical about multiple personalities, especially when the opportunity has existed for them to be dramatized in hypnotic states. Undoubtedly a case of multiple personality can be played up or played down according to the physician's predilection. It is nevertheless probable that they are perfectly genuine phenomena which sometimes occur quite apart from the attitude of the doctor. One of Prince's cases, the case called B. C. A., was already a dual personality when she first came for treatment.[22] The gradual, spontaneous evolution of the split between a narrow constricted self and a gay and expansive one could be traced back many years. B. C. A. illustrates Murphy's generalization that "the main dynamics in most cases of double and multiple personality seems to be an exaggeration of a conflict situation which is present in nearly all of us, namely, a conflict between a conforming and a guilty non-conforming trend."[23] "In such cases," Murphy says, "it is as if the unified plan for living, which most of us strive to maintain, has become demoralized and been replaced by a series of blind stabs into the unknown; genuine conflict of purpose leads to genuine conflict in the individual's pictures of himself, and the exigencies of the situation

[21] McCurdy, H. G., "A Note on the Dissociation of a Personality," *Character and Personality*, 1941, Vol. 10, pp. 33–41.

[22] Prince, M., *The Unconscious*, New York, The Macmillan Co., 2nd ed., 1921, Chs. 15–17.

[23] Murphy, G., *Personality: A Biosocial Approach to Origins and Structure*, Harper & Bros., 1947, p. 443.

lead to the unconscious setting-up of conflicting poses."[24] Many people find it hard to believe that genuinely independent self-systems can be set up within one body. But if we consider the additional selves as *no more than greatly extended and elaborated amnesic systems* or fugues, built up until they assume the scope of selfhood, it becomes less difficult to accept their genuineness. Multiple selves happen very rarely, but they do seem to happen.

When all is said and done, we find ourselves asking the same questions that faced us in our study of amnesia and fugue. In studying those phenomena, we noticed that a crisis of some kind almost always served as a precipitating factor. The same seems to be true of multiple personalities; each new dissociation comes on the heels of emotional crisis. This suggests the two possibilities mentioned before: that a sudden increase of conflict may be a necessary condition for so drastic a defense, or that the person is predisposed in some way to adopt dissociative solutions. We do not at present have any means of choosing between these alternatives. Here, as elsewhere, the problem of the choice of neurosis proves an elusive one.

Hysteria

Our discussion of hysteria can be relatively brief. Because it was the first neurosis to attract persistent medical attention, our historical introduction (Chapter 1) has already made us familiar with many of its manifestations. Charcot's studies of hysterical symptoms, and Janet's study of the mental state in hysteria, were milestones in modern thinking about neurosis. Freud's first work, in association with Breuer, dealt with a typical if extreme case of hysteria. The case of Pearson Brack (Chapter 2) is technically an example of hysteria, as is the patient described at the end of the last chapter who became blind after a very minor motor accident. Our present task will not be to examine new cases but rather to summarize the general facts about hysteria in so far as they are known today.

Varieties of Hysterical Symptoms.—In addition to the amnesias, fugues, and multiple personalities considered in the last section, hysterical symptoms take a wide variety of bodily forms. On the motor side there are the *paralyses* which may include an arm, a leg, both legs, or one whole side of the body. These symptoms can be distinguished from true organic injuries by the fact that normal reflexes are retained in the paralyzed area, and that little or no mus-

[24] *Ibid.*, pp. 447–448

cular degeneration occurs. Sometimes the diagnosis is made still easier by the anatomical nonsense that characterizes the symptom: both hands, for instance, may be paralyzed, while the arms retain their motility, a state that could be produced organically only by a highly peculiar nerve injury in both wrists. Other motor symptoms are mutism (inability to speak), aphonia (inability to speak above a whisper, to "voice" the speech), *tremor*, and *tics* (spasmodic jerking in a small coordinated group of muscles). On the sensory side there are the many varieties of *anaesthesia*. These may accompany the paralyses, but they sometimes occur alone. Within any one sense department the anaesthesia may take a number of forms. In vision, for instance, the possibilities include total blindness, blindness in one eye, contraction of the visual field to a small focal point, blindness in the left half or right half of both eyes, and many other curious fragmentations of the visual process. Considerable attention has lately been paid to anorexia nervosa (literally "nervous loss of appetite"), which sometimes is carried so far as to endanger the patient's life. Symptoms of this kind, which mainly affect the viscera and act through the autonomic nervous system, are now generally removed from the category of hysteria and placed among the psychosomatic disorders. Another symptom is the *hysterical fit*, which in some respects resembles an epileptic seizure but can generally be distinguished from it. Finally, there are sometimes *hysterical twilight states* in which the patient is confused and distressed, experience having an unreal and dreamlike quality. The loss of contact with reality is less complete than would be the case in psychosis.

The more bodily forms of hysteria are sometimes given the title *conversion hysteria*. The bodily symptoms represent a converted form of energy. The force contained in impulses, which because of anxiety can be allowed no outward expression, is converted or diverted into sensory-motor channels in such a way as to block the functioning of some organ. This theory of converted energy was introduced by Freud, who regarded it as a highly hypothetical process difficult to understand or to verify. The interference with bodily functions is generally of an inhibitory character, and when this is true it is easy to regard the symptom as the outcome of defensive inhibition. In various degrees, then, hysterical symptoms can be looked upon as expressions of the defensive process and expressions of the anxiety-linked impulse. The mechanism, however, is certainly an obscure one, and it may even be quite different in different cases.

Kretschmer's Study of Hysterical Tremor.—A valuable clue to the nature of hysterical symptom formation is given in a monograph by Kretschmer.[25] Strictly speaking, it applies only to one type of symptom—hysterical tremor—originating under the traumatic conditions of combat. It would be hasty to generalize from this finding to all hysterical symptom formation, but the clue remains a useful one.

Tremor is a biologically preformed component of the anxiety reaction. When stress is past, it subsides and disappears. Many men emerged from acute trauma trembling violently all over, but in most cases the tremor gradually subsided. In certain cases, however, the tremor did not subside; it lasted and became a permanent hysterical symptom. A wish to fall ill in order to be withdrawn from danger could readily be presumed in such cases, and Kretschmer worked out the following explanation of how a wish to fall ill, very likely unconscious, could prolong the tremor indefinitely without the patient's becoming aware of his collaboration in the process. It is generally true, Kretschmer pointed out, that reflexes can be reinforced by a voluntary diffuse tensing of the whole motor system. Thus the knee jerk can be amplified by clenching the hands and slightly tensing all the musculature. Sometimes a weak reflex can be brought above the threshold by this procedure. If one tries to reinforce a reflex directly, the result is a failure. Trying to amplify the knee jerk by direct volition actually interferes with the reflex act and adds an entirely secondary voluntary kick. It is only the gentle diffuse hypertonicity of the muscles that facilitates reflexes.

One additional fact is of great importance. The indirect reinforcement of a reflex in no way changes the character of the reflex and is not in the least sensed as a voluntary act. The tremor patients, therefore, could be conceived as quite involuntarily sustaining their reflex tremor by keeping up a slight hypertonicity of the musculature. The aid they were giving to the tremor would not enter consciousness or stir up guilt feelings. If this unwitting aid were continued for a short while so as to prevent the tremor from subsiding, the symptom would become established as an independent habit system that would continue indefinitely. Kretschmer considered that his hypothesis was to some extent verified by the fact that treatment consisting of prolonged muscular relaxation often stopped the symptom, especially in its early stages. Relaxation counteracted the unwitting trick whereby the patient sustained his tremor.

[25] Kretschmer, E., *Hysteria*, New York & Washington, Nervous and Mental Disease Monographs, No. 44, 1926.

Placement of the Symptom.—The crucial problem of hysterical symptom formation concerns the placement of the symptoms. How is the organ system chosen and how is the form of symptom determined? The possibilities are suggested in the following statements:

(1) Kretschmer's hypothesis gives us one possibility. The symptom consists of some natural part of the anxiety reaction, unwittingly reinforced and sustained by the patient until it becomes permanent.

(2) A somewhat similar process occurs when the symptom starts with a true organic injury. Unwitting prolongation turns what should be a temporary disability into a permanent thing. There are various reflex responses which tend to immobilize an injured part. The muscles of a wounded leg, for instance, will stiffen to prevent further motion and pain. If these immobilizing reflexes are prolonged by a mechanism akin to Kretschmer's, the wounded leg becomes an hysterically paralyzed leg.

(3) The term *somatic compliance* has been coined to suggest that weak organs may be chosen as the site of hysterical symptoms. If a person has always been a little lame, or has had eye trouble or difficulties with his voice, the effect is to heighten the importance of that particular system in his mind. When neurotic breakdown occurs, that system is compliant to the need for symptom formation.

(4) Temporary somatic compliance may exist when some organ is in a peculiar condition at a crucial moment of crisis. There was a good example of this in the Breuer case:[26] a paralysis of the right arm had its origin in the occasion when the patient, watching beside her father's sick bed, dozed and had a terrifying nightmare while her arm hung in an awkward position, "asleep" over the back of the chair. In neuroses of traumatic onset it sometimes appears that the symptom falls on an organ system that was highly active at the moment of acute crisis. If an explosion catches the soldier in the act of firing his rifle, the symptoms may place themselves in the form of paralyzed hands, bent neck, closed eye, etc.

(5) Direct connection between some organ system and the neurotic conflict may serve to choose the location. This is particularly true in what are called *occupational* neuroses—for example, mutism or aphonia in a salesman, paralysis of the fingers in a pianist, writer's cramp in a writer, or, to extend slightly the meaning of "occupation," sexual impotence in a Don Juan. In all such cases there are

[26] See above, pages 30–33.

conflict and anxiety over carrying out the occupation successfully, and the symptom definitely prevents further activity.

(6) The placement of a great many hysterical symptoms can be understood only by assuming—in some cases actually discovering—a roundabout associative or symbolic connection between the organ system and the conflict. Our study of phobias showed how extensive such possibilities might be. There is a connection between symptom and conflict, but one can grasp it only by untangling the chains of personal meaning that have been formed in the patient's mind in the course of experience, revery, and dream.

(7) Anticipated *secondary gain* seems to play an especially important part in hysterical symptom formation. The gain is not consciously anticipated nor the symptom voluntarily devised, but the symptom shows an unmistakable relation to certain effects on the patient's environment. This is nicely illustrated in one of H. V. Dicks' cases.[27] A middle-aged married woman had to nurse her mother-in-law, who was paralyzed in both legs. Her husband forced her to do this, and seemed to become concerned only with his mother, forgetting his wife. One day the wife took a walk, feeling rebellious, but at the same time very anxious as she became dimly aware of angry wishes that the old lady would die. She felt faint and sat down on a park bench. A moment later she tried to rise, only to discover that both her legs were paralyzed and that she now needed as much of her husband's attention as did his mother.

The Problem of Predisposition.—Looking back over obsessional neurosis and hysteria, considering the behavior of these two groups of patients in everyday life as well as their symptom pictures, it is hard to believe that we are dealing with uniform human beings who become what they are simply out of the force of circumstances. The cool affect, the predominant aggression, the complex thought process of the obsessional patient seem utterly foreign to hysterical personalities. It is a great mistake to suppose that a person can be born with such a strong obsessional tendency or hysterical make-up that neurosis follows as a matter of course. A nuclear neurotic process, a violent clash between impulse, anxiety, and defense, a development in the midst of great emotional or environmental difficulties must occur in the history of any neurosis. But, granting the necessity for a history of this sort, it seems likely that obsessional

[27] Dicks, H. V., *Clinical Studies in Psychopathology, op. cit.*, p. 93.

neurosis is the outcome in one kind of person, hysteria in another kind of person.

In hysterical patients it appears that aggression is a more or less secondary problem. Dependence, love, and sex are the critical things in the patient's life and in his neurosis. This in itself might still be due to circumstances, but it fits consistently with other characteristics generally assigned to the hysterical personality. Such patients tend to be impulsive, given to strong enthusiasms and passions, given also to vividness in behavior and a tendency to dramatize. They readily identify with others and care a good deal about personal relations. Compared to the complex obsessional, they are often described as childish and immature. Their ability to imagine themselves vividly in different roles appears in multiple personalities and in symptoms which copy another person's illness. In everyday life we constantly characterize one individual as cool and cerebral, another as warm and impulsive. We would not find it difficult to predict that the cool cerebral friend would become obsessive, and the warm impulsive one hysterical, if it should be their misfortune to be overtaken by neurotic breakdown. Thus again we find the theme of temperament weaving its way into our dynamic psychology of the neuroses. We know all too little about temperament, but until we know more about it we shall probably never explain the problem of the choice of neurosis.

SUGGESTIONS FOR FURTHER READING

Descriptions of the different symptom syndromes in neurosis can be found in several places. From the Freudian standpoint there is Israel Wechsler's *The Neuroses* (Philadelphia, W. B. Saunders Co., 1929), especially Chs. 4 and 5, and the scholarly *Outline of Clinical Psychoanalysis* by Otto Fenichel (New York, W. W. Norton & Co., 1934), especially Chs. 1, 2, and 5. A somewhat independent point of view is taken by H. V. Dicks in his *Clinical Studies in Psychopathology* (Baltimore, Wm. Wood & Co., 1939), who surveys the main syndromes in Chs. 1–5. The broad psychobiological outlook of Adolf Meyer is represented in D. K. Henderson & R. D. Gillespie's *Textbook of Psychiatry* (London, Oxford University Press, 3rd ed., 1933), in which the psychoneuroses occupy Ch. 14. All of these books include neurasthenia as a neurosis; we have removed it here to the psychosomatic disorders.

A reader familiar with French has access to what is probably the most brilliant clinical description of phobias and obsessions: P. Janet's *Les Obsessions et la Psychasthénie* (Paris, Alcan, 1903). The same author's *Major Symptoms of Hysteria* (New York, The Macmillan Co., 2nd ed., 1920) contains equally classic descriptions of dissociated states and hysterical symptoms.

Morton Prince's *The Dissociation of a Personality* (New York, Long-

mans, Green & Co., 2nd ed., 1913) is fascinating reading, though a little on the dramatic side. It should be followed by his more conservative but more dynamic paper, "Miss Beauchamp: The Psychogenesis of Multiple Personality," reprinted in *Clinical and Experimental Studies in Personality* (Cambridge, Sci-Art Publishers, 2nd ed., 1939), Ch. 7. In Ch. 8 of the same work, and in Chs. 18–20 of *The Unconscious* (New York, The Macmillan Co., 2nd ed., 1921), Prince gives an account of the B. C. A. case, in many ways more representative of multiple personality. A more recent case is reported by S. I. Franz, *Persons One and Three* (New York, McGraw-Hill Book Co., 1933). An excellent discussion of the problems raised by multiple personalities, both for abnormal and general psychology, occurs in Ch. 18 of Gardner Murphy's *Personality—A Biosocial Approach to Origins and Structure* (New York, Harper & Bros., 1947).

CHAPTER 9

PSYCHOTHERAPY: BASIC METHODS AND PRINCIPLES

One can turn to the topic of psychotherapy with a real sense of getting down to brass tacks. Most of what we know about neurosis, and a good deal of what we know about simpler maladjustments, was learned in the course of trying to bring about cure. If one sat down to devise a logical plan for understanding psychogenic disorders, one would probably start with a program for finding out the facts by observation and experiment, after which the knowledge could be applied to the practical art of therapy. Historically, the process moved in the opposite direction. Practical art preceded science and became the means whereby it was possible to accumulate a body of knowledge. What we know about psychogenic disorders has come largely from the observation, the wisdom, and the blunders of people who tried to cure them.

We are thus really getting down to brass tacks—that is, to the source of most of our information—when we reach the topic of psychotherapy. But we are getting there in an even more important sense: we now face the question of *what can be done* to help the people whose misfortunes and distress have occupied us so unceasingly up to this point. Maladjusted individuals are not as happy and effective as they might be. Neurotic individuals fall still further short of developing their full potentialities. This is a tragedy both for the individual and for society. We now begin to consider how maladjustments and neuroses can be rectified. How can a person be restored to psychological health?

Preliminary Considerations

Our plan for describing psychotherapy is to consider first (in this chapter) the basic methods and basic processes, then to take up (in the next chapter) the technical aids that can be used to hasten treatment and the adaptation of the basic processes to special purposes such as work with children. Before we begin our survey, however,

it will be well to examine some more general problems of psychotherapy.

The Meaning of Psychotherapy.—First let us be clear as to the limits of our discussion. Psychotherapy has a distinct and restricted meaning. It does not mean everything that a psychiatrist does to his patients. It does not mean everything that is done to maladjusted, neurotic, and psychotic individuals. We need to bound it carefully on two sides: first, to mark it off from therapy that is essentially somatic or that consists of practical management; second, to distinguish it from attempts to influence people by educative or persuasive methods.

(1) As we saw in our introductory chapters, disordered personal reactions can spring from two classes of events: the psychogenic and the somatogenic. Treatment naturally falls into the same two categories—psychotherapy and somatotherapy. The latter term is not in general use. We mention it here simply as a means of emphasizing the fact that psychotherapy has a restricted meaning. Some patients with fairly severe disorders are benefited by techniques such as shock treatment or brain surgery. With epilepsy and certain other disorders, the control of diet and the application of specific medicines may be indicated. All of these measures are therapy but not psychotherapy. In some cases a great deal can be done in the way of practical management. Placement and care in a hospital is the outstanding example, but such steps as a change of work, removal from an uncongenial family situation, or, in the case of children, the finding of suitable schools, camps, or foster homes may be of substantial importance. Even these steps are not, strictly speaking, psychotherapy. This term should be limited to those methods which depend on a direct interaction between patient and therapist. Psychotherapy operates on the learning process rather than on the body tissues or on the environment. Its benefit lies in the relearning or new learning that the patient is able to accomplish through talk with the therapist and through the ensuing personal relation.

(2) On the other side, psychotherapy must be distinguished from the vast array of activities that go under the headings of education, persuasion, and exhortation. Teachers and ministers, speakers and writers, propagandists and advertising men all operate through psychological channels and attempt to influence the learning process. There is no doubt that such methods are psychological,

but there is *no* point in calling them therapy. When a person acts in the capacity of therapist, his goal is not to dominate or persuade but simply to restore a state of good health. It may seem odd to speak of *health* when we have been so explicit that neither maladjustment nor neurosis is a disease. The concept of psychological health is in widespread use, however, as the equivalent of *adjustment,* which would be the more precise term. A therapist has nothing to sell and nothing to preach. He aims to assist the patient to reach a state of adjustment.

Forces at Work in Psychotherapy.—It is important to realize at the outset that psychotherapy operates with very small forces. Its aim is to bring about a process of growth in the patient, and this process can only be encouraged, not hurried or pushed or performed by the therapist for the patient. Much of our everyday thinking about medicine is colored by the dramatic achievements of modern surgery. In an operation lasting an hour or two, the surgeon can remove the nucleus of infection and put the patient on a rapid road to recovery. It is evident that no comparable means exists for removing a neurotic nucleus. What originates as a learning process can be rectified only by a new learning process. Thus the psychotherapist has at his command no means of making the kind of radical intervention that occurs to bodily processes in surgery. His intervention is less radical even than the ordinary giving of medicines and drugs. He has to promote a process of growth, and all he can do is to provide favorable circumstances.

If the forces at his command seem slight in comparison with those often available in the cure of the body, they seem slight also when put alongside the forces that created the disorder and that still may be acting to sustain it. Perhaps for twenty years the parents of the patient created conditions favorable to the development of a neurotic way of life; now the therapist comes in with the assignment of creating conditions to undo all that learning. Perhaps the patient's contemporary situation is full of exasperating frustrations; the hour in which the therapist tries to assist growth has to compete with eight hours during which a tyrannical boss keeps the patient pressed back against his neurotic anxieties. There is certainly nothing remarkable in the fact that psychotherapy sometimes fails and almost always takes a long time. The wonder is that it ever succeeds.

But the psychotherapist has one trump card, and if he plays it skillfully he need not lose out in competition with these other forces. He is in a position to establish a unique relationship with the pa-

tient, one that is unusually favorable for new learning. The patient is unhappy and discouraged. Whatever steps he has taken to help himself have proved of no avail. Everyone is tired of hearing about his problems, tired even of his having problems. The relation with the therapist fills him again with new hope. This time his listener is a medical man or someone similarly trained, uncommitted to any goal save health. He is presumed to be wise in human suffering and experienced in setting it right. He listens to the intimate secrets, the fears and hopes and loves, and without blaming the patient for any shortcomings he indicates that these secrets are really important. They interest him, he takes them seriously, they are the seat of the trouble and also of possible cure. One looks in vain among the other relationships of life for just this combination of qualities. The pastor is too strongly identified with standards of right and wrong. The friend will not listen very long without giving nervous reassurance or talking about his own troubles. The loved one may listen, but cannot be counted upon to give authoritative advice. No one hits the happy combination of interest, detachment, and knowledge that characterizes a skillful psychotherapist. It is this unique atmosphere that supports the patient's growth.

Corrective Emotional Experience.—One of the commonest errors in regard to psychotherapy is to think of it as an intellectual process. It is widely conceived as a replacing of what is unconscious by what is conscious, as an increasing of the patient's insight, or in other ways that suggest a quite false supremacy of intellect. This outlook implies that maladjustment and neurosis result from lack of understanding. As soon as the patient perceives the folly of his ways he will voluntarily mend them. Along with this error goes a still more serious one: the belief that insight and understanding can be *given* by the therapist to the patient. Let the therapist make his diagnosis as rapidly as possible, convey his results to the patient, point out the maladjustive behavior, indicate the neurotic trends, explain the inferred neurotic nucleus, and the patient will go home completely cured—such is the implication.

It is unfortunate that such theories about psychotherapy are not correct. Often the doctor can make a pretty good reconstruction of the patient's difficulties in a fairly short time. Sometimes a single consultation reveals most of the trouble and suggests the whole course of development that led up to it. Much time would be saved if this knowledge, conveyed directly to the patient, were capable of curing the disorder. It is instructive to consider what happens when

a therapist, either because he is poorly trained or because he is naturally impatient, unsympathetic, and domineering, puts this theory into practice. The patient leaves the office and does not return. Perhaps he tells his friends that the doctor is a fool, sarcastically quoting some of the ridiculous notions the doctor had about him. Perhaps he retires into a deep state of gloom and guilt because he cannot do away with the foolish behavior that has been revealed to him. But in any event the symptoms and sufferings remain. Mere intellectual insight proves worthless, if not harmful.

Psychotherapy does not take place primarily in the sphere of intellect. Its basic principle is, as Alexander expresses it, "to re-expose the patient, under more favorable circumstances, to emotional situations which he could not handle in the past." The patient must "undergo a corrective emotional experience," and his "intellectual understanding of the genetics has only an accessory significance." [1] Psychotherapy is designed to bring about learning, but it cannot get anywhere by the lecture method. Its sphere of operation is the patient's feelings.

Corrective emotional experience is essential even for the simpler maladjustments in which anxiety is not the main problem. The maladjusted person may perceive his trouble without *knowing how* to act differently. As we pointed out earlier, such a person is unpracticed in adjustive behavior. In spite of its conflicts, his familiar way of life has been rewarded and he has not learned to act in other ways. He has to learn, through corrective emotional experiences, that it is possible to behave differently and that such behavior leads to a more rewarding state than he has attained before.

If anxiety plays an important part in the disorder—if it is neurosis rather than just maladjustment—there is the added difficulty that the patient does not *dare* to alter his behavior. He is afraid to change lest he come into contact with acute danger. Only the outside observer knows that the danger is something long outgrown. To the patient himself it feels real and it blocks change. For the neurotic patient the most important corrective emotional experiences are those that permit a relaxing of defenses. Neurosis takes its start when threat is present and when conditions are just right to freeze some of the defenses. To correct this situation the defenses must be unfrozen. The patient must gradually feel all the anxiety derived from his earlier history, react less defensively, and thus learn to appraise the old dangers at their true current value. When

[1] Alexander, F., French, T. M., et al., *Psychoanalytic Therapy*, New York, The Ronald Press Co., 1946, pp. 66–67.

neurotic trends have invaded the whole personality and a complex protective organization has been built up, it requires a long series of corrective emotional experiences to bring about a return to health. The principle is no different, however, from what takes place when a recent highly traumatic incident is liquidated by narcosynthesis.[2] The patient resumes contact with the memories of his fright and relaxes his defense. Strengthened by the presence of the therapist, he dares reappraise the danger and finds that it can be tolerated without resort to the crippling mechanism of repression. The crucial thing in treating a neurosis is to create conditions in which the patient will *dare to reappraise his anxieties and relax the defenses.* This is for him the truly corrective type of emotional experience.

Choice of Patients for Psychotherapy.—Whether psychotherapy should be attempted in a given case of psychogenic disorder depends on an estimate of the patient's chances of developing and profiting by corrective emotional experiences. Often the decision is not an easy one. The external situation sometimes plays an important part; at other times the decision turns on the patient's apparent capacity for change. There is considerable agreement among the various writers who touch upon this topic. This enables us to discuss it without serious misrepresentation in a series of condensed statements.[3]

(1) First there is the question of motivation or need. As Rogers expresses it, the patient must be "under a degree of tension, arising from incompatible personal desires or from the conflict of social and environmental demands with individual needs."[4] Discomfort and tension must be great enough to overbalance the stress that inevitably arises during treatment. When patients seek help of their own accord, this first condition is usually met, but when they have been sent for treatment the therapist must judge carefully whether their own motives will become enlisted. Psychotherapy is a learning situation, and the factor of motivation cannot be neglected.

(2) The patient's age necessarily enters into the calculation. With children there are special problems, to be considered later, but otherwise it is generally true that youth is an advantage. Alexander says, "Since treatment usually implies some change in life situation,

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[2] See above, pages 237–238.

[3] See especially Rogers, C. R., *Counseling and Psychotherapy*, Boston, Houghton Mifflin Co., 1942, pp. 53–80; Hendrick, I., *Facts and Theories of Psychoanalysis*, New York, Alfred A. Knopf, 2nd ed., 1939, pp. 238–247; Alexander, F., French, T. M., et al., *Psychoanalytic Therapy*, *op. cit.*, pp. 96–106.

[4] Rogers, *op. cit.*, p. 76.

advanced age may reduce this potentiality and make treatment more difficult. Advanced age is not an absolute contra-indication; on the other hand, prognosis is better for the young who have a far greater opportunity for change." [5]

(3) Intelligence cannot be ruled out, inasmuch as psychotherapy proceeds through the medium of conversation and requires a coherent reporting and synthesizing of one's experience. Feeblemindedness would bar psychotherapy, and there is considerable doubt about the dull-normal range.

(4) The presence of important organic difficulties and instabilities makes psychotherapy problematical. The organic psychoses, epilepsy, brain injuries, neurological disorders, etc., obviously cannot be cured by it. The role of psychotherapy in psychosomatic disorders, delinquent and psychopathic conditions, and the functional psychoses will be discussed in the later chapters dealing with these topics. Its major sphere of operation is in dealing with maladjusted personalities and with neuroses. That is our reason for discussing it at this point rather than later in the book.

(5) Even within its major sphere, psychotherapy may not be indicated for all cases. An elusive factor variously known as adaptability, ego potentiality, and capacity to cope with life must be weighed as well as possible in estimating the chances for success. Hendrick refers to this factor as "strength of character" or, more precisely, "the capacity to endure an excess of emotional tension, to strive for reasonable goals in spite of inner difficulties which tempt one to accept the decision, 'I am just made that way,' as an excuse for withdrawing from struggle." [6] He adds, "The patient's capacity to fight the neurosis is a great asset, and it varies as greatly among individuals as does the degree of neurosis itself." [6] Obviously it is no mean task to estimate such a capacity beforehand. The patient's life history may give substantial evidence, but often the decision cannot be made without a trial of psychotherapy.

(6) The actual circumstances surrounding the patient have to be carefully assessed. He may be burdened by inescapable responsibilities, and these may contribute heavily to his trouble. Sometimes a change of attitude on the patient's part is helpful, even when circumstances cannot be altered. On the whole, however, a patient

[5] Alexander & French, *op. cit.*, p. 97.
[6] Hendrick, *op. cit.*, pp. 240–241.

must be in a position to change those circumstances in his life that contribute substantially to his disorder.

Again it is appropriate to mention that psychotherapy is a learning situation. The patient must be sufficiently motivated to learn, he must have the stability and capacity necessary for new learning, and he must be free from circumstances so overwhelming that they cancel any good that might come from the new learning.

Several of our points are illustrated in a case described by Alexander, which resulted in a decision *against* psychotherapy.[1] A business man of sixty had a phobia that prevented him from leaving his house and garden unless accompanied by his wife. The phobia began after he had sustained a bad sunburn which he referred to as sunstroke. The patient was by several years the senior of three partners in a successful business. He had become decreasingly active as head of the business, but by agreement he was to continue receiving his share of the profits. It was evident that the younger partners found it convenient to shelve in this way the aging member of the firm. The patient had given his whole life to the business, building his self-esteem on its success, and developing no side interests to make retirement attractive. He was quite unable to face the idea that he was now less useful and must surrender his place to younger men. With vehemence, and to the point of incoherence, he assured the therapist that the younger partners could not run the business without him. With equal vehemence he denied any possible origin of his phobia other than the sunstroke. These massive resistances suggested that the patient would have great difficulty in reaching any corrective emotional experiences. His income was secure, his business situation unchangeable, his phobia made it unnecessary for him to confess his failing powers as a business leader. Under the circumstances the neurosis could be looked upon as a good bargain, the best the patient was likely to be able to make.

Non-Directive Psychological Counseling

We shall begin our study of psychotherapeutic techniques with one of the newest developments. This choice is determined by the simplicity and clarity of the process. Once we grasp what goes on in non-directive counseling, it will be easier to understand the more complicated technique of psychoanalysis as developed by Freud and his followers. But we need to study the various processes that enter into full or standard psychoanalysis before we can properly assess

[1] Alexander & French, *op. cit.*, pp. 99–101.

the briefer procedures recently set forth by Alexander, French, and their co-workers at the Chicago Institute for Psychoanalysis.

General Character of Psychological Counseling.—The term *psychological counseling* refers to a variety of rather similar activities. It is easier to characterize them negatively than positively. They are not psychoanalysis with its group of specialized procedures: free association, interpretation, transference, and the analysis of dreams. They do not use special aids such as hypnosis, narcosynthesis, or psychodrama. They rely simply on conversation between patient and therapist. This may take the form of questions and answers, reconstruction of past history, or discussion of current difficulties. It may consist of an emotion-laden monologue by the patient, or at the opposite extreme the therapist may have to take the initiative in making the patient speak at all. The therapist may offer encouragement, give information, give advice; these more positive actions on his part still lie within the very general meaning of psychological counseling.

Many psychiatrists work in this unspecialized fashion. They adapt the conversation to the peculiarities of the individual patient and to the particular problems that arise. In the hands of an experienced and skillful therapist, this freedom and flexibility is an advantage. The therapist does a little of this and a little of that, depending on the circumstances that arise. Often the patient is bettered, but neither he nor his doctor knows just what it was that produced the change. The advantages are balanced by certain risks. The inexperienced and unskillful therapist may do a little of this and a little of that at the wrong time, and he is apt to discover his blunders only through their bad effect on the patient. The characteristic error of inexperienced therapists is to move too fast for the patient. Interpretations are offered and advice is given before the patient is ready to assimilate them. The therapist is constantly tempted to substitute his own insights and suggestions for a true corrective emotional experience in the patient. The very flexibility of most psychological counseling, an advantage in skillful hands, makes it hard for the young therapist to learn his art except through trial and error at the expense of the patient.

The same flexibility and lack of system makes it hard for the student of psychology to grasp the nature of the therapeutic process. It makes it hard to build up scientific knowledge about this process. We need to know what are the crucial events that make for corrective emotional experience. A substantial contribution to this end has

recently been made by Carl Rogers, who has taken the lead in securing, analyzing, and publishing stenographic transcriptions and phonographic recordings of therapeutic interviews. The advantages of such records need scarcely be mentioned. For the first time it becomes possible for the therapist to go back and see what he said, under what circumstances he said it, and what effect it had on the patient. In addition to this technical advance—and largely because of it—Rogers has succeeded in isolating what he considers to be the central type of event or crucial process in psychotherapy. He has worked out a procedure whereby this crucial process is utilized systematically for all it is worth, without interference by other processes.[8]

The Non-Directive Method.—Rogers gives his method the title of *non-directive counseling*. The reader should be clear that other workers often employ directive tactics, and that the technique now to be described is simply one form of psychological counseling. Rogers refers to the people who consult him as clients rather than patients. This is appropriate, inasmuch as his counseling technique can be usefully applied to many problems not serious enough to qualify as sickness. More consistently than others he believes that the client should always take the lead in the therapeutic process. The counselor should not intervene by asking questions, by giving information or advice, or even by directing the course of the conversation. His goal is to help the client grow in the client's own directions, and his intervention is limited to removing whatever emotional obstacles lie in the client's path. Even when we speak of "removing obstacles" we use an expression that sounds more active than the behavior which Rogers considers ideal in a counselor. The client removes the obstacles; the counselor merely serves to make this possible. The principle of not directing the client is adhered to with the utmost consistency.

Rogers maintains that when the non-directive principle is faithfully and skillfully followed, events take a fairly regular course. The whole therapy is "an orderly, consistent process, even a predictable process in its major outlines."[9] He maintains further that when the treatment is properly conducted, "the client is likely to be able to handle his own affairs after six to fifteen contacts," although

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[8] Rogers, C. R., *Counseling and Psychotherapy*, *op. cit.*, 1942. This book contains the verbatim record of a treatment that lasted for eight sessions. Other transcribed case reports are given in Snyder, W. U., *Case Book of Non-Directive Counseling*, Boston, Houghton Mifflin Co., 1947.

[9] *Ibid.*, p. 44.

here there will be wide individual variations.[10] We are dealing with a therapeutic process, then, which is held to be regular, predictable, and fairly short; all this in spite of the fact that the client leads the way and that the counselor practices a minimum of intervention. Before we consider the regular course of events, we must understand precisely what the counselor does. In spite of his passive non-intervention he is, after all, an indispensable part of the process.

Recognition of Feelings.—The counselor uses one therapeutic tool, and one only. This tool is called the acceptance, recognition, and clarification of feeling. Apart from creating a therapeutic relationship such as we discussed earlier in the chapter, a relationship characterized by a warm and friendly interest and a permissive, noncensorious attitude, the counselor confines himself to a single activity. He simply re-states what the client has just said, but he re-states the feeling side of it rather than the content. This is not as easy as it sounds. All our habits of conversation are built on the idea of responding to content. If someone says, "I didn't have a good time at *X*," a very natural social response would be, "Oh, didn't you? I thought it was a fine place when I was there." To borrow one of Rogers' examples, if a student says that his study habits are wrong and that he is not really so stupid as his grades indicate, it is natural to ask him what his grades are. In both cases the response is made to content, not to feeling. The respondent talks about the objective characteristics of *X* or the objective grades on the student's report card. It is quite another matter to respond to the feeling that was expressed: the first person's dislike of *X*, the second person's disappointment at his grades and concern lest they be taken as the true measure of his ability.

The acceptance, recognition, and clarification of feeling is the crux of the counselor's art. It is a real art and a real skill. The counselor must be able to perceive and follow the feelings that are being expressed in each statement, a thing by no means easy in itself and certainly impossible if his own feelings get in the way. When the counselor is successful in recognizing feelings, the client finds himself in a unique situation. The feeling element in his conversation, the thing that really matters to him, is constantly appreciated and is clearly the thing in which the counselor, too, is interested. Successful recognition of feelings thus leads to the expression of more and more feelings. The client has probably never before had a listener who paid so much attention to his feelings. As a result,

[10] *Ibid.*, p 232

it often happens that within a single hour he talks about things he has never told to anyone else.

The consistent use of just this one therapeutic tool distinguishes non-directive counseling from other forms of psychological counseling in which advice, information, interpretation, and practical assistance are intermingled. The Rogers technique deserves its title of "non-directive" and justifies its claim to be completely "client-centered." The feelings, interests, values, goals of the therapist are completely excluded; those of the client dominate the whole procedure. At times the counselor is almost amusingly evasive. He replies to the client's anxious queries by acknowledging that the client *feels anxious, or he parries a request for advice by recognizing that* the client would like someone to settle the question for him. But he sticks to his non-directive principles and the client soon learns that he himself must take all the initiative.

Course of Treatment.—The regular series of events which Rogers claims to be characteristic of non-directive counseling begins with a process called *structuring the counseling relationship.* This consists of explaining to the client that the hour belongs to him, that he can talk about what he pleases, that the counselor has no *preconceived answers to his problems, that benefit may result from* talking everything over together. This process of structuring may have to be repeated many times, even well along in the series of interviews. It is not really what the client expects or wants. Especially if he is distressed and suffering he wants a greater display of reassurance and sympathy than he is likely to get from the counselor. Rogers shows, however, that very often the giving of reassurance is valueless because the client is not really able to accept it. Above all, every client, at one time or another, tries to get the counselor to give advice and solve his problems for him. Restructuring must be *often repeated.*

As the counselor succeeds in establishing an outflow of feelings, the client at first uses the opportunity to pour out his *negative feelings.* He gives vent to his doubts, guilts, inferiorities, anxieties, and hostilities. The counselor steadfastly accepts, recognizes, clarifies. When the negative feelings have been fully expressed, there occurs "one of the most certain and predictable aspects of the whole process," the faint and tentative expression of *positive impulses.* Social feelings, love, self-respect, the desire to be mature make their appearance in the client's conversation. When these are duly clarified there begin to be distinct signs of the *achievement of insight.* Hav-

ing expressed so many feelings on both sides of the ledger, the client begins to see himself in a new light. He begins to talk about possible decisions and courses of action. Before long one witnesses the *initiation of positive actions,* possibly minute but generally significant. The timid high-school boy takes the step of going to a dance; the formerly frantic and resentful mother devises a way of showing affection and respect for her child; the prim and prudish young girl comes to the decision of bobbing her hair as the other girls have done. The first positive actions may be hardly more than symbolic. They may be initiated only after a series of attempts to persuade the counselor to sanction or advise them. But in any event they are important because they represent just the kind of step the client has been unable to take before.

As the client becomes increasingly able to take these positive actions, he begins to experience a decreasing need for the counselor. The relationship undergoes a subtle change. The client shows less strain and more confidence; he feels that he is working with the counselor on a plane of greater equality. He begins to speak occasionally of the approaching end of the relationship. The closing of treatment is a delicate matter that must be correctly timed. At first the client is apt to be a little terrified at the prospect. This feeling reappears when an actual date for the last meeting has been set. Sometimes the client feels worse again at the last meeting, but this may betoken nothing more than a wavering of confidence at the prospect of losing the relationship that has resulted in a definite improvement. Usually the client is allowed to depart with the assurance that he can come back if he needs to do so.

Changes Effected in the Client.—While success is of course not universal, there is no doubt that counseling according to this plan makes changes in the client. Although nothing is done except to recognize and clarify his feelings, although no drastic interpretations are given and no attempt made to recover events of importance in the previous history, clients emerge from the experience with a sense of greater self-confidence and greater insight. They have achieved a corrective emotional experience through expressing their feelings and having these feelings made explicit for them by the counselor's constant recognition. The counselor has never told them what was wrong with them. By reflecting back upon them the feeling implications of each thing they have said, he has given them the chance to find out for themselves at least some of the things that are the matter with them. Change occurs, and it occurs in a fairly short

time. We must put the question, therefore, whether the change is profound, whether it is enduring, whether the accompanying insights have a lasting effect on future development.

To look first on the bright side, we take one of Rogers' most successful examples, the case of sixteen-year-old Barbara.[11] During her junior year in high school this girl had what was described as a "nervous breakdown," characterized by "fears and sensations of an overwhelming sort which were very troubling." Her case appears to qualify as at least a mild neurosis. The root of her difficulty was discerned to be in an overstrict religious background and in a too strong identification with her scholarly father. Sixteen sessions of non-directive counseling brought about the following changes in her insight, accompanied by appropriate positive actions. (1) She passed from rather fantastic intellectual ambitions and an intense desire for perfection to a more realistic acknowledgment of what any one person, and herself in particular, would be able to achieve. This progress did not end in a sad sense of limitation but rather in a cheerful acceptance of things as they are. (2) She changed from an "ultra-saintly person, afraid of any social instincts, to a person who wanted to get along with and enjoy other young people." Her social interests were very greatly expanded. (3) She had always "hated sweetheart stuff," but as the interviews progressed she was first able to acknowledge a distinctly affectionate interest in a certain boy friend, then later to appreciate the "puppy-love" character of this infatuation, recognizing its shallowness compared to what she really wanted. (4) Starting from the position that she wanted to be a man and greatly disliked children, she gradually came to feel that the role of woman and wife would not be objectionable. Her dislike of children began to evaporate.

These are large and important changes, having the effect of bringing the girl out of a blind alley of serious maladjustment into the main path of healthy development. Considering her youth and her apparent capacity for change, there is little reason to doubt that the benefit would be permanent. Unfortunately the amount of change does not always seem to be so large as it is in this example. When one studies the case of Herbert Bryan, for instance, a neurotic in his late twenties, whose eight interviews are printed verbatim in Rogers' book,[12] there is room for considerable doubt as to whether the improvement was more than transient. Many problems clearly touched upon in the client's conversation were as un-

[11] *Ibid.*, pp. 185–194, 211–213, 223–228, 250–251.
[12] *Ibid.*, pp. 261–437.

solved at the end as at the beginning, and it is hard to feel confident that the brief spurt of self-assurance shown in the last two interviews would carry him through future difficulties. In contrast to Barbara, the course of whose life appears to have been set right by non-directive counseling, Herbert Bryan, older and with a more stubborn neurosis, sounds as if he left the counseling relationship very much as he came to it.

Limitations of Non-Directive Counseling.—The question of the permanence of change will ultimately be settled by follow-up studies of clients. The whole non-directive procedure is so new that one cannot as yet put it to this crucial test. The method is widely appreciated for its clarity, its consistency, and the fact that it is unlikely to do the client any harm. It is all too easy during a therapeutic interview to mix up the principles one is employing and thus to destroy the efficacy of any of them. Thus an inexperienced or careless therapist may proceed for a while non-directively, thus affirming his respect for the client's ego, then be tempted into an interpretation which says in effect that he does not quite trust the client's ego, then hope to go back to the non-directive atmosphere just as if he had not wounded the client's ego. Rogers has shown how this kind of confusion can be avoided. He has shown how to proceed consistently on the basis of respecting the client's ego and letting him take all the initiative. Whatever else it accomplishes, this work should have a profoundly clarifying effect on the training of future therapists, who should hereafter be able to realize much more clearly what they are doing at each moment, even if they decide to use other therapeutic tools besides the recognition of feelings.

But this desirable effect of Rogers' work should not overshadow the real limitations that begin to be apparent in non-directive counseling. The chief of these are pointed out in an article by Thorne, who considers non-directive methods "definitely not the complete answer to all therapeutic problems, even in mild personality disorders." [18] Thorne laments the failure to obtain any kind of history, pointing out that the counselor cannot be sure he has really uncovered the major problems if he does not permit himself to ask questions about the patient's past life. Furthermore, what facts the patient elects to reveal are not checked by corroborative evidence from other sources. As a result it is to be questioned whether a "comprehensive evaluation of the dynamic mechanisms operant in the total person-

[18] Thorne, F. C., "A Critique of Non-Directive Methods of Psychotherapy," *Journal of Abnormal and Social Psychology*, 1944, Vol. 39, pp. 459–470.

ality" has been made. Not enough is done to prevent the treatment from concentrating on one small and secondary portion of the patient's difficulties. Some of the published reports justify Thorne's remark that the patient "browsed along the edges of his problem, coming to grips with it only in terms of a few partial insights." Another critic, Lowrey, joins Thorne in describing the method as rigid and inelastic.[14] There is failure to follow up significant leads in the patient's conversation, failure to work out problems thoroughly, and an unwillingness to give advice and counsel even when these would be distinctly helpful.

These criticisms cannot be overlooked. Non-directive counseling works on a client in just one way and neglects the possibility of using other approaches in a wise and timely fashion. What effect would it be likely to have on a fairly serious neurosis such as those we described in the last chapter? There is nothing in the procedure to prevent a patient from avoiding contact with his really important sources of anxiety. He can always change the subject if the conversation touches upon them too closely. Defensive tactics of this kind can be penetrated only by using stronger measures than the recognition of feeling. Such measures need not be highly directive. They are stronger in the sense that they produce more profound corrective emotional experiences. These measures have been most painstakingly worked out in Freudian psychoanalysis, to which we now turn.

Standard Psychoanalysis

It is not strictly correct to speak of any one procedure as standard psychoanalysis. Each worker who uses the method originally devised by Freud adapts it somewhat to his own personality and to the very different problems offered by his patients. Freud once likened psychoanalysis to chess, in which only the opening moves and a few typical concluding situations can be taught. With allowance for all the variation that must necessarily exist, however, we shall still be justified in referring to those forms of psychoanalysis as standard which have these characteristics: (1) the systematic use of free association, interpretation, and transference neurosis, and (2) the goal of uncovering and resolving the major emotional problems of the patient's childhood. By standard psychoanalysis, then, we really refer to the *full-length* variety, much as it was originally set forth by Freud.

[14] Lowrey, L. G., "Counseling and Therapy," *American Journal of Orthopsychiatry*, 1946, Vol. 16, pp. 615–622.

In contrast to non-directive counseling, standard psychoanalysis takes a very long time. Treatment is usually scheduled to take place for one hour a day, five days a week. In spite of this rigorous schedule, it is rare for a psychoanalysis to be completed in less than one year, it is common for the treatment to last two or three years, and in some cases improvement is reached only after periods of five or more years. These figures become startling when we realize one of their implications—that a busy psychoanalyst who used only the standard technique would have time in his whole professional career to treat barely more than a hundred cases. When we consider, however, that psychoanalysis is intended as a therapy for the neuroses, and that a neurosis is the end result of a series of developments starting in childhood, it seems less remarkable that treatment should take such a long time. Many years of learning go to make a neurosis. Unlearning and relearning cannot take place overnight. We should remember also that briefer methods of psychoanalysis could scarcely have been discovered without the patient full-length work of Freud and his followers.

Free Association.—Psychoanalysis is distinguished from psychological counseling in the first place by its use of the specific technical tool of free association. The use of this tool does not imply disregard for recognition of feelings, which we saw was the special device used in non-directive counseling. Quite the contrary: free association is intended to promote the recognition of feelings by both patient and physician. It may even be considered a radical device for achieving this goal. In so far as the patient is successful in giving free associations, everything he says is governed by an emotional logic rather than a conscious and critical logic.

The early sessions of psychoanalysis are devoted to the taking of a case history. When this is accomplished, the patient is instructed in the technique of free association. Alexander summarizes what is communicated to the patient in the following words:[18]

> The patient is requested to report everything that occurs to him in the analytic session. He is asked to verbalize everything that occurs to him in the original sequence and form without any modification or omission. He is asked to assume a passive attitude toward his own trains of thought; in other words, to eliminate all conscious control over his mental processes to which he gives free rein and merely report them.

This technique tends to heighten the activity of feeling, including feeling that is usually suppressed. As Alexander puts it, "once the

[18] Alexander, F., *The Medical Value of Psychoanalysis*, New York, W. W. Norton & Co., 1937, pp. 40–41.

patient abandons the conscious control and direction of his ideas, the train of free spontaneous associations is guided more by the repressed material than by conscious motives." Freud's own account of the instructions is somewhat more vivid: [16]

> We warn him expressly against yielding to any motive which would induce him to choose or exclude any of his thoughts as they arise, in whatever way the motive may be couched and however it may excuse him from telling us the thought: "that is too unpleasant," or "too indiscreet" for him to tell; or "it is too unimportant," or "it does not belong here," "it is nonsensical." We impress upon him the fact that he must skim only across the surface of his consciousness and must drop the last vestige of a critical attitude toward what he finds.

The most interesting fact about free association is the obstacles it encounters. It was through a study of these obstacles—the silences, blockings, embarrassments, and anxieties of the patient which came to be called resistance—that Freud built up his concept of repression. It is worth while to point out and expressly reject a common misunderstanding about free association, the idea that it opens a highway over which repressed memories and fantasies roll smoothly into consciousness. No such miracle takes place, and the maximum effect that can possibly be attributed to the free association technique is a small reduction in the efficacy of habitual defenses, a weakening of the top layer of conscious control. Small as this change may be when thought of in terms of behavior dynamics, it is just enough to upset the delicate balance of personality organization in favor of hidden feelings. If repressed material starts to ooze upward, there is now an appreciable interval before it is met by the customary defenses, a precious moment during which the physician, if not the patient himself, can catch a glimpse of both parties to the conflict.

An Example of Free Association and Resistance.—Free association and the resulting resistances play such a central part in psychoanalysis that we may profitably stop to examine a brief example. The following excerpt gives the opening remarks of a college student during his first hour of free association. After hearing the instructions from the examiner (E) the subject (S) proceeded as follows:

> *S:* The thing uppermost in my mind at present is the hour exam I just had. Rather easy exam. I wasn't feeling particularly brilliant this morning. I don't know whether I made any mistakes or not. Quite a bit hinges on this exam because I want to get a scholarship for the second semester. If I get it, I will be able to carry through my work

[16] Freud, S., *General Introduction to Psychoanalysis*, New York, Boni & Liveright, 1920, p. 249.

to my Master's degree. If I don't, I don't believe I'll be able to make it. It's hard to borrow money these days. Nobody has much to lend. Another thing, it is hardly worth while to borrow much to put you through school because you run yourself into debt that you can hardly ever pay off. I knew a girl who went to State College and she has been out four years and she owes $1,700. She is working in a department store for $18 a week. Her chances of clearing up the $1,700 are rather small. I would like to keep on at college though because with the kind of work I get here I will get the kind of job I want. I am particularly interested in research work and this course that I am taking fits me for that.

E: I am afraid you are telling me a story rather than telling me what is coming into your mind. (After the first few sentences *S* has been giving a reasoned statement of his financial position. This is contrary to instruction and hence constitutes the first manifestation of resistance.)

S: I have an experiment this afternoon and I'm darned if I know what it is about. (This remark may contain a double meaning: *S* is wondering what the present session is about, as well as the afternoon's experiment. But he has abandoned his first form of resistance, the next topic being a good example of free associations.)

S: I wonder how my Dad is getting along. He is on his last legs, so to speak. Dad and I never got along very well. I remember one time when I was a youngster I was supposed to be watching some cows that were grazing near an orchard. I got so interested in reading that I forgot about the cows and they entered the orchard and ate some of the fruit off the trees. Dad was angry as the devil. He came around the corner and made a bee-line for me and I ran and he, being the old backwoods type, took a healthy swing at me with his foot as I went by and he slipped and nearly broke his arm on the wet grass. (At this point *S* turned way around on the couch to look at *E*.)

E: What did you think then when you turned around?

S: The reason I turned around was to look directly at you.

E: Why did you want to look directly at me?

S: If you are trying to put over a point and look directly at the person it is generally better. In sales work, for instance . . . (Again *S* has departed completely from free association to the idea of making a point and selling an argument. This is another form of resistance, similar to the first. At the same time he has dramatized his feeling toward *E*. Doubtless annoyed because *E* corrected him on account of his first lapse from the fundamental rule, he thinks of an earlier incident in which he lapsed from duty but eluded his father's wrath, and indeed turned the tables by being the cause of his father's hurting himself. This line of thought, however, awakens so much anxiety that he has to turn around to make sure that *E* is not getting angry. At this point *E* again reminds *S* of the fundamental rule.)

S: (Long pause.) I am to report what comes into my mind and nothing seems to come in. I don't care much for your paintings that you have, or whatever they are.

E: What don't you like about them?

S: I have disagreeable memories of paintings of that type. The framed diploma is a plain-looking thing to have on the wall. Is that yours, by the way?

E: Tell me what comes into your mind about it.

S: I thought it might be yours, but when I look at the inscription it says "M.D.," so I guess that can't be yours. (For a moment *S* appears to free associate, but he has chosen another method of resistance, that of describing objects in the room. Almost at once his feelings betray themselves: he criticizes the objects, and leads up to a very neat indirect way of saying to *E*, "You are no doctor.") [17]

The subject, in this case, was not a patient but a participant in a study of personality. He was therefore treated less gently than would be advisable in the first session with a troubled neurotic individual. The excerpt nonetheless illustrates the difficulty of abandoning one's conscious vigilance. It shows the resistances and even anxieties that creep into the free associative process almost as soon as it is instituted.

Interpretation.—Free association is the first distinguishing mark of psychoanalysis. The second point that distinguishes it from psychological counseling is the systematic use of interpretation. It is true that interpretation enters to some extent into many therapeutic procedures, although it is scrupulously avoided in non-directive counseling. In psychoanalysis, however, it is the outstanding means used to bring about a corrective emotional experience. As Hendrick puts it, "The analyst has become essentially a technician in reducing unconscious resistance. The chief implement in his technique is interpretation."[18] Hendrick makes it plain that interpretation is not used to instruct the patient, but rather to bring about a new feeling on his part. "The role of the analyst as interpreter," he continues, "is not to paraphrase what the patient reports, but to indicate at appropriate moments what he is *not* reporting."

These words neatly draw the contrast between psychoanalysis and non-directive counseling. The counselor does little more than paraphrase, though with a selective emphasis on the feeling aspect of what has been said. The psychoanalyst deliberately tries to point

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[17] This case is fully described in Murray, H. A., *Explorations in Personality*, New York, Oxford University Press, 1938, Ch. 7. See especially pp. 639–640.

[18] Hendrick, I., *Facts and Theories of Psychoanalysis, op. cit.*, p. 215.

out to the patient that he is using a defense, that he is shifting away from a topic that has occurred to him, or that he is apparently trying to conceal something. This is the specific implement that psychoanalysis uses against the patient's defenses. Free association is designed to heighten the prominence of these defenses; interpretation is designed to show them to the patient and slowly wear them down.

It is obvious that the timing of interpretations is a matter of crucial importance. They must be given precisely at the moment when the patient is able to take them, and no sooner. If the patient cannot take them—if they awaken too much anxiety—he is forced to apply defenses against the interpretations and the analyst, and this delays the progress of treatment, in some cases even causing it to be broken off. An interpretation is rightly timed when the patient is able to perceive his defense, experience the impulse against which it is a defense, realize that he need not be afraid of this particular impulse, and thus achieve a relaxing of the defense. There is a gain of insight in this process, but its chief value lies in the corrective emotional experience. The essential thing is that the patient has stopped being afraid of some impulse in himself. Usually the feeling that results is one of relief and relaxation with a renewed outpouring of free associations.

At first the interpretations are what might be called superficial. They are nowhere near the neurotic nucleus and may have reference to the most trifling defenses such as mannerisms, tricks of speech, or minor acts that pass as conventional. Perhaps it is noticed that the patient repeatedly follows a sequence which consists of making a critical remark but denying that it is his own view of the matter. One day he says that an interior decorator might consider the therapist's wallpaper too dark, though he himself likes it. Another day he observes that a person with sinus trouble would not care for so much tobacco smoke in the consulting room, though he himself is happily free from that trouble. If the analyst calls his attention to this sequence, the patient is likely to be surprised; he has never noticed it himself. But if the interpretation has been correctly timed the patient will realize both his defense and the hostile impulse that necessitates the defense. He will be able to feel his own real annoyance and to relax his defense at least to the extent of expressing distaste for dark wallpapers and smoke as his own feelings rather than someone else's. This is typical of those short steps that are the most a patient can at first accomplish toward overcoming his deeper anxieties.

Interpretations may have to be repeated on several occasions be-

fore the patient fully and permanently relaxes his defense. Then, before long, the problem is likely to come up in a new guise, and once more a defense must be relaxed. The dangerous impulse has to be perceived and felt in all its manifold forms and connections. This slow process has been called *working through.* It is necessary because the patient, even with the best will in the world, cannot relinquish all at once his defensive attitudes. The conflict has come to be represented in a great many contexts. Defense that is relaxed at one point crops up again in another context. There is an interesting analogy between working through and mourning. Facing the fact of bereavement, the person may attempt to perform an all-inclusive act of renunciation, but this attempt is bound to fail. Each vivid reminder of the lost person will at first cause a renewal of pain and call for another renunciation. As Lindemann has pointed out, there is a "grief-work" that has to be accomplished, and it takes time.[19] Similarly, in the analysis of a neurosis, each fresh reminder of the pathogenic conflict sets it going again, calling for a new relaxation of defenses. Fortunately each new experience makes the work a little easier.

Rightly timed interpretations have the effect of relaxing defenses at points where the patient, if left to himself, would presumably maintain them. Interpretation is an implement for gently pushing the patient a little bit closer to his anxieties and defenses. Why is he able to relax a defense under these circumstances? Probably for two reasons which operate together. (1) He perceives that the danger is not as real as his defense had implied. The defense is excessive, and it is safe to let it down. We can express this another way by saying that he becomes able to reappraise the danger situation. (2) He is strengthened by the presence of the analyst, who serves as a guarantee of safety, even while he urges renewed contact with the threat. To the extent that the patient is dominated by anxieties he may be likened to a frightened child. Alone he cannot face the threats, but in company with the analyst he dares to peek at them and finally approach them. The patient becomes a little more daring because he is not alone in the enterprise. This increase of daring is the heart of his corrective emotional experience.

Transference Neurosis.—In addition to free association and interpretation, standard psychoanalysis makes extensive use of the transference neurosis. We have already looked into Freud's con-

[19] Lindemann, E., "Symptomatology and Management of Acute Grief," *American Journal of Psychiatry,* 1942, Vol. 101, pp. 141–148.

cept of the transference.[20] As treatment proceeds, the patient begins to manifest a variety of personal feelings toward the analyst. These feelings run all the way from admiration and affection to hostility and fear. When the transference is positive, the analytic work proceeds smoothly. The patient produces many associations, accepts interpretations fairly readily, and may begin to feel much better. An early improvement of this kind is looked upon by the analyst with suspicion. It is, as Hendrick says, "a direct product of assuming a pleasantly dependent attitude to the therapist and gratifying unconsciously one's need of parental love and attention." [21] An improvement thus produced is not likely to endure. If the therapeutic relationship is terminated, the patient is all too likely to lapse into his former difficulties. Sometimes a negative transference dominates the early part of the treatment, though usually it comes later. Then the work goes on slowly, with difficulty, without signs of benefit to the patient.

Transference neurosis refers to an acute development that occurs fairly regularly in full-length psychoanalysis and that is considered essential for a complete cure. The relation to the analyst is intensified to a point where it becomes more important to the patient than does his own recovery. He seems to be engaged in a struggle with the analyst, trying to win various kinds of emotional satisfaction from him. In this stage it becomes abundantly clear that the patient's attitudes have little relation to the actual situation; they are "transferred from earlier ones, especially from childhood conflicts with the parents." Freud referred to this development as a "new edition" of the old neurosis. The following paragraph from Hendrick deserves careful attention.[22]

> Because this occurs with such consistency in every analysis, we can understand that the transference has developed to a point where the transference emotions are more important to the patient than the permanent health he is seeking. This is the point where the major unresolved, unconscious problems of childhood begin to dominate. They are now reproduced in the transference with all their pent-up emotion. The patient is unconsciously striving for what he failed to gain or to do without in actual childhood. Only those who have observed it will appreciate how fully much of the reaction to the analyst at this period is like a child's. Petulance, irritability, defiance, even a childishness in tone of voice are frequent, even in people who are otherwise quite mature.

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[20] See above, pages 40–42.
[21] Hendrick, I., *Facts and Theories of Psychoanalysis, op. cit.*, p. 207.
[22] *Ibid.* p. 208.

The transference neurosis is reached only after the more superficial defenses have been relaxed. It signifies that the patient has at last reanimated his nuclear neurotic processes. When he has struggled through this stage with its crucial corrective emotional experiences, his treatment is nearly finished. The steps that remain consist of dissolving the therapeutic relationship and implementing the new freedom from anxiety by appropriate positive actions outside the consulting room. The dissolving of a relationship that has carried so much emotional weight takes a considerable time. When this is successfully accomplished, however, there is no aftermath of dependence, and the patient turns freely to the new life that has become available to him.

The transference neurosis occurs with little direct provocation from the analyst. But it is fair to say that the whole analytic situation encourages this particular development. The psychoanalyst typically makes himself a shadowy figure, a blank screen on which the patient can project whatever fantasies lie close to his heart. The analytic patient lies on a couch, relaxing in the interests of free association. The therapist sits out of sight and does not have much to say. As a matter of policy, most analysts rule out any social contacts with patients outside the office. While always present as a source of reassurance and strength if necessary, the therapist does not become as clearly differentiated a figure as those one meets in daily life. Peck described his role as follows: "He loans himself, as it were, for the subject to react upon in a sort of test experience, and, instead of being drawn into that experience, his part is to reveal to the patient what is going on." [28] By restricting himself to this kind of a part, he makes it easier for the patient to use him as a father, a mother, an authority figure, a rival, or whatever person is needed in working out the neurotic nucleus.

One of the features of non-directive therapy is its unceasing respect for the client's maturity. The counselor always allows him to take the lead in what goes along as an ordinary conversation. The psychoanalyst does not attempt to handle his patient so gently. From the start, when he instructs the patient in free association and when he gives interpretations that necessarily constitute a criticism, he creates a relationship that has a little of the quality of teacher and pupil if not of parent and child. The non-directive counselor is unfailingly permissive. The analyst is permissive toward all kinds of impulses and fantasies in the patient that would win condem-

[28] Peck, M., *The Meaning of Psychoanalysis*, New York, Alfred A. Knopf, 1931, p. 188.

nation in everyday life, but he is not permissive when it comes to using defenses and failing to associate freely. It is appropriate in comparing the two procedures to quote another remark of Peck's to the effect that psychoanalysis is "the major surgery of psychotherapy." "Like major surgery, analysis does not help everything, nor is it usually the first method to be thought of in trouble. It should be reserved for those problems which less radical procedure does not reach." [24]

The working through of the transference neurosis is accomplished by the familiar implements: free association and interpretation. Interpretation operates with its greatest effectiveness at just this point. If a patient has been expressing fury at the analyst for not showing the loving attention of a father, and if he then experiences sharp anxiety lest the father punish or desert him, it becomes peculiarly easy for him to appreciate the archaic character of his feelings. The discrepancy between the actual therapeutic situation and his childlike demands and fears is dramatic and inescapable. The intense but inappropriate emotions that constitute the transference neurosis can thus have a peculiarly powerful corrective effect.

Dream Analysis.—The analysis of dreams plays a prominent part in standard psychoanalysis. We have not discussed it up to this point because in spite of its prominence it introduces no new therapeutic principles. Dreams may be regarded as spontaneous free associations. They are used in psychoanalytic treatment as a starting point for further free associations, and sometimes as objects for interpretation. They are of service to the extent that they allow feelings and attitudes to leak into awareness faster than might otherwise be the case. What they bring forward, however, is utilized no differently from other material.

In an earlier chapter we concluded that dreams are activated by tensions that threaten to disturb sleep. When a patient is undergoing psychotherapy his sleep is likely to be disturbed by a great many tensions set up during the treatment and left unresolved at bedtime. Psychotherapy is a disturbing business. It stirs up feelings and problems that one would prefer to avoid. The dreams that occur concurrently with treatment are therefore likely to be numerous and heavily loaded with matters pertaining to the illness. Among other things they often portray with crystal clearness the state of the transference relationship. Direct expression of transference emotions, whether affectionate or hostile, is for most patients not easy. Even free association does not always suffice to bring

such material into verbal expression. Here the patient's dreams will often take the lead, expressing this feeling in disguised but dramatic form and thus opening a road for less roundabout expressions. Dreams thus help to keep the treatment in motion and sometimes pull it out of doldrums when everything seems blocked. Occasionally a dream marks a dramatic and significant change, becoming the means of sudden forward progress. We shall describe an example of this kind in the next section when we give a case to illustrate a briefer psychoanalysis.

Results of Psychoanalytic Treatment.—For what disorders is psychoanalytic treatment indicated, and how successful are its results? As already stated, standard psychoanalysis is a radical and thorough method of therapy. Time-consuming and expensive, it should not be undertaken until simpler methods have been tried without success. In general, maladjustments which do not involve deep sources of anxiety can be corrected by some form of psychological counseling. Probably some of the less severe neuroses can also be helped either by counseling or by methods which we shall describe presently. The appropriate sphere for standard or full-length psychoanalysis is the fairly severe neurosis.

A comprehensive survey of the results of psychoanalytic therapy has been prepared by Knight.[25] His material includes reports from several institutes in both Europe and the United States and covers nearly a thousand patients. So many complications enter into figures of this kind that we shall consider only the most general results. Two categories of disorder especially concern us: psychoneuroses (neuroses with focal symptom syndromes) and character disorders (neurotic personalities without focal symptom syndromes). Knight's tables show that 466 such cases were treated for six months or longer. The degree of improvement is expressed in four categories: apparently cured (profound change of personality with no residual difficulties); much improved (important basic change for the better, but with some remaining difficulties); improved (relief of symptoms and acute troubles without fundamental change of personality); and no change or worse. The 466 patients then distribute themselves as follows:

Apparently cured:	138 (30 per cent)
Much improved:	151 (32 per cent)
Improved:	135 (29 per cent)
No change or worse:	42 (9 per cent)

[25] Knight, R. P., "Evaluation of the Results of Psychoanalytic Therapy," *American Journal of Psychiatry*, 1941, Vol. 98, pp. 434–446.

It is clear from these figures that psychoanalysis is not a sure cure even for the neuroses. Like all methods of treatment, it has its failures and its merely partial successes. It should be borne in mind, however, that psychoanalysis sets a very high standard for itself. Most medical statistics are not so discriminating in the matter of a fundamental change. Removal of symptoms is often accepted as the equivalent of cure. On this basis, 91 per cent of the neurotics treated by psychoanalysis might be classed as "successful," and 9 per cent as "unsuccessful." A profound change of personality, constituting a protection against the recurrence of disorder, is more than most therapies undertake to achieve.

It would be valuable to compare the figures just quoted with comparable reports from institutions using methods other than psychoanalysis. Unfortunately no such reports are really comparable. As we have seen, patients are always selected for psychotherapy; the doors are not wide open to all comers. Figures would be comparable only if we knew that the selection policies were also comparable. For what they are worth, however, we may consider some figures assembled by Appel from institutions treating neuroses by techniques other than psychoanalysis.[26] On the whole they show a slightly less favorable trend: some 15 to 20 per cent in the first category (apparently cured), and about 14 per cent in the fourth (no change or worse). The two middle categories are reported so differently that they cannot be compared.

Psychoanalysis is rarely indicated in the treatment of psychoses. Knight's tables show that of 92 selected cases treated for six months or longer, 69 (75 per cent) were reported in the two poorer categories (improved, no change or worse). In later chapters we shall consider the applicability of psychoanalysis to problems such as delinquency, psychopathic personality, alcoholism, sexual disorders, and psychosomatic disorders. Only with psychosomatic disorders is the success comparable to what is obtained with neuroses.

Briefer Psychoanalysis

We have concentrated thus far on extremes. Non-directive counseling is the shortest, and standard psychoanalysis the longest, method of psychotherapy. Non-directive counseling is criticized chiefly for the fault of being too superficial. Standard psychoanalysis is never criticized on this ground, but constantly has to

[26] Appel, K. E., "Psychiatric Therapy," in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders*, New York, The Ronald Press Co., 1944, Vol. 2, p. 1154.

answer questions as to whether such thoroughness is necessary and whether the process cannot in some way be hastened. Our study of psychoanalysis will have shown that hastening or shortening is no simple matter. One cannot talk sensibly about shortening the process without showing just how and where the shortening is to take place. Is there to be a shortening or elimination of the transference neurosis? Is the process of working through to be curtailed? Are the interpretations to be speeded up, and if so, what is to prevent the patient from leaving the analysis in disgust? Critics of psychoanalysis usually do not sense the full difficulty of speeding up a process that calls for corrective emotional experience and that has to struggle with an affect so powerful as anxiety. Fortunately there have been some among the psychoanalysts who without minimizing these difficulties have set themselves to work out the possibilities for briefer psychoanalysis. That the quest is far from hopeless is revealed in the recent report by Alexander and French.[27]

The Principle of Flexibility.—In the opinion of Alexander and French, it is possible to vary the psychoanalytic technique very widely in accordance with the needs of particular patients. By adapting the method to the patient, they find it possible to shorten the average length of treatment without thereby making the therapy superficial. "As we now practice psychoanalytic therapy," they say, "we seldom use one and the same method of approach from the first to the last day of treatment." [28] Instead, the guiding principle is the principle of flexibility.

VARYING THE DETAILS OF PROCEDURE.—The principle of flexibility can be expressed by saying that every aspect of the technique is varied as much as may be necessary to fit the patient's problems and progress at that particular moment. Sometimes the patient lies on the couch and gives free associations. At other times it is more economical to have him sit in a chair facing the therapist and talk about his problems in the ordinary manner. Interviews may be held every day, but this may encourage the patient to procrastinate and withdraw more deeply than is necessary into early memories and a reconstruction of childhood experiences. On the whole it is preferable to have daily interviews only when the patient is acutely distressed or highly resistant. Otherwise one or two meetings a week makes for more rapid progress, giving each meeting a more important

[27] Alexander, F., French, T. M., et al., *Psychoanalytic Therapy*, New York, The Ronald Press Co., 1946.
[28] *Ibid.*, p. 25.

character. Another matter that can be varied is the emotional intensity of the interviews. Patients differ a great deal in the amount of emotion they can endure. The standard free association technique is well adapted to those whose tolerance is low, but some patients profit by the kind of insights and emotional experiences that arise out of direct conversation, argument, and challenging interpretations. The pace of interpretation can be increased for those patients who are able to stand it. Often it is advantageous to interrupt treatment for a period of time in order to let the patient work his problems over in his own mind and test his own resources. He does some of his working through by himself. In all these respects, therefore, technique can be varied in the interests of more rapid improvement.

MANIPULATING THE TRANSFERENCE RELATIONSHIP.—Particularly important is flexibility in regard to the transference relationship. Increasing doubt has arisen as to the wisdom of allowing a full transference neurosis to develop in all cases. It is an interesting fact, a valuable addition to scientific knowledge, that the transference neurosis can develop and that it does so spontaneously if given the opportunity. Much has been learned in this way about the childhood origins of neurosis. But as a practical matter the full development of transference neurosis in all its aspects does more than anything else to lengthen the treatment, and Alexander and French now hold that it is in most cases unnecessary. The problem is seen in a new light. The transference neurosis must be kept within workable limits and confined to those aspects which reflect the really nuclear problems. In some cases it is not allowed to develop at all. The manipulation of the transference is accomplished by the therapist's attitude and his interpretations. If he treats the patient as though he were childlike and dependent, and if his interpretations call attention to the infantile character of the patient's behavior, transference neurosis is greatly encouraged. If he treats him always as an adult and an equal, and directs interpretations only toward the present situation, transference neurosis is greatly discouraged. Thus it is within the therapist's power to control this feature of the relationship in the interests of maximum efficiency.

ENCOURAGING ACTIVITY OUTSIDE THE ANALYSIS.—Another aspect of flexibility is seen in the use of experiences outside the therapeutic relationship. Standard psychoanalysis tended to neglect this possible resource in treatment. The value of extratherapeutic experiences is well brought out in the following quotations.

> It is important to keep in mind that the patient will finally have to solve his problems in actual life, in his relationships to his wife and his children, his superiors and his competitors, his friends and his enemies. The experiences in the transference relationship are only preparations, a training for the real battle. The sooner the patient can be led against those real obstacles in life from which he retreated and can be induced to engage in new experimentation, the more quickly can satisfactory therapeutic results be achieved.
>
> There is no more powerful therapeutic factor than the performance of activities which were formerly neurotically impaired or inhibited. No insight, no emotional discharge, no recollection can be as reassuring as accomplishment in the actual life situation in which the individual failed.[29]

In addition to encouraging the patient when he seems prepared to take active steps of some kind, the therapist sometimes makes contact with his spouse, employer, or a friend. A change of attitude by a person of importance in the patient's life may helpfully speed the patient's own progress.

The reader will probably feel that all this constitutes a simplification of psychoanalysis which makes it once more indistinguishable from psychological counseling. Alexander and French insist that their procedures, however flexible, still belong in the category of psychoanalysis. In one respect their claim is hardly justified. If in a given case free association is not used, the transference neurosis is not allowed to develop, and interpretation is sparingly applied—all of which is possible under the principle of flexibility—then the technique has lost its claim to be considered psychoanalysis. It is not in this way, however, that Alexander and French support their contention. They believe that the practice of briefer psychoanalysis requires experience with the full-length standard technique. No matter how greatly the treatment may be abbreviated, it is always a planned reduction of the full-scale analytic process. One cannot say, they contend, that briefer psychoanalysis is simpler psychoanalysis. It requires greater rather than less skill. The matter of timing, for instance, which is crucial enough in standard psychoanalysis, becomes even more crucial and delicate when not only interpretations but also changes in technique, the emotional intensity of the sessions, and the encouragement of outside activities have to be correctly timed. It is necessary for the therapist, moreover, to have a correct and early grasp of the patient's problems in order to plan an economical strategy for the treatment. The therapist's understanding

[29] *Ibid.*, pp. 38, 40.

may be revised from week to week and his plan of treatment may have to change. But this makes the process longer; the maximum saving is achieved when the initial diagnosis and plan of treatment is correct. Great burdens are thus placed on the analyst's skill, wisdom, and experience. Briefer psychoanalysis is not a random or opportunist mode of treatment. It is a planned reduction of the standard procedure.

An Illustrative Case.—We can accomplish more by describing a case than by further general discussion. The following case was chosen by Alexander and French as an illustration of the principle of flexibility.[80]

A businessman of forty-two years had suffered for a long time from an uncontrollable jerking of his arms. On three occasions he had had brief periods of unconsciousness. Neurological examination failed to disclose any sign of brain injury which might account for these attacks or for the jerking. The patient had a long history of irritability and a domineering attitude which injured his human relationships. At one point his wife divorced him on account of these intolerable traits, but later they were remarried. The immediate occasion for seeking medical help was the fact that his wife was again considering separation. In addition, for a number of weeks he had suffered a complete loss of sexual potency.

The treatment consisted of twenty-six interviews extending over a period of ten weeks. Brief as it was, the results were entirely satisfactory.

The patient's troubles were discerned to have their origin in his relation to his father. The father had been a self-made man with huge self-confidence and a violent temper. He was a tyrant both at home and in his business. He never tired of making the son feel inferior, and though at times there was sharp conflict between them, the son always gave in. Among other things the father had intimidated the patient in the matter of sexual expression. To meet all this pressure and somehow preserve self-respect, the patient had built up his own assertive and domineering attitude. He was ruled by a vast compensatory need to appear important and strong. When the father died, the patient took over the family glassware works and with great energy expanded it well beyond what his father had been able to accomplish. He felt impelled to surpass his father, yet along with all his competition and rebellion there was a great deal of admiring devotion.

[80] *Ibid.*, pp. 55–65.

From the very start the patient reproduced in the therapeutic situation his combined attitudes toward his father. He wanted rules to be made for him, and scrupulously obeyed one or two that had to be suggested. But his conversation was otherwise designed to impress the analyst with his importance, and whenever the analyst explained anything he quickly began to explain something about which he himself was expert: business or sports. He literally tried to force the doctor to become tyrannical so that he could rebel and compete with him. This attitude was so clear that after two meetings the analyst undertook to create a corrective emotional experience by behaving in just the opposite fashion. He let the patient take the lead, avoided statements that could be thought arbitrary, admitted the limitations of psychiatry, expressed admiration for the patient's good qualities, took an interest in his business and social activities. Under this treatment the patient became distinctly confused. He plainly thrived in the permissive, encouraging atmosphere, but he was unable to check his competitive feelings and still tried to fight battles with the analyst. This offered the perfect opportunity for crucial interpretations. The patient could not help seeing that his aggression was completely out of relation to the analyst's behavior. His chief neurotic trend was exposed and he became able to enter a more genuine relationship with the doctor.

The change in his attitude toward the therapist was soon reflected at home. He became less domineering and was able to assume a more appropriately benevolent and helpful role toward his son. But his need to make a tyrant out of the analyst finally yielded only after a particularly vivid dream and its aftermath. The patient dreamed that he had manufactured some glassware and that the analyst angrily broke it all to pieces. The dream reminded him of an occasion when his father smashed a set of glassware because he did not like the design. During the hour which began with the reporting of this dream, the analyst asked the patient to tell more about his work. The patient eagerly embarked on a condescending lecture. The corrective emotional experience occasioned by thus assuming authority over the therapist was so great that the patient thereafter recovered his sexual potency. His old role of the now-rebelling, now-submitting son could be outgrown as he found it possible to have a relation of friendly give and take with an authoritative person. As he achieved this new learning on the social plane he outgrew his sexual intimidation.

The remaining few hours of treatment were devoted to fuller discussion of the transference relationship. In childhood the pa-

tient had often been obliged to accept help from his father, but the father had always made him feel inferior on such occasions. This led him to react with a compensatory striving to prove that he was really the better man. Accepting help from the analyst had thus reanimated from the start the very core of the neurotic problem. The analyst's radical assumption of exactly the opposite role, giving help along with interest, permissiveness, and a complete lack of the father's dogmatic self-confidence, led to an unusually rapid corrective emotional experience. At the end of treatment the patient's arms no longer jerked, which may be taken as presumptive evidence that the jerking originated from the tension of suppressed rage. His emotional and sexual relations with his wife were better than ever before, talk of separation had ended, and his irritable and domineering tendencies had greatly diminished. The patient was at least much improved, if not fully cured.

Analysis of the Therapeutic Process.—Let us consider this case as a planned reduction of the standard psychoanalytic technique, at the same time comparing it with non-directive counseling. Free association on the couch was not used extensively. Most of the interviews were conducted as ordinary conversations. In this respect the procedure did not differ from counseling. The therapist did more, however, than recognize and clarify the patient's feelings. Guessing at the nature of the central problem from the very start, he deliberately took a more actively conciliatory and participating attitude. He used interpretation freely at critical points. It is questionable whether the patient would have moved ahead so rapidly if the therapist had not taken the initiative in pointing out the inappropriateness of his competitive aggression. The case illustrates particularly well the controlled use of the transference neurosis. If the analyst had remained a passive blank-screen, the patient would probably have stayed for many weeks fighting out his angers and his timid submissions, learning only gradually that they were not appropriate in the therapeutic situation. By taking a clear attitude and being a definite person quite unlike the patient's father, the analyst brought about a much quicker realization and abandonment of these defensive actions. Yet the events that did take place qualify as a limited transference neurosis. "The main factor was that the patient was given an opportunity in his relationship to the analyst, first, to develop the same emotional conflict he had toward his father (the transference neurosis) and, second, to find a new, less neurotic solution for this conflict." [81]

[81] *Ibid.*, p. 62.

It should be realized that this successful treatment in twenty-six interviews is unusually short. There are elements of luck as well as planning in briefer psychoanalysis. It was a peculiar piece of good fortune that the whole analytic situation so readily aroused the nuclear problem. Had the patient happened to consult a woman physician of about his own age instead of an older man, it would not have been possible to adopt the same procedure. One must recognize in this patient a rather unusual degree of ego potentiality and capacity to endure emotional tension. Success could scarcely have been attained so quickly with someone of less energetic disposition. Nevertheless it is quite apparent that the principle of flexibility did much to hasten the process of treatment.

Summary of Basic Processes

In this chapter we have examined three schools of thought on the subject of psychotherapy. Non-directive counseling, standard psychoanalysis, and briefer psychoanalysis each have their philosophy of treatment as well as their specific techniques. While these philosophies are important, it is still more important for us to discern the fundamental processes that are at work and to isolate the basic techniques. Nothing that we have studied violates the general principle, agreed upon by all schools, that the essence of psychotherapy is a corrective emotional experience. No one today will raise the flag for bare intellectual understanding as a means of treatment. Our search for basic processes therefore resolves itself into an attempt to isolate the measures taken to bring about corrective emotional experiences.

It seems possible to name five processes which cover all the action that goes on in psychotherapy.

1. Initial Therapeutic Relationship.—First there is the creation of a unique situation and a unique personal relationship. There are four important aspects of the therapeutic situation. (a) The therapist is *expert,* in the sense that he possesses special training, experience, and knowledge about maladjusted and disordered behavior. (b) The therapist is *permissive,* in the sense that he serves only the interests of health and makes no censorious judgments upon the patient's acts or feelings. (c) The therapist is *interested and friendly,* communicating in this way a certain warmth that makes the relationship more personal than is ordinarily the case in a professional consultation. (d) The therapist is a *source of encouragement.* While it is necessary to avoid all false reassurance, the ef-

fect of his presence is to increase courage. The patient dares to express feelings and relax defenses because of his strengthening alliance with the therapist. It is within the shelter of this relationship that corrective emotional experience begins to take place.

2. **Expression of Feelings.**—Steps are taken to encourage the patient to express his feelings. This may be done by asking questions, by taking a case history, or by encouraging the patient to give his own story. From non-directive counseling we learned that feelings come to expression more readily when the patient rather than the therapist leads the way in the conversation. In this chapter we have studied only one technical device for increasing the expression of feelings. *Free association* is intended to remove superficial resistances and bring into prominence the emotional patterns that stand in need of correction. In the next chapter we shall examine several additional technical devices having much the same purpose.

3. **Pointing Out of Feelings.**—The action of the therapist upon what the patient expresses consists essentially of pointing out the feelings. In this way the patient becomes more fully aware of his feelings; he develops insight and is thus better able to profit by further experiences in which he is moved by the same feelings. We have examined two forms of the pointing out procedure. (a) *Recognition of feeling,* the process neatly isolated by Rogers, consists of paraphrasing what the patient says in such a way as to emphasize its feeling implications. The therapist sets the focus of interest on feeling and brings about a greater expression of feeling than is usual for the patient. The changes that ensue from this free expression in the presence of the therapist constitute in themselves a corrective emotional experience. (b) *Interpretation,* the cornerstone of all psychoanalytic procedure, is not sharply different from the recognition of feelings. Interpretation may be regarded as a more active form of recognition. Instead of recognizing the patient's feelings as they are expressed, the therapist recognizes feelings before they are expressed or when they are still being expressed in disguised ways—at all events, before the patient himself has recognized them. When suitably timed, this procedure also results in corrective emotional experience.

4. **Transference.**—The initial therapeutic relationship can readily become colored by childlike attitudes in the patient. The importance of the treatment is so great, and the emotions involved so strong, that the patient can hardly avoid developing certain feelings that have li-

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tle to do with the actual situation and much to do with his own past. The transference of childlike feelings into the therapeutic relationship can be either discouraged or encouraged by the therapist. If the patient is allowed to develop the same emotional conflicts in relation to the therapist that he had with parental and other important figures in early life, a situation is created that is peculiarly favorable for interpretation. The *transference neurosis,* as developed in Freudian psychoanalysis, is a state of very real emotion, but the experience becomes corrective only when through interpretation the patient realizes the inappropriate character of his feelings and reappraises the archaic dangers from which they spring.

5. New Behavior.—As treatment progresses, the patient begins to behave in new ways outside the therapeutic relationship. He starts to replace his rooted maladjustive patterns with better adjusted forms of behavior. To the extent that these new actions are successful and prove rewarding, they constitute corrective emotional experience. The possibility of dissolving the therapeutic relationship can be gauged from the success and stability of the patient's new behavior. A variety of attitudes can be taken toward what the patient does in his actual life, ranging all the way from simple recognition through encouragement to persuasion and direction.

No one form of psychotherapy necessarily uses all these processes. Non-directive counseling discourages transference and excludes the use of free association and interpretation. Standard psychoanalysis goes light on the encouragement of new behavior outside the therapeutic relationship. It prefers to work out the transference relationship thoroughly before encouraging the patient to try his wings in new ventures. Briefer psychoanalysis tries to make a flexible use of whatever procedures fit the case. It is likely to use free association and the transference sparingly, but it is strong on interpretation and the encouragement of independent new behavior.

In the next chapter we shall study several more forms of psychotherapy. Some of them introduce new accessory procedures, but none of them add anything to our list of five basic processes. It will be convenient to bear the list in mind, testing each new method against it in order to discern the characteristic pattern of ingredients.

SUGGESTIONS FOR FURTHER READING

An eclectic survey of both the technical tools and the philosophies of psychotherapy is given in Paul Schilder's *Psychotherapy* (London, Kegan Paul, Trench, Trubner & Co., 1938), Chs. 6–8. This survey covers most of

the material of this and the next chapters. For non-directive counseling the principal sources are Carl R. Rogers, *Counseling and Psychotherapy* (Boston, Houghton Mifflin Co., 1942) and W. U. Snyder's *Casebook of Non-Directive Counseling* (Boston, Houghton Mifflin Co., 1947). The former contains one and the latter five complete case reports.

Freud's *General Introduction to Psychoanalysis* (New York, Boni & Liveright, 1920) gives a good introduction to his views on treatment in Chs. 27–28. I. Hendrick devotes Part III of his *Facts and Theories of Psychoanalysis* (New York, Alfred A. Knopf, 2nd ed., 1939) to the same topic. A more detailed and technical account of psychoanalytic technique will be found in S. Lorand's *Technique of Psychoanalytic Therapy* (New York, International Universities Press, 1945). A searching study of the effects of interpretation has been given by J. Strachey, "The Nature of the Therapeutic Action of Psychoanalysis," *International Journal of Psychoanalysis*, 1934, Vol. 15, pp. 127–159.

Briefer psychoanalysis is represented by one book: F. Alexander, T. M. French, et al., *Psychoanalytic Therapy* (New York, The Ronald Press Co., 1946). In the next chapter, when considering active psychotherapy, we shall see that other workers have anticipated the Chicago group both in the criticism of standard psychoanalysis and in more vigorous techniques. Literally speaking, their work is also briefer psychoanalysis.

In a short but stimulating paper R. R. Willoughby has undertaken to relate psychotherapy to the general principles of learning ("An Operational Approach to the Problem of Emotional Readjustment," *Journal of Abnormal and Social Psychology*, 1938, Vol. 33, pp. 261–264).

CHAPTER 10

PSYCHOTHERAPY: TECHNICAL AIDS AND VARIATIONS

The dilemma of modern psychotherapy is the question of time. The psychogenic disorders are usually built up over the course of years. Understandably the undoing of a long chain of learnings is a slow process, especially when the only available tool is to create conditions for new learning. Of the methods studied in the last chapter only one—non-directive counseling—holds itself fairly regularly to a limit of fifteen or twenty interviews, and a grave question has been raised as to whether this method is sufficient for disorders that are at all deeply rooted. Standard psychoanalysis is extremely time-consuming, so much so that it can never reach more than a small fraction of the people who need psychological help. Briefer psychoanalysis sometimes achieves far-reaching results in a short time, but these successes are by no means the rule. They occur either when the disorder is less severe or when a fortunate combination of circumstances serves to hasten the corrective emotional experience. It is incredibly difficult to speed the process of psychological growth.

On the other side of the picture stands a vast human need for psychotherapeutic services. The Second World War sharply increased this need, but even before the outbreak of hostilities there was a growing demand for psychological help. The technical aids shortly to be described all have the same purpose: to shorten the duration of treatment, thereby making it possible for more people to be treated. Students of this subject invariably feel torn between two attitudes. From what we know of the social need, every attempt to shorten psychotherapy must be viewed with enthusiasm. But from what we know of the nature of psychogenic disorders, every claim that therapy has been shortened must be viewed with suspicion. The easiest way to shorten treatment is to make it more superficial. Quick methods must always show that they are really able to produce the same results as slower procedures.

Hypnotherapy

We take up first those methods that make use of hypnotism. To what extent can hypnotism shorten the process of psychotherapy?

The Older Suggestive Methods.—Sixty years ago it seemed likely that hypnotism would become the psychotherapy of the future. Rescued from scientific disrepute by Charcot and put to new uses by Janet and Breuer, it seemed destined to become the method of choice in treating the neuroses. Between 1880 and 1900 hypnotic treatment reached a peak of popularity. Dozens of clinics were opened, thousands of patients were treated, several professional journals were started, and textbooks began to appear giving minute instructions in the hypnotic art. The range of disorders reported cured was astonishingly wide. Only the severe psychoses seemed immune to hypnotic benefit, and some of the reports claimed success with diseases clearly of organic origin. Not only were cures obtained but they were obtained in a short time. Sometimes three or four sessions were enough, sometimes ten or a dozen, rarely more than twenty.

The method used by most of the hypnotic practitioners was some form of direct suggestion. The patient was placed in a deep hypnotic state and given suggestions that his symptoms would disappear. Sometimes the suggestions were directed not only at the symptoms but also at what were presumed to be the attitudes and problems underlying the symptoms. Looked at from the vantage point of modern dynamic psychology this attempt to reach the underlying factors seems ridiculously crude, but it was a step in the right direction, taken in the interests of rendering the cure more permanent. Both Janet and Freud used hypnosis to explore the patient's buried memories and secure an abreaction of suppressed feelings. This innovation sometimes brought success where direct suggestion had failed. The hypnotic therapist of 1900 seemed destined to succeed with problems that had long baffled the medical profession. With direct suggestion and abreaction at his command he seemed fully equipped to deal with neurotic disorders.

Before long it became clear that hypnotic therapy was not entirely satisfactory. Some patients were barred from its benefits by the fact that they could not develop a sufficiently deep hypnotic state; others could not be hypnotized at all. More important was the growing evidence that hypnotic cures were rarely permanent. Apparently cured when dismissed from treatment, the patients often came back later with new symptoms or a recurrence of the old ones. Sometimes a cure by direct hypnotic suggestion was permanent, but in the majority of cases the effects were transient and had to be renewed at fairly frequent intervals. The earlier reports of therapeutic success had to be largely discounted. Unless it could be shown that a patient remained well for at least a year after treatment, the statement that

he was cured meant nothing. These findings led to a decline in hypnotic therapy. The decline was hastened by the rise of psychoanalysis, so that by 1920 only a small minority of workers used hypnotic methods.

As we look back on this rise and decline of hypnotic therapy it is easy to see what was the matter. The whole thing was conceived too much along the line of a doctor giving medicine to a patient. Mesmer, the founder of hypnotic therapy, believed himself to be employing a physical agent, an invisible fluid which transmitted animal magnetism into the patient's ailing body. When the theory of animal magnetism was abandoned, its place was taken by psychological theories hardly less naïve. The hypnotist gave doses of suggestion, he implanted ideas in the patient's mind, he set certain automatisms in motion. When discussing hypnotism in an earlier chapter we saw how unsuitable these concepts are for explaining the known facts. Hypnotic behavior is produced by the patient, not forced upon him by the hypnotist. Just as a psychoanalytic patient can be cured only by his own corrective emotional experiences, not by the analyst's insights, so the patient in hypnotic therapy must be cured by his own reactions to the hypnotic experience, not by ideas or suggestions implanted by the operator. As modern dynamic psychology made this fact progressively clearer, hypnotism moved into the position of a technical aid in psychotherapy rather than an independent system. Few disorders can really be cured by hypnotism alone. Its appropriate sphere is that of a special technique which can be called upon to assist in various ways the carrying out of more comprehensive treatment.

In a recent survey of the literature on hypnotherapy Brenman and Gill warn us against too hasty a dismissal of the older suggestive methods.[1] Sometimes direct hypnotic suggestion permanently removes a symptom or changes an attitude that is troublesome to the patient. Recurrence of symptoms or the formation of substitute symptoms is not inevitable. Brenman and Gill make it clear, however, that lack of permanence is the chief limitation of direct suggestive techniques. Because these are in effect "an attempt to suppress the patient's symptoms," they give him no insight into the emotional basis of his difficulty. The patient does not have corrective emotional experiences such as we described in the last chapter. He does not relax defenses, reappraise old sources of anxiety, or learn new attitudes toward the problems responsible for his illness.

[1] Brenman, M. & Gill, M. M., *Hypnotherapy: A Survey of the Literature*, New York, International Universities Press, 1947, pp. 52–66.

Few practitioners today use direct suggestions except as an occasional auxiliary technique. The one tool that has been borrowed extensively from the older workers is the recall of buried memories with abreaction of suppressed affect. This is an uncovering rather than a suppressive procedure, and it has assumed considerable importance in recent experiments with hypnotherapy.

Hypnoanalysis.—The use of hypnotism in connection with a more comprehensive plan of treatment is now commonly referred to as hypnoanalysis. While individual workers still differ widely in their methods of conducting hypnoanalytic treatment, the general principle can be quite simply stated. Like briefer psychoanalysis, hypnoanalysis is a planned reduction of the full-length standard analytic method. This reduction is effected by using the hypnotic state whenever it is capable of hastening some portion of the procedure.

It will be useful to refer to our summary of therapeutic processes at the end of the last chapter. Hypnoanalysis creates an *initial therapeutic relationship* which is basically no different from the one described there. Doubtless the introduction of hypnotism emphasizes the elements of expertness and authority in the therapist, but the use he makes of the hypnotic state gives abundant evidence of his permissiveness, warm interest, and presence as a strengthening ally. It is not of the essence of hypnoanalysis for the therapist to take a more dominating role apart from the fact that he induces hypnosis. The process of *pointing out feelings* and the attitude toward *new behavior* are not different from those prevailing in standard psychoanalysis. The peculiar features of hypnoanalysis are to be found (1) in its use of the hypnotic state to facilitate and hasten the patient's *expression of feelings* and (2) in its rapid development and employment of a *transference relationship*. It is in these two ways that it undertakes to shorten the time required for treatment.

Value of the Hypnotic State.—The value of the hypnotic state lies chiefly in the increased vividness with which situations can be imagined. Past happenings can be recalled with an intensity that amounts to reliving, and present thoughts and feelings can be given a dreamlike clarity. It is this property of the hypnotic state that makes it useful in accomplishing the purposes otherwise left to free association and spontaneous dreaming.

Directed Associations.—Brenman and Gill undertake to speed the usually slow process of free association by placing the patient in

a deep hypnotic state and suggesting the point from which association should start.[2] Whatever the patient has seemed to have uppermost in his mind at the beginning of the hour is chosen as the point of departure. These workers also try to get around blocks and silences in the patient's stream of talk by saying, "I will count to 10, and when I reach 10 you will tell me the first thing that occurs to you in connection with so-and-so." These methods, they find, lead to a more rapid production of associations than is otherwise possible.

HYPNOTIC REVERY.—The hypnotic state is conducive to unusually free and vivid reveries. This fact has been turned to account by Kubie who has worked out a specialized technique for maintaining a drowsy state of revery for long periods of time—several hours if necessary.[3] Kubie reports on one case in which this method stimulated a rapid outpouring of important emotion-charged memories that had failed to appear in more than a year of standard psychoanalysis.

HYPNOTIC DREAMS.—The interpretation of dreams forms a valuable part of standard psychoanalysis. With the aid of hypnosis it is possible to stimulate dreaming and thus hasten and enrich the material that is produced from this source. The hypnotic induction of dreams has been particularly developed by Wolberg.[4] Patients may be given the suggestion to dream while hypnotized or to dream when asleep the following night. A certain amount of training is required to make such suggestions effective, but time is saved in the end. Patients can be stimulated to dream about topics which they are still not able to express or experience directly; the interpretation of their dreams then brings the material more rapidly to awareness and to corrective emotional experience. The induced dream is a particularly good medium for bringing out the patient's attitudes toward the therapist.

HYPNOTIC RECALL AND ABREACTION.—Probably the most dramatic achievement of hypnosis is its effect on memory. Its value in stimulating the recall of traumatic memories and the abreaction of suppressed emotions was demonstrated by Janet, Breuer, Freud, and the military psychiatrists of World War I. In hypnoanalysis it is particularly valuable at points where serious resistance is encountered, where normally the patient might linger for days and even

[2] Brenman, M. & Gill, M. M., *Hypnotherapy, op. cit.*, pp. 84, 123.
[3] Kubie, L. S., "The Use of Induced Hypnagogic Reveries in the Recovery of Repressed Amnesic Data." *Bulletin of the Menninger Clinic*, 1943, Vol. 7, pp. 172–182.
[4] Wolberg, L. R., *Hypnoanalysis*, New York, Grune & Stratton, 1945, pp. 182–194.

weeks before being able to produce the anxiety-laden material. Lindner claims that hypnosis performs its greatest time-saving service at just such points.[5] He uses ordinary free association as his basic method, but recommends shifting to the hypnotic state as soon as the associations become blocked. The patient is hypnotized and then reminded of his last few associations and recollections. If the analyst has been able to make a good guess as to the character of the repressed material and the time in the patient's life when the anxiety-laden events occurred, he can use an even more direct method for restoring memory: *hypnotic regression.* The patient is told that he is back at some previous age level and that he feels exactly as he did at that time. It is a nice art to bring about these regressions. Erickson has developed the technique in considerable detail.[6] He begins by disorienting the patient for current time and place relationships, asking him progressively to forget the date, week, month, year, etc., after which the suggestion of an earlier age can be more readily accepted and vividly developed. Good hypnotic subjects are able to behave as if they were three or six or ten years old with remarkable fidelity. Some workers believe that they regress even in their mental capacities so that their intelligence test performances become identical with what they would have been if tested at the earlier age. The evidence for this last proposition is by no means conclusive.[7] At all events, the revived memories of the early period are often so vivid as to stir up great emotion and produce abreaction in the hypnotic state.

Effect of Hypnosis on Resistance.—All the hypnotic methods thus far described have as their purpose the more rapid production of associations, memories, and the feelings that go with them. The chief obstacle to bringing these things forward is resistance. The patient is unable to produce them in waking conversation or free association because they threaten him with too much anxiety. We must consider, therefore, what effect hypnotism may be conceived to have on resistance. The vivid imaginative properties of the hypnotic state explain the clarity and emotional force of what is dreamed or fantasied or remembered, but they do not explain how the patient becomes more able to relax his defenses. The question is a difficult

[5] Lindner, R. M., *Rebel Without a Cause: the Hypnoanalysis of a Criminal Psychopath*, New York, Grune & Stratton, 1944, pp. 15–24.

[6] Erickson, M. H. & Kubie, L. S., "The Successful Treatment of a Case of Acute Hysterical Depression by a Return under Hypnosis to a Critical Phase of Childhood," *Psychoanalytic Quarterly*, 1941, Vol. 10, pp. 583–609.

[7] Cf. Young, P. C., "Hypnotic Regression—Fact or Artifact?" *Journal of Abnormal and Social Psychology*, 1940, Vol. 35, pp. 273–278. Spiegel, H., Shor, J. & Fishman, S., "An Hypnotic Ablation Technique for the Study of Personality Development," *Psychosomatic Medicine*, 1945, Vol. 7, pp. 273–278.

one. Does relaxation itself weaken the defenses? Or does the very act of hypnotizing change the transference relation in the direction of childlike trust? We do not know the answers, but both Lindner and Wolberg discuss a point of technique that seems highly important.[8] The patient can be allowed, even encouraged, to forget everything that is disclosed while he is in the hypnotic state. He thus avoids the shock of awakening to the sudden realization of all he has poured forth. Nevertheless it often happens—in fact Lindner calls it "a constant and unvarying phenomenon"—that this same material comes readily into the patient's waking free associations a few days after its rehearsal in the hypnotic state. The memories and feelings stimulated in hypnosis cannot be immediately tolerated, but they can penetrate the patient's defenses far sooner than would otherwise be the case. Somehow the defenses have been loosened by the hypnotic rehearsal.

Hypnoanalysis would serve little therapeutic purpose if it merely stimulated the outpouring of memories and feelings in the hypnotic state. If resistance is to be truly overcome, this material must be dealt with in the waking state and become fully integrated with the self or ego. Whatever is brought forward in hypnosis must sooner or later become the topic of conversation and corrective emotional experience in the waking state. It is for this reason that the technique is called hypnoanalysis—a true combination of hypnotic and psychoanalytic procedures.

Character of the Hypnotic Transference Relationship.—We have seen that it is possible for the therapist to control the transference situation by his attitude toward the patient and by the character of his remarks and interpretations. If the patient is allowed to sit facing him in an ordinary conversation, and if interest is centered on current problems, the relation is maintained as much as possible at a level of equality. If the patient is asked to lie on the couch and is instructed to give free associations, the analyst remaining out of sight, the development of a more childlike attitude and an ultimate transference neurosis are facilitated. The hypnotic situation goes a step further in creating the parent-child type of relation. The hypnotist at first stands over the patient, does all the talking, orders complete passivity, speaks of comfort and relaxation and sleep, and takes all the initiative in what is going on. Ferenczi, who studied the hypnotic relation in great detail, declared that "the situa-

[8] Lindner, *op. cit.*, pp. 21–22; Wolberg, *op. cit.*, Ch. 19.

tion during hypnosis tends to favor a conscious and unconscious imaginary return to childhood, and to awaken reminiscences, hidden away in everyone, that date from the time of childlike obedience.[9] The attitude adopted by the hypnotist may vary from impressive dominance to gentle friendliness, but the situation is always sufficiently one-sided to justify Ferenczi's picturesque designation of these extremes as "paternal and maternal hypnosis." Subjects sometimes prove insusceptible to hypnosis because they cannot tolerate the one-sided relation with its implicit passivity and dependence.

For those who are not resistant, the hypnotic situation contains very definite gratifications. Childlike desires to be the object of solicitous attention and to be free from irksome responsibility are usually well satisfied in hypnosis. The situation thus both arouses infantile feelings of dependence and gratifies them. When studying non-directive counseling we saw that the therapist has to keep structuring the situation in such a way as to emphasize the client's freedom to use the hour as he pleases and to solve his problems with only a minimum of help. Hypnotherapy goes to the opposite extreme, stimulating the client's dependence and at least temporarily relieving him of the feeling that he must solve his own problems. The hypnotherapist's attitude fits much more readily with the patient's expectations and desires at that point. Gratification of his dependent needs gives him a strong motive to please the therapist. With childlike intensity he wants to be well if that is what the hypnotist wants.

These characteristics of the hypnotic situation can be used to explain in part the results obtained by the older hypnotists who used direct suggestion. As Rado has pointed out, both the quick cures and their lack of permanence can be related to the motivational situation just described.[10] Symptoms are suppressed out of an unconscious desire to please the hypnotist. They can be kept in suppression only so long as this wish is gratified by further hypnotic sessions or by fantasied repetitions of the hypnotic situation. If the patient is dismissed as cured, the very act of dismissal curtails at once the gratifications he was receiving from hypnosis, and his artificially intensified motive toward health falls back to its previous insufficient level. Defenses again triumph and the symptoms reappear.

Hypnoanalysis creates the same initial situation. The subsequent handling of that situation, however, is utterly different. Wolberg

[9] Ferenczi, S., *Contributions to Psychoanalysis*, Boston, Richard Badger Co., 1916, p. 57.

[10] Rado, S., "The Economic Principle in Psychoanalytic Technique," *International Journal of Psychoanalysis*, 1925, Vol. 6, pp. 35–44.

describes in the following quotation the use that can be made of the hypnotic transference relationship.[11]

> It is neither possible nor desirable to avoid dependency at the start. The motive for being hypnotizable is probably rooted in a dependency need that is partially retained by every person as a residual element of his childhood adjustment. Dependency may be the only type of relatedness that the neurotic person can enter into at the beginning. Normal independence and self-sufficiency may be beyond his ken or may be anathema to him. In his relationship with the hypnotist, the patient may automatically assume the role of a helpless child not only during hypnosis but also posthypnotically. This need not halt rational therapy, for the hypnotic relationship, properly employed, may be used as a means of hastening ego growth. In the normal developmental process the helpless child is dependent on the parent for love and support, and evolves an independent self largely as a result of gratifying experiences with the parent. The hypnotic relationship, even though rooted in dependency, may similarly be utilized to encourage self-development.

Self-development is encouraged by progressively showing the patient that it is possible for him to be active even in the hypnotic state. He gives associations, talks, argues, experiences many feelings. Gradually the situation becomes structured in a way that emphasizes the patient's activity and responsibility. The hypnotist reduces himself from the omnipotent parent first perceived by the patient to the realistic stature of a rational therapist who merely assists in the process of growth. Wolberg believes that the rapid early development of a childlike relation effects an economy in treatment. It produces an immediate closeness between patient and therapist and activates a wealth of feelings that would otherwise creep more slowly into expression. Just as in standard and briefer psychoanalysis, the transference relationship gradually becomes itself the object of analysis. It causes resistances in the patient and these are broken down by interpretation. If the relation to the therapist is thoroughly worked through, there need be no residual dependence at the end of treatment.

As was the case with non-directive counseling, we cannot yet give a satisfactory indication of the results of hypnoanalysis. The integration of hypnotic with analytic methods is too recent an experiment to have produced a large series of completed cases with a sufficiently long follow-up. Some workers report that the period of treatment is radically shortened, never extending over three or four

[11] Wolberg, *op. cit.*, p. 259

months. Others are more conservative and allow for difficult cases in which the length of treatment is only a little less than in standard psychoanalysis. Inasmuch as hypnoanalysis is a planned reduction of the standard procedure, its most important test will come in comparison with the briefer psychoanalysis described by Alexander and French. The hypnotic state has potentialities for hastening and shortening certain aspects of the treatment. This particular resource is not tapped in briefer psychoanalysis. On the other hand, the hypnotic state cannot be used without developing the hypnotic transference relationship which must then be fully worked through. This takes away the therapist's flexibility in choosing the type and amount of transference neurosis he will allow to develop. Much research will be needed before we can settle the issues thus raised.

Narcosynthesis

Narcosynthesis is distinctly not an independent therapeutic system. It is a new development, being largely the product of experience during World War II. Conceived within the framework of an anxiety theory of neurosis, it was regarded from the start as a technical aid in a more comprehensive plan of treatment. Thus far it has been used principally with neuroses of traumatic onset. Whether it can be woven into an analytic technique suitable for the more chronic civilian neuroses, and thus compete directly with hypnoanalysis and briefer psychoanalysis, remains for the future to decide.

Narcosynthesis performs its service at much the same point as hypnosis. It shares in several ways the characteristics of the hypnotic state, notably in freeing the associative processes and producing an extremely vivid recall of past experiences. We have already had occasion to mention narcosynthesis twice in this book. It was the means whereby the neurotic bombardier, Pearson Brack, described in our clinical introduction, recovered contact with the anxieties caused by his narrow escape from death.[12] We discussed it also when working out a theory of the nuclear neurotic process, showing how it functioned to overcome the defensive inhibition that is directed against remembering an acutely frightening event.[13] As we are to this extent already familiar with narcosynthesis, we can deal with it now rather briefly, aiming in particular to establish its place in relation to other psychotherapeutic procedures.

[12] See above, page 69.
[13] See above, pages 237–238.

The Technique of Narcosynthesis.—Before the war some use had been made of drugs to increase the productiveness of interviews. The so-called "sodium amytal interview" had as its purpose the revealing of repressed material so that the therapist could be better guided in his handling of the case. Repressed emotional situations were sometimes recalled and abreacted with great vividness, but as the patient forgot them completely when he emerged from the influence of the drug there was no lasting change in his adjustment. Under many circumstances, especially those of war, this use of drugs to accomplish a rapid but penetrating diagnosis may be extremely valuable. Whether a soldier is to be returned to active combat, withdrawn to less strenuous duty, or separated from the service can be decided more wisely after this kind of diagnosis. The aim of narcosynthesis, however, is therapeutic rather than diagnostic. Drugs are used not only to secure recall and abreaction of crucial experiences but also to accomplish a synthesis of this material with the patient's waking self or ego. This step is more difficult and requires well-timed activity on the part of the therapist.

The technique as used in combat zones is described as follows by Grinker and Spiegel.[14] The patient, following preliminary interviews with the therapist, is placed in a darkened room, told that he is to have an injection that will make him sleepy, then given an intravenous injection of sodium pentothal. He is asked to count backward from 100, and when the counting becomes confused but before he is actually asleep the injection is discontinued. This device serves to establish a satisfactory level of narcosis. Some patients begin to talk spontaneously, but most of them have to be stimulated by the therapist who begins to describe whatever he knows about the traumatic situation. Generally this serves to get the patient started on what soon becomes a dramatic reliving of the dangerous scene.

> The terror exhibited in moments of supreme danger, such as during explosions within the plane, the falling of a plane, the mutilation or death of a friend before the flyer's eyes, is electrifying to watch. As the event approaches, the body becomes increasingly tense and rigid. The eyes widen and the pupils dilate, while the skin becomes covered with fine perspiration. The hands move about convulsively, seeking a support, a protection, a weapon, or a friend to share the danger. Breathing becomes incredibly rapid and shallow. The intensity of the emotion sometimes becomes more than can be borne and frequently at the height of the abreaction there is a collapse. The individual falls back in bed

[14] Grinker, R. R. & Spiegel, J. P., *Men Under Stress*, Philadelphia, Blakiston Co., 1945, pp. 170–178, 389–406.

and remains quiet for a few moments, usually to resume the story at a more neutral point.[15]

Grinker and Spiegel point out that the patient's emotional reaction often corresponds not to what he did and felt on the original occasion but rather to what he controlled and repressed in order to complete his job. There seems little doubt, however, that in all other respects the patient produces a true replica of what actually happened.

The therapist must generally play an active part in the drama. He can step in to assume various roles, yet at the same time preserve his position as the doctor who gives encouragement and support, sympathy and forgiveness, or whatever may be necessary to carry the patient through his violent emotions. More crucial is the therapist's activity as the drug wears off. The patient passes through a "twilight area" in which he is still in touch with his harrowing memories but at the same time increasingly in contact with the present reality. Sodium pentothal is preferred to the other barbiturates because it produces this transitional state, wearing off rapidly instead of plunging the patient into a stuporous slumber. It is at this point that the synthesis must be effected. The therapist must keep the memories actively alive, at the same time showing the patient that the danger is past and that defenses can be relaxed. Occasionally this activity fails and the patient becomes amnesic for the period of narcosis. Usually the synthesis can be accomplished, in which case the patient may experience a marked relief from pressure. "The ego finds that it is stronger than it had anticipated." [16]

Application to Civilian Neuroses.—There is little doubt concerning the value of narcosynthesis for the prompt treatment of neuroses of traumatic onset. Its unique service in combat zones has been thoroughly demonstrated. When time is limited it is by far the most practical means for liquidating the defenses against recent trauma. Its value as a technical aid in treating the neuroses of civilian life is at present much less clear. Considerable experimentation will be necessary before we can judge the possibility of making narcosynthesis a part of peacetime psychotherapy.

Only tentative and preliminary reports are at present available. Grinker and Spiegel have used the technique in treating Air Force returnees at a convalescent hospital in this country. Most of the patients had been through traumatic experiences, but earlier neurotic

[15] *Ibid.*, p. 173.
[16] *Ibid.*, p. 175.

patterns were clearly indicated as predisposing causes of breakdown and as maintaining causes of the current complaints. The patients were not the equivalent of a civilian sample, but they were closer to it than the men treated in combat areas. Grinker and Spiegel report that narcosynthesis was required in only about half the cases. It was used chiefly when severe resistance blocked the progress of conversation or free association. Sometimes a single narcotic session, sometimes three or four proved necessary to break through a major resistance. The material produced in narcosis was not different in character from what could be obtained in waking interviews, but it could be obtained more quickly with the help of the drug. With this group of patients the material was by no means confined to battle scenes. It included events of childhood, scenes in the family, and emotions related to current problems of adjustment. Narcosynthesis was valuable but distinctly secondary in the psychotherapeutic program.

Probably future research will disclose the precise situations in which narcosynthesis is most useful. Freed reports particularly favorable results with neurotic patients having a trend toward detachment. Such patients produce plentiful free associations and memories, but these are accompanied by little feeling. Narcosynthesis did not restore additional memories, but it added the missing affective charge to thoughts and memories already obtained and thus served to hasten the progress of treatment.[17]

Comparison with Hypnoanalysis.—It will clarify the place of narcosynthesis among psychotherapeutic methods if we compare it directly with hypnoanalysis. The narcotic state and the hypnotic state are used at much the same point and for much the same purpose in treatment. Both states have the property of facilitating vivid recall and emotional abreaction. No elaborate experiments have yet been made on the induction of reveries and dreams or the guiding of free associations in narcosis, but the vivid recall of experiences is strictly analogous to what can be obtained in the hypnotic state. The introduction of narcosis at points of severe resistance is also analogous to the use frequently made of hypnotism. The methods are much alike on all these points.

There are two important differences. In the first place sodium pentothal can be used with almost any patient, whereas hypnotism requires a susceptible person and thereby excludes a certain number

[17] Freed, H., "Narcosynthesis for the Civilian Neuroses," *Psychiatric Quarterly*, 1946, Vol. 20, pp. 39–55.

of patients. In the second place, hypnotism inevitably produces a certain type of transference relationship characterized by childlike compliance and dependence. Narcosynthesis may produce a similar effect, but the tendency would appear to be by no means as strong. The magical power which patients so insistently read into hypnotists can here be read into the drug rather than the person who administers it. Narcosynthesis would thus seem to give the therapist greater freedom in handling the transference relationship. Both of these differences must be counted to the advantage of narcosynthesis, but we should refrain from awarding it the decision over hypnoanalysis until more evidence is available. The repeated use of drugs may carry complications from which repeated hypnosis is free. Grinker and Spiegel, despite their own outstanding contributions to the use of sodium pentothal, make the following statement: "We believe hypnotism, when performed in the manner of inducing abreactions and effecting adequate synthesis, is of no less value in therapy than narcosynthesis." [18]

Active Psychotherapies

Thus far in this chapter we have discussed two technical aids designed to shorten the time required for psychotherapy. In this section we turn our attention to a number of techniques which have one point in common: the therapist actively intervenes to hasten some portion of the therapeutic process. *Active psychotherapy* is a loose and somewhat inaccurate term. A psychotherapist is always to a certain extent active. Even the counselor who wants to make his method as non-directive as possible has to create the *initial therapeutic relationship,* structure the situation, and selectively recognize feelings rather than simply engage in a social conversation with the patient. The therapist is active when he requires free associations or when he uses hypnotic or narcotic aids to stimulate the *expression of feelings.* He is active in *pointing out feelings,* especially when he gives interpretations. His attitude toward the *transference relation* and toward *new behavior* undertaken by the patient entails at least a certain amount of activity. Active psychotherapy is therefore a relative term. It refers to methods in which the therapist takes steps that are still more active than those thus far described. Of course the peak of activity is represented in the old-fashioned hypnotist who used direct suggestion to remove symptoms. Between him and the practitioner of narcosynthesis, hypnoanalysis, or briefer psycho-

[18] *Op. cit.,* p. 395.

analysis lies a zone of relatively active methods which we shall now briefly consider.

Persuasive Re-education.—Many names have been used to describe these relatively active methods: suggestion, explanation, persuasion, re-education, directive psychotherapy, education of the will, etc.[19] Some of the techniques, like the persuasive methods of Dubois and Dejerine in Europe and the re-education procedure of Riggs in this country, have grown up entirely outside the influence of psychoanalysis. Other workers, such as Stekel and Adler, began with Freud but presently diverged from his therapeutic principles. Though varying greatly in detail, they all cast the doctor somewhat in the role of a teacher who explains things to the patient and urges him to act upon the explanation. For our present purpose they can be lumped together under the heading of *persuasive re-education.*

Alfred Adler was one of the first in Freud's circle to become impatient with the length of psychoanalytic therapy. His own simpler conception of the neuroses, which we have mentioned in earlier chapters,[20] permitted him to believe that a more rapid re-education was possible. Starting from the usual *initial therapeutic relationship,* Adler secured an *expression of feelings* by directed conversation and dream analysis. His characteristic activity was most apparent in the process of *pointing out feelings.* As the patient little by little unfolded his story, Adler indicated the episodes that revealed strivings for superiority, roundabout ways of dominating people, evasions of the real issues of life, underlying feelings of inferiority, failure to develop true social feelings, and all the rest of the neurotic style of life. While he diverged greatly from Freudian psychoanalysis in the things he elected to point out, it is not incorrect to consider his tactics as a speeding up of the process of interpretation. Standard psychoanalysis points out a great deal to the patient in the course of two or three years. Adler worked faster and did not pay so much attention to the delicate question of timing the interpretations so that the patient could use them to relax his defenses. Such methods are not without success. Clifford Allen, an unsparing critic of Adler in several respects, raises the question whether you can cure neurotic sufferers by this technique, and answers that "you most certainly can." "There is no doubt that a certain type of pa-

[19] Several such methods are described by Appel, K. E., "Psychiatric Therapy," in J. McV. Hunt's *Personality and the Behavior Disorders, op. cit.,* Vol. 2, esp. pp. 1110–1118, 1125–1133.

[20] See above, pages 43–47, 259–262.

tient will respond to Adler's methods very well. Moreover, in those cases which do respond, the time taken for treatment will be considerably reduced, although naturally the illness is not attacked at such a fundamental level as it would be by Freudian methods." [21]

Persuasive re-education is undoubtedly capable of bringing about a corrective emotional experience. This is particularly true when it is used with delicacy by workers who are sensitive to the motivational conditions under which relearning can take place. If the doctor points out the patient's evasive defenses before the patient has begun to like and respect the doctor, learning is not likely to take a therapeutic form. The most that the patient will be able to learn is that the doctor is an insulting fool who is to be strictly avoided in the future. It was probably Dejerine who handled this problem with the greatest insight.[22] He believed in the efficacy of pointing things out to the patient, but he did this only after gaining the patient's absolute confidence through sympathetic exploration of his problems. Under these circumstances persuasion is practicable and can be used to hasten the therapeutic process. It is possible to relax defenses and learn new behavior when you are assured of the warm interest and expert guidance of an impressive therapist.

Limitations of Persuasive Methods.—The greatest liability of persuasive re-education is that it will slip over from encouraging the *expression* of feelings to encouraging their *suppression*. There is a constant danger that the therapist's activity will outstrip the patient's capacity to grow. As we saw in studying standard psychoanalysis, the patient often requires a long time for the working through of a given interpretation. The anxiety and its defense crop up in a new form; what seemed accomplished yesterday has to be accomplished again today. A young analyst in training once remarked that he got tired of hearing himself give the same interpretation day after day, yet the patient always needed it. Persuasive re-education tends to build a therapeutic relationship in which the patient greatly admires the doctor and hates to displease him. Under such circumstances he will try to keep up with the doctor and struggle to produce the new behavior which he perceives to be the latter's ultimate desire. When he cannot relax defenses fast enough to achieve this goal, he resorts to suppressing his symptoms and neurotic trends. Our study of the older hypnotic methods has taught

[21] Allen, C., *Modern Discoveries in Medical Psychology*, New York, The Macmillan Co., 1937, p. 184.
[22] Dejerine, J. & Gaukler, E., *Psychoneurosis and Psychotherapy*, Philadelphia, J. B. Lippincott Co., 1913.

us the consequences of this situation. It is difficult to end the therapeutic relationship without producing a relapse. What has been done to please the therapist requires that he should keep on showing his pleasure.

It is also characteristic of persuasive re-education that it uses transference without analyzing it. The patient's feelings toward the doctor are used to promote progress without being pointed out or interpreted. The therapeutic situation itself is not turned into an opportunity for the patient to practice his growing capacity for mature human relationships. The therapist relies on new behavior outside the office to provide the needed corrective emotional experience. Inside the office he allows the patient to remain in a childlike role, dependent and admiring. If the persuasive therapist undertook to interpret the transference and work out all its emotional implications, his procedure would probably take just as long as standard psychoanalysis.

Persuasive re-education is often successful, however, and we must consider the circumstances under which it can achieve success. Its greatest liability, moving too fast for the patient, is avoided when the patient's progress is not blocked by substantial anxiety and stubborn defenses. When the patient is simply maladjusted or has only a mild neurosis he will be able to cut short the laborious process of working through. So long as the therapist recognizes his feelings correctly and rewards him with solicitous interest he will be able to keep pace with the interpretations of his conduct. Growth will be possible without the forcible suppression of important problems. Under these circumstances, furthermore, it may be possible to dispense with interpreting the transference. At first the patient needs constant rewards of approval from the therapist in order to change his behavior. If change is rapid, however, the rewards inherent in better-adjusted living will supersede those obtainable from the therapist. The shy and awkward patient, for instance, at first needs encouragement to undertake new social contacts, but if these are successful they become self-rewarding. If these gains take place rapidly, without the discouraging relapses that are characteristic of the severe neuroses, the transference fades away without leaving harmful traces. The patient has outgrown his childlike dependence on the therapist just as a healthy child outgrows his dependence on the parents.

Persuasive re-education can thus be used with success when the patient is not too heavily crippled by anxiety and defense and when he is capable of a warm and trusting attitude toward the therapist.

Under the right circumstances it is a suitable means for dealing with the less severe disorders.

Herzberg's Use of Tasks.—An interesting variation of active psychotherapy is reported by Alexander Herzberg.[23] Without dispensing altogether with psychoanalytic measures he uses a combination of persuasion, direct influence on the patient's milieu, and therapeutically oriented tasks. It is this last feature, the tasks, that distinguishes his method from others and that is allegedly responsible for the greatest saving of time. The principle of the tasks is simple. The patient is directed to undertake some specific piece of new behavior. At subsequent interviews he is expected to report fully on his success in carrying out the new behavior. The primary function of tasks is to give the patient the heightened self-confidence that comes with success. He learns that he can take action and win at least a local victory over his neurosis. The struggle to execute a task also yields a valuable by-product. When the patient has to report that he has not yet fully succeeded, he generally gives free and voluminous expression to the feelings and resistances that surround the task.

Obviously it is of the utmost importance that the therapist assign the right tasks. If the patient fails completely, he is likely to be so badly discouraged that he breaks off the treatment. What is assigned must be within his powers and must be of such a nature that it leads toward health. It must be directed against impulses that are maintaining the neurosis or against secondary gains that are being derived from sickness. Like interpretations in psychoanalysis, tasks must be directed at first against superficial aspects of the neurosis and only later reach the deeper problems.

The following example will help to clarify the procedure.[24] A wife felt strongly hostile toward her husband because of his lack of initiative and failure to earn well. At the same time she liked him for his kindness and consideration. For the sake of their children she wanted the marriage to continue, and her own hostility therefore filled her with self-reproach. Her aggressive feelings were thus constantly turned back on herself in the form of blame, and this finally resulted in depression with insomnia and various bodily symptoms. By concentrating fiercely on her symptoms she could now forget her aggression toward her husband. This neurotic solution of the main conflict, however, soon became exploited for secondary gain. By

[23] Herzberg, A., *Active Psychotherapy*, New York, Grune & Stratton, 1945.
[24] *Ibid.*, pp. 51–52.

constant complaining about her illness she obtained increased attention from her husband, who took her out every day in order to make her feel better and who allowed her to keep a maid. Before long she was receiving presents and financial aid from her parents. Because of her condition she refused sexual intercourse, thus in effect punishing her husband. How can therapeutic tasks be used in treating this neurosis? Obviously it would be futile to direct them straight at the main emotional problem, telling her to stop hating her husband or punishing herself. Tasks were assigned instead which had the effect of removing the secondary gain. Progressively she was required to stop speaking of her symptoms at home, to discharge her maid and do her own housework, to resume sexual relations and discontinue her daily requests to be taken out, and to refuse all assistance from her parents. As these steps were successfully accomplished it became possible to go on to more nuclear problems.

The assignment of tasks is a highly active procedure. It is not at all what a neurotic patient wants when he takes his problems to a therapist. It is strong medicine, and the doses must be selected with the utmost skill. Herzberg makes no bones about the fact that many patients cannot take it and break off the treatment. Of a series of a hundred consecutive cases, 48 were cured or much improved, 47 broke off treatment either slightly improved or unimproved, and 5 were ended by the therapist as not capable of significant improvement. When success is achieved, however, it comes in a fairly short time. The tasks keep the treatment moving at a good pace. Herzberg reports that 44 per cent of his successful patients required 20 interviews or less, 38 per cent between 21 and 40, and only 18 per cent a longer period.[28]

Psychotherapy with Children

Psychotherapy with children is not fundamentally different from psychotherapy with adults. The same principles operate, but their emphasis and application have to be adjusted to the fact that the patient is immature and dependent. The child does not come for treatment of his own consent. As a rule he does not even perceive himself as sick or in need of treatment. The therapist therefore has to proceed somewhat differently in creating the *initial therapeutic situation.* He has to prove to the child that he is a helpful kindly com-

[28] *Ibid.*, pp. 136–137.

panion and that he can become an interesting part of the child's world. Sometimes this can be accomplished in the first interview, but often it takes a longer time for the therapist to sell himself to the young patient. Anna Freud describes an example in which a ten-year-old boy, whose symptoms included phobias, deceptions, and thefts, was convinced only after many meetings that it was worth his while to bother with the therapist. "I had to inveigle myself," she says, "into a confidence which would not be won directly, and to force myself upon a person who was of the opinion that he could get along very well without me." [26] She accomplished this by adapting herself to the child's whims, making herself an interesting participant in his play, proving herself useful when he was in trouble, and allying herself with him by returning things he had stolen and protecting him from punishment. When a patient comes for treatment from any other motive than his own need for help, the therapist has to exert himself to create a workable therapeutic situation.

The *expression of feelings* must also be accomplished in a different fashion. For younger children, at any rate, conversation is a poor medium for this purpose, and the principle of free association cannot be grasped. Fortunately a good substitute is available. If left to himself a child will play, and the therapist can do no better than encourage him to play. Play is a spontaneous and unguarded activity. It is the child's natural mode of expressing his feelings, developing his interests, and working on his problems. When play was first suggested as a substitute for conversation and free association, it was conceived largely as a means of diagnosis. Soon it became apparent, however, that play was itself to a certain extent therapeutic. The child uses it not only to express his anxieties but also to reduce them by putting himself in the position of actively mastering the dangers. By introducing the young patient into a small world of toys—dolls and animals, houses and furniture, cars and trucks, water, sand, and building blocks—the therapist at one stroke accomplishes two things. He opens an easy path for creating the initial friendship, and he links himself to the child's own preferred means of expressing feeling and achieving corrective emotional experience.

Another process that is considerably altered in work with children is the *transference*. The child develops various feelings, sometimes quite violent ones, toward the therapist, but these may constitute a new relationship rather than a transferred repetition of older atti-

[26] Freud, A., *Introduction to the Technic of Child Analysis*, New York & Washington, Nervous and Mental Disease Publishing Co., 1928, p. 8.

tudes toward parents. As Anna Freud neatly expresses it, "the child is not ready to undertake a new edition of its love relationships because the old edition is not yet out of print. Its original objects, the parents, are actually in existence as love objects, not in fantasy." [27] Often it happens that a child who is well loved at home mistrusts the therapist, whereas a rejected child at once strikes up a warmly affectionate relationship. At other times, to be sure, genuine transference does occur: the child repeats in relation to the therapist the emotions that he feels toward one of his parents. But the value of a *transference neurosis* is by no means as great as it is in adult psychoanalysis. Little gain could be expected from working out at the office a new edition of parental relationships if upon going home the child was simply plunged back into the old edition. Psychotherapy makes a patient less afraid of dangers that are no longer real. Its efforts are undone if the danger proves to be still real.

On the question of *new behavior* there is a corresponding difference when psychotherapy is applied to children. New behavior can serve as corrective emotional experience only when it is met with a new and more favorable reception. The child is in a poor position to make his environment treat him differently, even when his own behavior has greatly changed. He is still dependent and relatively helpless, he still occupies his accustomed positions in the family and among his playmates. The therapist must therefore place considerable reliance on changing the environment so that it will treat the child differently and allow his new behavior to become corrective emotional experience. Sometimes progress is possible only by putting the patient in a new environment: a new school, a camp, or even a foster family. Many workers feel that it is futile to practice psychotherapy with children under fourteen unless the parents can be influenced at the same time. Simultaneous treatment for mother and child is strongly recommended at most guidance clinics.

Levy's Release Therapy.—We begin with a method that is applicable only in certain situations but that has the virtue of great simplicity. David Levy has given this method the name of *release therapy*.[28] Its distinguishing mark is its dependence on the child's acting out his problems and anxieties in play. This acting out in play, together with the permissive and sympathetic attitude of the therapist, constitutes the whole therapeutic process. No attempts are made to point out to the child the feelings he has expressed, to

[27] *Ibid.*, p. 38.
[28] Levy, D. M., "Release Therapy," *American Journal of Orthopsychiatry*, 1939, Vol. 9, pp. 713–736.

develop a transference relationship, or to promote any kind of new behavior. The method thus uses only two of the five basic processes: the initial therapeutic situation and the expression of feelings. Nevertheless it is highly successful for certain types of problems with children in the age range from two to ten. It is clearly capable of creating a corrective emotional experience.

The probable cause of anxiety in each case is judged from the history as given by the parents. The therapist then prepares a suitable arrangement of toys which gives the child the opportunity to play actively with the situations that caused him fear. The therapist may even take the lead in playing with the chosen toys and encourage the child to join him. As an example we may take the case of a boy of seven who had been having severe nightmares, awaking in sobs to recount dreams in which he was bound and tortured. The precipitating incident proved to be a story read at school in which two knights nailed an innkeeper by the hands to the door of his own inn. A few months earlier there had been a real incident when some boys bound him to a tree in the park and pretended to torture him. Both the story and the real incident contained grave threat because of their similarity to two harrowing experiences a few years earlier when he had been bound in blankets for puncture of the eardrums without anaesthesia. This boy was cured of his nightmares by four sessions of play. Toys were chosen to represent knights and an inn, boys, ropes, and a tree, blankets and a doctor. The patient played actively with this equipment and thus immunized himself to his fears.

Not all cases can be so quickly cured. For the series of 35 patients given in Levy's paper the average number of sessions was about 15. Not all the young patients have such clearly focalized sources of danger. In another case, for example, fear seemed to rest on all manifestations of messiness and aggression. The cause was presumed to lie in too early and too severe discipline, but no specific terrifying incidents were given in the history. Throughout the 19 sessions of treatment the little girl, once she overcame her initial anxiety, spent her time throwing clay and stepping on it, splashing water and sitting in it, cutting things to pieces and hurling them around the room. While this went on at the office, notes from the mother reported a constant increase of relaxation, contentment, and outgoing affection at home. The child began to blossom when the burden of guilt was lifted from her destructive and hostile tendencies by the therapist's permissive attitude. Yet in this case, as in the majority of Levy's cases, there was not a word of interpretation. The younger children—those under six—were apparently cured

without knowing why they had been sent to the clinic to play and without perceiving any relation between their play and their behavior at home. This is corrective emotional experience reduced to its lowest terms.

One of the virtues of Levy's report is its clear statement of the conditions under which release therapy can be successfully applied. He offers the following criteria for selecting patients: (1) The problem should consist of a definite symptom syndrome precipitated by a relatively specific event: a fright, birth of a younger sibling, divorce of the parents, or something of the sort. (2) The fear should not have been in existence too long, so that it has had time to ramify throughout the personality and affect many aspects of behavior. Release therapy is thus not indicated for children over ten. (3) On the other hand the problem must center on something that happened in the past rather than on a chronic continuing situation. A background of satisfactory family relationships must be assumed. Release therapy is not indicated for chronic parental rejection, maternal overprotection, or similar enduring difficulties in the home situation. Only the effects of past experiences can be "released."

There is a certain resemblance between release therapy with young children and emotional abreaction as applied to adult neuroses of traumatic onset. Levy's criteria make it plain that release therapy is chiefly of value for children's neuroses of traumatic onset. It is not a sufficient treatment for those childhood neuroses that creep into a tangled existence out of chronic parent-child friction. Apparently the child in playing out his traumatic situations achieves much the same corrective emotional experience that occurs when the soldier under sodium pentothal rehearses his frightful scenes of combat. In play the child resumes contact with the threat and reappraises it. This time he achieves active mastery—he nails the innkeeper to the door, or ties the doll to the tree and has it break its bonds asunder. Probably the greater success with younger children comes partly from the fact that play and reality are less strictly differentiated. For a small child, doing something in play is almost the same as doing it in reality.

Simultaneous Treatment of Mother and Child.—Unfortunately Levy's criteria exclude the majority of neurotic and maladjusted children. It is not often that the existing family situation plays a negligible part in the difficulty. When the problem arises out of parent-child relationships, it is futile to try to solve it purely by changing the child, who is the least strong and mature party to the

relationship. Under these circumstances it is becoming a common practice to draw the mother into a simultaneous therapeutic relationship. Ideally the father should also be drawn in, but he can usually escape on the plea that he has to earn money to pay for the treatment. The mother has to bring the child to the office; she is generally upset over his condition, and it is not difficult to ease her gently into a therapeutic relationship.

Many workers carry on psychotherapy with children in this fashion. The process is well described by Frederick H. Allen who has worked it out for a period of twenty years at the Philadelphia Child Guidance Clinic.[29] While the child is in the psychiatrist's office, the mother gives her version of the case to the social worker and is progressively encouraged to express feelings. The treatment of the mother follows the lines of non-directive counseling as described in the last chapter. The treatment of the child is similarly non-directive in spirit, although Allen favors a certain amount of interpretation rather than mere recognition of feelings. The child at once experiences the novelty of being able to behave without maternal supervision, encouragement, criticism, or whatever has characterized the parent-child relationship. By slow degrees he makes his own relationship with the therapist and assumes responsibility for his own actions. Allen's reports are full of attempts by the children to make the therapist assume responsibility. They want him to treat them the way their mothers do. The significant step of doing things because they themselves want to, rather than to please the therapist or resist him, comes later and with difficulty. The mothers meanwhile change in much the same direction. Frequently the mother has been as much enslaved to the child as the child has been to the mother. The root of the trouble, Allen points out, often lies in this exaggerated identification between mother and child. Both parties need to be disentangled so that they can become individuals in their own right.

The procedure is illustrated in the case of Solomon, a ten-year-old boy suffering from tics and general nervousness.[30] Whatever their origin, the symptoms served the purpose of enslaving an already devoted mother who fussed anxiously over Solomon's difficulties. The child soon discovered that the therapist was not going to fuss anxiously over his symptoms, and these were rarely manifested at the office. At the third interview Solomon stated that his mother thought he was better. At almost the same moment the mother was telling the social worker that the symptoms were very much worse;

[29] Allen, F. H., *Psychotherapy with Children*, New York, W. W. Norton & Co., 1942.
[30] *Ibid.*, Ch. 6.

then she suddenly blurted out, "What will I have left when the children are grown?" Her own difficulty in letting Solomon, her youngest child, grow up was clearly a contributing cause of his illness. Solomon, meanwhile, began to learn the satisfactions of growing up, though he resisted them stoutly for a time. There were several scenes in which he debated whether he would bravely go to bed alone rather than having his mother take him upstairs at night. He tried to cajole the therapist into ordering this new behavior, and his feelings were hurt when the therapist said that the act should not be done simply to please him. Finally, however, Solomon began to do things on his own initiative. He expressed an interest in growing up and being like his older brothers. The change in both child and mother was neatly symbolized at the close of the last interview. For the first time Solomon struggled uncomplainingly to put on his heavy coat with its awkward collar, working until he succeeded, and for the first time his mother did not offer to help him.

It seems likely in this case that work with Solomon alone would have gone to waste. He readily gave up his symptoms at the office, but would he ever have been able to discontinue them at home if his mother solicitously fussed over him and thus rewarded the symptoms? Treatment of the mother alone would also have gone rather slowly. Would insights gained at the office survive the primitive appeal of her child's tearful trembling at the prospect of going to bed alone? Each party could make rapid and substantial progress only when the other party also changed. This problem of changing a relationship rather than merely changing a patient is often the central one in child guidance.

Child Psychoanalysis.—A small group of workers headed by Melanie Klein in England may be said to practice standard psychoanalysis with children. Klein substitutes play for free association, but otherwise she follows closely the Freudian pattern for adult analysis. Systematic use is made of interpretation, the transference neurosis is fully developed, and no unusual attempts are made to influence the child's environment.[81] In general, however, psychoanalysis with children is not sharply set off from other methods of treatment. The principle of flexibility, at last fully recognized in briefer psychoanalysis, has from the start been inescapable in work with children.

It would perhaps be fair to say that therapy with children could

[81] Klein, M., *The Psychoanalysis of Children*, London, Hogarth Press, 1932, esp. Pts. 1, 2.

be classed as psychoanalysis when substantial use is made of interpretation. Yet there are a good many child analysts who now argue for a sparing use of interpretation. Lippmann, for instance, really reduces interpretation to the recognition of feelings when he says: "Interpretations are made only when the child has so worked through the material that the meaning is quite clear to him." [82] For our purposes it is not important to draw a sharp line between what is child psychoanalysis and what is some other kind of therapy. It is important, however, to learn everything we can about interpretation and to see how it fits into the therapeutic process when the patient is a child.

A discerning account of this problem has been given by Erikson.[83] He calls attention to the phenomenon of *play disruption,* defined as "the sudden and complete or diffused and slowly spreading inability to play." [84] Playfulness implies a certain freedom and relaxation, a peaceful state of mind. When the child's play leads him to dangerous topics and anxiety-laden ideas, this freedom is lost and his play either comes to a standstill or assumes a compulsively repetitive character. Play disruption is thus the equivalent of the resistances that arise in the course of adult free associations. If the child can play out his problems and bring them to a more successful conclusion, as happens in release therapy, interpretation is unnecessary. Corrective emotional experience can take place without it. But when his play terminates in disruption—when he becomes unable to cope with the anxieties to which his play intentions have led him—then release is impossible without help from the therapist.

> Those children who transfer not the solution but the insolvability of their problems into the play situation and onto the person of the observer need to be induced by *systematic interpretation* to reconsider, on a more verbal level, the constellations which have overwhelmed them in the past and are apt to overwhelm them when reoccurring. Where *this* goal is given, child psychoanalysis begins.
>
> Child analysis proper seeks to provide the child with an opportunity for catharsis only in the frame of an intimate therapeutic contact in which *repeated interpretation* furthers the *verbal communication* of inner dangers and the establishment of a *supremacy of conscious judgment* over unmanageable or incompletely repressed tendencies." [85]

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[82] Lippmann, H. S., "Child Analysis," *American Journal of Orthopsychiatry,* 1939, Vol. 9, pp. 707–712.

[83] Erikson, E. H., "Studies in the Interpretation of Play. I. Clinical Observations of Play Disruption in Young Children." *Genetic Psychology Monographs,* 1940, Vol. 22, pp. 557–671.

[84] *Ibid.,* p. 563.

[85] *Ibid.,* pp. 563–564.

Interpretation is not a single act; it must be repeated as often as is necessary to permit the child a ready and relaxed verbal expression of his troubles. When such expression becomes possible, when the young patient can verbalize his tendencies with comfort and even with humor, he not only feels a vast immediate relief but he is also protected against future eruptions of the same crippling feelings.

The things that need interpreting are the child's fears, guilts, aggressions, and sexual tendencies. The therapist points them out before the child has verbalized them, but if possible not before the child is able to verbalize them. When interpretations are rightly timed they produce an immediate corrective emotional experience. This happens because the therapist's verbalization, occurring as it does within the permissive and friendly therapeutic relationship, says in effect that it is natural to have aggressive or sexual tendencies and that one need not feel afraid or guilty on their account. The child can reappraise the dangers when he finds that the therapist appraises them calmly rather than embodying them. A certain amount of sheer instruction goes along with the interpretation. The child's conception of the sex act and the reproductive process is likely to be highly distorted, and in the end it is better for him to know the true state of affairs.

It is probably impossible to dislodge the more severe neuroses of childhood without taking active steps of interpretation.

Drama as an Aid in Expressing Feelings.—The crowded children's psychiatric ward of the Bellevue Hospital in New York has been the scene of several valuable therapeutic experiments. Forced by necessity to shorten treatment as much as possible, workers under the direction of Lauretta Bender have tried various methods for hastening the expression of feeling. We shall briefly describe two of these methods, both of which use drama and attempt to secure a loosening of feelings in several children at the same time.

First there is the use of *puppet shows*, reported by Bender and Woltmann to be particularly effective for the age range from six to twelve.[36] The shows are devised to represent the common emotional problems of childhood and to provide ready identification figures. The hero, Caspar, is "active, curious, sociable, and uninhibited; he is immune to any real harm and in the end he finds a solution to his problems." There is a mischievous monkey, a dreadful alligator, witches, cannibals, giants, and kind parents. Caspar gets into vari-

[36] Bender, L. & Woltmann, A. G., "The Use of Puppet Shows as a Psychotherapeutic Method for Behavior Problems in Children," *American Journal of Orthopsychiatry*, 1936, Vol. 6, pp. 341–354.

ous scrapes and the monkey is constantly in trouble, but in the realm of puppets the forces of evil can always be overcome. The shows are conducted in such a way as to invite active participation by the audience. At crucial moments the children are asked to tell the puppeteers what happens next. Led on in this fashion they soon begin to give advice, shout warnings to Caspar that the alligator is creeping up behind him, denounce the witches and giants, urge clemency for the monkey, sometimes even get into brawls amongst themselves.

Bender and Woltmann call attention to three therapeutic benefits that result from this procedure. (1) Although the children rarely develop real anxiety as they watch the shows, they participate emotionally in Caspar's adventures. They share his daring and his aggression against the figures of authority and punishment that threaten him; they share also in the happy outcome which leaves these threatening forces defeated and harmless. Thus they gain some of the benefit that comes from spontaneous play. (2) "It is undoubtedly one of the greatest therapeutic factors that the child learns that other children about him are experiencing the same feelings that he is, and he is aided and abetted in the expression of his aggressive tendencies by the fact that others about him are loudly proclaiming his own feelings." In a show that deals with sibling rivalry, for example, the children shoutingly urge Caspar to throw the baby into the garbage can or drop him down the toilet, thoughts that would come to expression much more slowly without group support. (3) Subsequent individual therapy gets off to a good start by having the child retell the puppet story. Just as in hypnoanalysis the feelings experienced in hypnosis make their way more readily into waking free association, so here the feelings stirred up while the child is in the puppet audience become easily available for discussion in the therapeutic interview.

Puppet shows do not constitute an independent method of therapy. They serve as a time-saving technical aid in securing an expression of feelings, but they are simply an adjunct to individual psychotherapy. The same is true of drama as reported by Curran.[87] Puppet shows cease to be suitable beyond the age of twelve, and for work with groups of problem boys between twelve and sixteen Curran substitutes the writing and acting of plays. Sometimes the authors of the plays are allowed to choose the cast; sometimes a play is read aloud and the boys choose their own parts. The play is then re-

[87] Curran, F. J., "The Drama as a Therapeutic Measure in Adolescents," *American Journal of Orthopsychiatry*, 1939, Vol. 9, pp. 215–231.

hearsed and performed before a larger audience in the ward. Afterwards the actors are gathered together for a discussion. Questions are asked about events in the play. Curran reports that these discussions become very spontaneous, with much expression of aggression, but that they do not touch on deeper personal matters. These are reserved for later individual interviews. It is noticed that the boys loosen certain problems in themselves by acting appropriate roles, that they gain additional insight from the group discussion, and that they can then act out the appropriate roles even more freely. As they express their aggressions in this way one witnesses the encouraging fact that they become increasingly able to express friendliness and sympathy. But although the plays and discussions produce real benefits, they are conceived as adjuncts to individual psychotherapy.

Drama and puppet shows belong in the sphere of technical aids to the expression of feelings. At the same time they introduce an element of group activity. They thus lead us naturally to one of the newest and most interesting developments in psychotherapy: working with patients in groups.

Group Psychotherapy

The original impetus to group psychotherapy was a purely practical one. Psychiatrists in mental hospitals, and more recently psychiatrists in the armed services, confronted by an impossible amount of work, could help a substantial number of their patients only if they invented some radical device for saving time. For the most part no suitable device suggested itself. Doubtless many hundreds of treatable patients went untreated because nobody had the time to work with them. Here and there, however, starting about forty years ago but gaining real momentum only in the last decade, workers began to experiment with the possibility of treating patients in groups. For the most part group psychotherapy was not offered as a substitute for individual therapy. Nevertheless it soon proved to have certain unique advantages. Those who practiced it became convinced that it possessed distinctive curative properties in its own right. It brought the patient into an immediate social relationship with fellow-sufferers, thus permitting his social readjustment to begin at once and in a group which was apt to be uncommonly sympathetic. In individual therapy there is sometimes a gap between the patient's progress in his relationship with the therapist and his progress in the relationships of everyday life. Group psychotherapy claimed an advantage in bridging this gap. What the patient gained from adjust-

ment to the group might serve as a stepping stone toward new behavior at home and at work.

The Technique of Group Psychotherapy.—We shall first consider what goes on in sessions of group psychotherapy. As Klapman observes, the method is so new that "its practice has not yet been frozen into rigid techniques." In his opinion, however, "it is noteworthy that no matter in what quarter its practice is begun, and regardless of the fact that it may be initiated by isolated units of workers, the practices and lectures employed eventually take on the same character." [38]

Although a few workers claim success with large numbers, the common experience seems to be that six or eight patients, certainly not more than ten, form the most workable therapeutic group. The groups are usually referred to as "classes," and the patients are told that they constitute a regular part of the program of treatment. As a starting point and focus for each meeting, especially in the early part of the series, the therapist gives a talk. He may discuss some such topic as the emotions, beginning with their biological functions and physiological accompaniments. He may have something to say about defense mechanisms, starting with their familiar everyday forms. Simple diagrams or drawings on the blackboard are used whenever possible, not only to clarify what is being said but also to serve as an anchorage point for the discussion that is to follow. These talks by the therapist should not be regarded merely as a device to set the meeting in motion. They have a genuine teaching function. An intellectual grasp of mental mechanisms, even in simple terms, forms part of the goal of treatment, even though it is worthless when not accompanied by corrective emotional experience. It is valuable for the patient to realize at once that emotional disorders are scientifically understandable. He learns that what he may have believed to be his own guilty secrets and contemptible weaknesses have their place in general scientific knowledge. He is reassured to find that the therapist knows about them and that other patients suffer from them.

Sooner or later, however, the therapist's talk goes over into group discussion. The therapist encourages questions and asks for illustrative experiences. At first the patients may be reticent about their own experiences. They show many varieties of resistance, ranging from silence to an argumentative attack on the ideas presented by

[38] Klapman, J. W., *Group Psychotherapy: Theory and Practice*, New York, Grune & Stratton, 1946, p. 151.

the therapist. The group situation, however, is eventually conducive to overcoming resistance. If the therapist maintains a permissive and interested attitude and does not allow himself to be drawn into defenses of his own, the patients become increasingly able to speak about the things that trouble them. Once the process is started it goes forward fairly well. Each patient is emboldened by hearing the others talk about their problems. Each has the valuable privilege, moreover, of keeping silent if he wants to; conversation will be taken over by the therapist or by someone else if his own talk begins to embarrass or frighten him.

The personal problems brought up by patients cannot as a rule be fully worked out in class. The patients themselves usually seek individual interviews if they have touched upon matters of great importance. We can perhaps best show the relation between group and individual procedures by describing two of Klapman's examples.[89] (1) Class discussion brought up the common belief that minister's sons do not turn out well. The therapist asked how this might be explained in those cases for which it is true. A patient suggested that it might be because minister's sons have an easy time. The therapist disagreed, mentioning several ways in which the son of a minister is restricted and handicapped by his father's public position. The patient then said that he was a minister's son; he related some difficult incidents arising from this fact. He showed considerable emotion, and afterwards sought a private interview in which the question of his childhood difficulties was discussed much more fully. (2) The topic of mothers was under discussion. A male patient stoutly maintained the sacredness of mothers, giving a speech that sounded like a public address on Mother's Day. Later the subject of ambivalence was discussed by the therapist and illustrated with a case history. The patient appeared greatly interested, agreeing that there was much in what had been said. In subsequent individual interviews he gradually revealed that he had always been dominated by his mother who flagrantly tried to break up his marriage, that he both hated and feared her, that on one occasion she made him drive her to a scene where she shot and killed a woman with whom her husband was embroiled. This patient did not express his problem in the group; he expressed only his defenses. But the class discussion of ambivalence opened his eyes and loosened his defenses to a point where he could bring out his suppressed feelings in private interviews.

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[89] *Ibid.*, pp. 118–119.

Curative Processes.—In a recent article Ackerman lists six therapeutic aims for group psychotherapy: (1) to provide emotional support through group relationships, (2) to encourage discharge of pent-up aggression, (3) to reduce guilt and anxiety, (4) to encourage the correction of irrational interpersonal reactions, (5) to increase self-esteem and recognition of constructive capacities, (6) to foster the development of insight.[40] As regards Ackerman's second, third, and sixth items it is fair to say that group therapy does not differ significantly from individual therapy. The expression of aggression, the reduction of the associated guilt and anxiety, and the strengthening of this gain through insight all represent basic goals for any kind of psychotherapy. The peculiar virtues of group psychotherapy come out in the other three items. The feeling of group support, the change in one's reactions to other members of the group, and the heightened recognition for what one does successfully are benefits that occur most readily in therapeutic groups.

In individual treatment the patient's social adjustment is largely left to the patient. New behavior may be explicitly encouraged, but it is not observed by the therapist. Group psychotherapy brings this important step directly into the clinic. As group discussion proceeds, the patients begin to react to one another. Friendships and rivalries develop, subgroups are formed, complicated patterns grow up in relation to the therapist. Great alertness on the part of the therapist is required to keep these currents flowing in such a way that the group can continue to work together and with him. When well managed, this activity within the group offers a unique opportunity for practice and relearning of social attitudes. If patients *A* and *B* always take opposite sides in a discussion, patients *C* and *D* are quite likely to point this out, so that part of the re-educative process is supplied by the group itself. What is not accomplished in the group can be pointed out by the therapist in private sessions. The therapist has seen and heard the patient's fumblings with social relationships. He is in an excellent position to point things out.

Sometimes participation in a therapeutic group leads to enduring friendships. Even when this is not the case, the patient emerges from the work with a new and generally constructive social experience behind him. This is the special advantage of group psychotherapy, making it in certain respects a more real experience than individual therapy.

Group psychotherapy is not restricted to the maladjustments and

[40] Ackerman, N. W., "Group Psychotherapy with Veterans," *Psychosomatic Medicine*, 1946, Vol. 8, pp. 118–119.

neuroses. It has been used successfully in mental hospitals with psychotic patients. It is not, however, particularly well adapted to dealing with the more severe disturbances, whatever their character. A severe and long-standing neurosis based on heavily repressed childhood anxieties will be touched but slightly by the group method. There is a disadvantage as well as an advantage in the group procedure. The gradual overcoming of resistances and the slow working through of anxiety-laden problems is not favored either by the group situation or by the relatively rapid tempo of group work. Most therapeutic groups meet once or twice a week for a total of perhaps fifteen sessions. Obviously no miracles can be accomplished in that length of time. Ackerman states that group therapy "*offers a means for therapeutic resolution of some types of social* maladaptation and emotional disturbances of relatively recent origin." It is at its best when the disturbance is primarily in social relationships and is not of too chronic and profound a character. Otherwise the greater part of the benefit is likely to be obtained from individual sessions, with the group work serving as a technical aid to the *expression of feelings* and to *new social behavior.* Group psychotherapy is being extensively developed in work with veterans and is the topic of considerable current research. In a few years it will probably be possible to say more about its precise sphere of application and the results to be expected.

Moreno's Psychodrama.—A variant form of group psychotherapy that has attracted notice in recent years is the psychodrama originated by J. L. Moreno.[41] The essential principle of psychodrama is to stimulate the expression of feelings through unrehearsed, spontaneous play-acting. Other patients take part in the action, and still other patients and observers make up the audience. Moreno himself has surrounded the procedure with an array of grandiose concepts, but the central ideas seem to be quite simple. Drama stands as a midway point between fantasy and reality. It is real in the sense that there is a stage with lights, a group of spectators, and other actors toward whom one is behaving. It is unreal in the sense that the whole thing is only a play. Unrehearsed drama has a certain similarity to free association. Giving free associations is real in the sense that a therapist is listening and that relief from a neurosis is being sought. It is unreal in the sense that what one says is illogical and fantastic, quite unsuitable for communication in everyday life. Proponents of psychodrama maintain that it is better than

[41] Moreno, J. L., *Psychodrama*, New York, Beacon House, 1946, esp. Sections 1, 2, 6.

free association as a means of securing expression. Although at first it may be hard for patients to act with freedom, they can be slowly inducted into an atmosphere in which they learn to express themselves with great spontaneity and often with great enjoyment.

The following case report by Sarbin will make the procedure clearer.[42] A seventeen-year-old high-school boy seemed quite incapable of social relationships. Listless and shy, he stayed by himself most of the time, but from interviews and tests it was clear that he fantasied himself as a popular high-school boy. He was first asked to participate as a spectator while other patients acted their psychodramas. Then he was asked to prepare a short scene of his own for a subsequent session. He chose the role of a radio commentator and gave a simple scene that required no supporting characters—altogether a safe and undemanding performance. At the next meeting he was requested to serve as a minor character in a drama being enacted by other patients. He was the buddy of a soldier who received abusive treatment from a tough sergeant. He was able to imitate freely the actions of his buddy and even develop them in his own way. For his next assignment he prepared an original scene calling for several supporting characters. For the first time he was able to act without self-consciousness, genuinely absorbed in the drama. Next he took the part of father in another young patient's drama. This role proved highly congenial; he "stole the show" as he acted out what were unmistakably his own father's attitudes toward him. Only after this success was he requested to enact what corresponded to his own most cherished fantasy. He was asked to depict a day in the life of a high-school boy. Choosing various characters to represent his parents and his fellow students, he put on a spontaneous drama remarkable for its animation and conversational freedom as well as its revelation of his emotional difficulties at home.

There were various other sessions, but what concerns us more is the patient's off-stage progress. Instead of sitting alone he began to come into the center of the group. Instead of retiring between scenes he began to use these intervals for conversation with others. Listless shyness gave place to more alert participation. The parents were surprised at the rapid increase of interest in people and events and at his spontaneous seeking for companionship. The patient even gained weight while these improvements were going on. In the realm of psychodrama he had become able to behave in a way that

[42] Sarbin, T. R., "The Concept of Role-Taking," *Sociometry*, 1943, Vol. 6, pp. 273-285.

corresponded to his ego-ideal and that gave him self-esteem. The change carried over into new behavior in everyday life.

As is the case with group psychotherapy generally, it is still too early to tell what will prove to be the most effective uses of psychodrama and what kinds of patients will respond to it most favorably. It would seem to be an ideal technique for patients with a certain degree of generalized inhibition. It supplies just the right lift and social support for overcoming inhibitions that are not too deeply rooted. Moreno has recently been using it for marriage problems and even for matrimonial triangles.[43] Here psychodrama is sometimes successful in liberating the deeper feelings that discolor and clog the relationships. A scene can be started from whatever clues the parties offer in their preliminary interviews. Although these clues may have to do with superficial or side issues, "it is a reliable psychodramatic experience," according to Moreno, "that, once the subjects are working on the therapeutic stage, they are carried by the momentum of psychodramatic dynamics from the surface to the deeper level of their relationship." [44]

Considered in relation to the five basic therapeutic processes outlined at the end of the last chapter, psychodrama bears particularly on the *expression of feelings* and on *new behavior*. Spontaneous drama serves as a medium for securing a free and often intense expression of feelings. This expression goes directly over into new behavior on the psychodramatic stage. In these respects, therefore, psychodrama does not basically differ from other forms of group psychotherapy which utilize group discussion for the release of feelings and for new social interactions. Moreno's description of his work leaves doubt as to whether much use is made of pointing out or interpreting feelings, whether much permanent insight is gained, and whether sufficient attention is paid to what the patient accomplishes in everyday life. These faults, however, are not inherent in the psychodramatic technique. They can readily be avoided by combining psychodrama with individual therapy. Used in this way, psychodrama will probably take its place as another of the technical aids or adjuncts that in suitable cases hasten the process of psychotherapy.

Slavson's Activity Groups.—A few years ago Slavson reported an experiment in group therapy worked out on a rather large scale under the Jewish Board of Guardians in New York City.[45] Small

[43] *Op. cit.*, pp. 233–245, 328–349.
[44] *Ibid.*, p. 329.
[45] Slavson, S. R., *An Introduction to Group Therapy*, New York, Commonwealth Fund, 1943.

groups or "clubs" were formed for children in the age range from eight to thirteen, providing them with the opportunity to meet, play, practice handicrafts, and occasionally take trips under the guidance of a carefully trained leader. Outwardly resembling the numerous clubs already in existence in most communities, these activity groups actually had a psychotherapeutic purpose. Children were chosen who needed practice in social adjustment, either because they were shy, submissive, and isolated, or because they were aggressive, self-willed, and unaccustomed to sharing. They were chosen, one might say, from a middle zone of social ineptitude: on the one hand, not too badly maladjusted to preclude participation in a group; on the other hand, not capable of going directly into an ordinary group organized without therapeutic intent. Slavson's activity groups are analogous to group psychotherapy as practiced with adults, except that no attempt is made to instruct or to point out feelings. The corrective emotional experience comes from simply being in the group under the conditions about to be described. If the child is in need of more radical treatment, this is accomplished by simultaneous individual therapy carried out by someone other than the group leader.

The therapeutic character of the groups is maintained by the behavior and attitude of the leader. His behavior is designed to create maximally favorable conditions for social learning. At the outset his attitude is almost completely permissive. He busies himself with handicrafts, takes little notice of aggressive and destructive behavior, allows the group to blow off steam and then bring itself to some kind of order. He is friendly and gentle but not too personal; he carefully avoids establishing relations that will lead to feelings of favoritism and "sibling rivalry" within the group. Keeping to this half-impersonal role, he nevertheless makes it a business to give recognition and praise whenever a child does something well. This sets a fashion which eventually is copied by the children. Group recognition as well as the leader's recognition becomes available for all good performances.

Under these circumstances social development takes place with gratifying speed. The group is given the chance to try mischief, rough-house, disorganized fooling around, and to discover for itself the greater satisfactions of orderly cooperative behavior. These satisfactions are strengthened by the leader's reward in the form of recognition, but the leader does not take the initiative in producing the orderly behavior. Spontaneously a sense of responsibility develops in the group, so that the chores connected with having the meetings and serving refreshments are more and more taken over by

the children. At the end of six or eight months of weekly meetings most of the children have progressed sufficiently with their social adjustments and social skills so that they can transfer to ordinary clubs and neighborhood groups.

Our survey of psychotherapy has introduced us to an almost bewildering variety of schools and procedures. Twenty years ago the subject could have been presented with far greater simplicity. The recent flourishing growth of therapeutic techniques, the constant experimentation with new methods and new short cuts, represents an attempt to meet a steadily growing social need. Maladjustments and neuroses are probably becoming more frequent; at all events, they are being more widely recognized as subject to correction. Freudian psychoanalysis set a model of thoroughness and brought out all the difficulties that are inherent in changing conditions that have roots in childhood and branches in every corner of the personality. But standard psychoanalysis could reach but a fraction of the people who needed psychotherapeutic help. The other techniques that we have studied represent collectively a great campaign to meet this pressing social need. On the surface one seems to hear a babel of conflicting voices, but by closer listening we have been able to realize that they all spoke dialects of a single basic tongue. The fundamental principles of psychotherapy are not hopelessly complex. They all have to do with removing blocks in the learning process and promoting new growth. The processes are partly understood and wholly understandable.

SUGGESTIONS FOR FURTHER READING

A good introduction to hypnotherapy in general will be found in M. Brenman & M. M. Gill's *Hypnotherapy—A Survey of the Literature* (New York, International Universities Press, 1947). A detailed presentation of hypnoanalysis is given by L. Wolberg, *Hypnoanalysis* (New York, Grune & Stratton, 1945). Part One of this book describes at length the treatment of a single case; Part Two is devoted to general principles.

For narcosynthesis the best reference is R. R. Grinker & J. P. Spiegel, *Men Under Stress* (Philadelphia, The Blakiston Co., 1945), Chs. 7 and 17.

In *Active Psychotherapy* (New York, Grune & Stratton, 1945) A. Herzberg gives a somewhat condensed but valuable account of the use of therapeutic tasks as a means of shortening treatment.

Anna Freud's small monograph, *Introduction to the Technic of Child Analysis* (New York & Washington, Nervous & Mental Disease Publishing Co., 1928), is still an excellent introduction to the special problems of psychotherapy with children. F. H. Allen's *Psychotherapy with Children* (New York, W. W. Norton & Co., 1942) is particularly successful in describing the problem of separating mother and child from a too-entangling relation.

A new book by Virginia M. Axline, *Play Therapy* (Boston, Houghton Mifflin Co., 1947) gives in semipopular style and with excellent pictures an account of play therapy conducted according to strictly non-directive principles. D. M. Levy's paper on release therapy is reprinted in S. S. Tomkins, *Contemporary Psychopathology* (Cambridge, Harvard University Press, 1943), Ch. 6.

The best introduction to group-psychotherapy is a book edited by S. R. Slavson, *The Practice of Group Therapy* (New York, International Universities Press, 1947). Various workers contribute chapters to this book. Slavson's report of his own work, *An Introduction to Group Therapy* (New York, Commonwealth Fund, 1943) is an unusually interesting monograph.

CHAPTER 11

DELINQUENT BEHAVIOR AND RELATED DISORDERS

Adjustment represents a compromise between the needs of the individual and the demands of the society in which he lives. Individual tendencies must be restricted and channeled in certain directions if the person is to function as a member of the social organism. The process of socialization begins early and continues late in life. Even the small child is asked to give up some portions of his dependence and his autonomy, and the demands steadily increase as he grows into adulthood. There are many rewards that go with socialized living. It is possible for individual interests and social demands to strike an excellent bargain. The person learns to exercise his best skills and satisfy his deepest needs along lines that benefit his fellow men. His life is both happy and useful, and he qualifies as a well-adjusted individual.

Neurosis is a deviation from this ideal bargain. Individual tendencies are not satisfied; on the contrary, they are renounced or repressed or distorted in order that the person may feel safe in the group. Anxiety lest he be punished or deserted by the group—in childhood, by the parents—forces crippling defenses upon the expression of his own tendencies. The neurotic typically *accepts the process of socialization.* He accepts it *too strongly,* making a greater surrender of his own tendencies than he can actually tolerate. He takes out his problems upon himself in the form of symptoms, suffering, fatigue, chronic dissatisfaction. He can be cured if his defenses can be relaxed so that his own tendencies have another chance to find satisfying and socialized channels of expression.

In this chapter we shall study the opposite deviation from the ideal bargain: that in which the individual *does not accept the process of socialization.* Either actively or passively he resists the socializing process, with the result that his behavior remains insufficiently controlled by the demands of society. His opposition may be highly generalized, so that he is always against law, order, and social expectation. He becomes an habitual delinquent, criminal, or ne'er-do-well. On the other hand his opposition may be highly focalized: he offends only in respect to sexual behavior or the chronic use of alcohol and drugs. The patterns of personality to be studied here

are very diverse. It is well-nigh impossible to place them in a satisfactory classification. The single feature that unites them is their failure, in whole or in part, to accept the process of socialization.

Delinquency and Criminal Behavior

Behavior that is called delinquent sometimes results from an entirely normal process of psychological development. If a boy is brought up in a clan of pirates, he will develop a super-ego that tells him never to work for something when it is possible to steal it. Identifying with his father, he will build an ego-ideal of bigger and better piracy. In such a case the process of socialization is accepted. The person is called a criminal by the major society, but within the minor society of pirates he is simply growing up to be a solid and respected citizen. Before concluding that a given case of delinquency represents a failure to accept prescribed standards of conduct, it is necessary to ascertain what standards of conduct prevail in the family and in the immediate neighborhood. Merrill reports the case of the three Maguire brothers who during late childhood and early adolescence ran up a collective total of twenty-four court appearances.[1] The mother was always in court to defend them, and the father saw no objection to their eking out the slender family income derived from his business as a peddlar. The Maguires were a well-knit, affectionate family, free from conflicts and emotional disorders, handicapped only by somewhat limited intelligence which made it difficult to earn a living. Every social agency knows cases of this kind in which the whole family pattern is one of delinquency.

Even when delinquent behavior is not an obvious continuation of the family pattern it bears a significant relation to the surrounding social and economic conditions. The whole problem forms a chapter in social pathology as well as a chapter in abnormal psychology. There are many valuable studies of the social conditions that are conducive to delinquency and crime.

Delinquency Areas.—Shaw and his associates have made a detailed study of juvenile delinquency in Chicago and several other American cities.[2] The incidence of juvenile delinquency varies greatly in different parts of a city. The rate is highest in slum sections inhabited by low-paid workers mostly of foreign origin. It

[1] Merrill, M. A., *Problems of Child Delinquency*, Boston, Houghton Mifflin Co., 1947, pp. 284–289.

[2] Shaw, C. R. & McKay, H. D., *Report on the Causes of Crime*, National Commission of Law Observance and Enforcement, 1931. A summary of this work is given by R. E. L. Faris in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders*, New York, The Ronald Press Co., 1944, Vol. 2, pp. 741–746.

is lowest in outlying residential sections having a native-born business and professional population. In the intervening areas the rates vary in proportion to the distance away from slum areas. By careful analysis Shaw was able to rule out a number of factors which at first glance might appear to bear on these differences. While it is true that intelligence level tends to be lowest in the slum areas and highest in the outlying residential areas, this fact does not serve to explain the rates of juvenile delinquency. Within any given area the delinquent population is not mentally inferior to the non-delinquent population. The ethnic origin of the populations similarly fails to explain the obtained differences. When the figures are broken down into Irish, Scandinavian, Italian, Slavic, Negro, and other national and racial groupings, there are slight differences in the average rate of juvenile delinquency, but these are by no means so large as the differences between areas. All national and racial groups have high rates if they inhabit slum areas. All have lower rates if they have moved out toward the stable residential districts.

It turns out that the most important determinant of the rate of juvenile delinquency is the degree of social organization prevailing in the area. Slum areas are socially disorganized. The population is constantly on the move. The neighbor of today is gone tomorrow, and his place is very likely taken by a family of different national origin and different language. Diverse cultural standards flourish side by side with little interaction and little community solidarity. Under these circumstances it is difficult for parents to maintain control over their children, even though the majority try to do so. The parents have to work single-handed without reinforcement from the neighbors. In a stable community each family is known and each child is known in the neighborhood. Reputations have to be maintained, and behavior is governed by neighbors and acquaintances as well as by members of the family. It is this extended reinforcement of standards that is lacking in a disorganized area. In its place are the street corner gangs and the opportunity to become an apprentice in an adult criminal group. Social disorganization is the most important factor that influences the rate of juvenile delinquency.

Delinquency and Brain Injury.—During the second half of the nineteenth century there were repeated attempts to show that criminals had defective brains. This conception of the problem was a natural consequence of the somatogenic hypothesis which for a time completely dominated psychiatric thinking. The criminal behaved differently from other people, therefore something must be different about his nervous system. The results of these investigations

were uniformly negative. Neither neurological examinations nor the post-mortem study of criminal brains revealed any consistent patterns of peculiarity.

It is nevertheless hard to dismiss altogether the idea of a relation between delinquent behavior and unusual conditions in the brain. Sometimes following a severe head injury, and sometimes following an attack of encephalitis (which is known to injure brain tissue), the behavior of a previously well-adjusted child will change in what might be called a delinquent direction. The child becomes overactive and aggressive; he has outbursts of emotion and irritation, and he is unable to concentrate or to accept the restraints of the schoolroom. He seems to have lost some of the regulating control that previously characterized his behavior. Under such circumstances it is harder for him to accept the process of socialization. The control of impulse and temper, the postponement of immediate satisfactions, the mere restraint of sitting still at table or at school become suddenly more difficult than they were before. In view of these facts it is at least a legitimate hypothesis that some subtle inadequacy of cerebral tissue might underlie the delinquent's failure to accept the standards and restraints of society.

The recently developed technique of the *electroencephalogram* (EEG) opens a new path for investigating this question. The EEG is a graphic recording of the electrical activity of the cortex. When electrodes are attached to the scalp and connected with an amplifier it is possible to record fluctuations in voltage, popularly known as "brain waves," which appear to arise from activity in cerebral tissue. Under basal conditions—that is, with the subject awake but resting quietly with closed eyes—the normal adult record shows a predominance of slow waves, *alpha rhythms*, averaging about 10 cycles per second. Superimposed on these waves are the faster *beta rhythms* with a frequency anywhere up to 40 cycles per second. Waves of less than 8 per second, sometimes called *delta waves*, are rare in the records of normal adults. They are typical of infants in the first year of life, and their frequency of occurrence decreases with age. An abnormal EEG is one that includes a distinctly greater frequency of very slow waves (less than 8 per second) than is characteristic for that particular age level. Thus an EEG may be abnormal for a child of eight although the same record would be normal for a child of four.[8]

[8] For a detailed review of electroencephalography consult D. B. Lindsley's chapter in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders*, *op. cit.*, Vol. 2, Ch. 33. A shorter account is given by B. L. Pacella in *Modern Trends in Child Psychiatry*, New York, International Universities Press, 1945, pp. 103–123.

Abnormal EEG's are obtained with considerable regularity from patients with known brain disorders such as tumors, inflammations, and gross degenerative changes. They are also obtained following the administration of certain drugs. They are likely to appear following a severe blow on the head or an attack of encephalitis, especially when these result in the behavior disturbances already described. Sometimes abnormal EEG's are obtained when there is no known history of injury or brain disease. There is a presumption in such cases that a subtle disorder exists; at any rate, the functioning of cortical tissue would seem to be not up to par with chronological age.

The most crucial experiment for our present problem was performed by Jenkins and Pacella, using a group of delinquent boys in a training school as subjects.[4] On the basis of behavior the boys could be divided into two subgroups. The first group showed assaultive tendencies, irritability, poor control, restless distractibility, and great trouble in adjusting to routine and restriction. The second group, much the larger of the two, had histories of stealing, especially group stealing and similar offenses in company with street corner gangs. A considerable number of the boys in the first group had had either head injuries or encephalitis, and the EEG was abnormal in 73 per cent of the cases. In the second group abnormal EEG's were obtained from only 30 per cent, which is not significantly out of line with results obtained from normal subjects. For the second and larger group, therefore, there is no justification for assuming that abnormal brain conditions contributed significantly to the delinquency. These boys, of course, with their predominant offense of stealing, are precisely the ones whose conduct is well explained by Shaw's notion of socially disorganized delinquency areas. For the first and smaller group, however, cerebral injury of some kind, reducing the efficiency of cortical action and showing itself in the abnormal EEG, probably played a very important part in the delinquency. The population of a typical training school includes a certain number of cases of cerebral pathology.

The Individual Delinquent.—Thus far we have examined two factors which tend to produce delinquent behavior: social disorganization and brain injury. These concepts are important, but they are only a first step in explaining delinquent and criminal behavior. For a fuller understanding we need to be able to show how they affect the development of the individual so that he fails to accept the process

[4] Jenkins, R. L. & Pacella, B. L., "Electroencephalographic Studies of Delinquent Boys," *American Journal of Orthopsychiatry*, 1943, Vol. 13, pp. 107–120.

of socialization. Not every child with an abnormal EEG becomes delinquent. Not every child brought up in a socially disorganized area joins a street gang and takes the pathway that leads to the juvenile court. Modern criminology has taken a very definite turn toward the study of the individual. "If a contrast can be made between the present-day search for the causes of crime and the study of the etiology of crime a generation ago, it would be that greater attention is being given now to the study of the offender and less attention to the explanation of crime in general." [5] This development was initiated about 1909 by William Healy when he became associated with the juvenile court in Chicago. Healy's first major book, *The Individual Delinquent,* was built upon detailed case studies of young offenders.[6] He studied the immediate environment, the family situation, and the mental and emotional life of each delinquent in order to build the equivalent of a psychiatric case history. Nothing short of this can illuminate the inner nature of delinquency.

In discussing the psychological aspects of delinquent and criminal behavior we shall first consider the question of emotional relationships within the family circle. The process of socialization is first applied by the parents, and it is in his relationship with the parents that the child may first become unable to accept socialization. Under these circumstances delinquent behavior may assume the personal meaning of a way of escape from bitter conflicts. Next we shall consider the question of membership in delinquent groups, trying to ascertain why these groups irresistibly attract certain children while other children prefer to associate with law-abiding groups. Lastly we shall study the manner in which initial delinquency is built up into a criminal career. Once the path of delinquency has been entered it becomes increasingly difficult to shift back into socially sanctioned behavior.

Failure to Introject Parental Standards.—Socialization can be regarded as a bargain that is struck between parents and child. The child's part of the bargain is to give up his dependence in favor of self-help, his autonomy in favor of conformity, his sexual and aggressive tendencies in favor of controlled behavior; in general, the privileges of a small child in favor of the responsibilities of a larger one. The parents' part of the bargain is to set models of considerate and socialized behavior and to make it worth the child's while, in the coin of affection and praise, to undertake the required sacrifices.

[5] Reckless, W. C., *Criminal Behavior,* New York, McGraw-Hill Book Co., 1940, p. 163.
[6] Healy, W., *The Individual Delinquent,* Boston, Little, Brown & Co., 1915.

The parents, who are in the position to manage the bargain, must steer a middle course and maintain a workable balance. The demands they make must be neither too small nor too great in proportion to the rewards they give. Conversely, the rewards they give must be neither too small nor too great in proportion to the demands they make. We have already examined the relation of these facts to maladjustment and neurosis. Our present concern is to work out the patterns that result in a failure by the child to accept parental standards.

One of these patterns consists of making no demands and setting no standards. The child is simply "spoiled," allowed to do everything he pleases with no loss of rewards. This gives him no motive to take the uphill road toward socialization. He expects everything to come easily, as his just due, and it is easy for him to slip over into the attitude that he might as well take what he wants. This kind of training produces indifference, perhaps mild contempt, toward the restraints of socialization. In Levy's study of maternal overprotection there are four cases that ended in chronic delinquency or at least in extremely inconsiderate and egocentric behavior. All four were the product of indulgent maternal overprotection with no serious pressure toward socialization.[7]

A contrasting pattern is that in which demands are made but rewards of love are more or less completely withheld. The parents are severe and unloving; they require that socialization shall take place, but they give the child no praise or affection when he succeeds, only punishments when he fails. The child's sacrifices are thus made unpleasant, and nothing is offered to cancel the aggression that he feels in submitting to such a bargain. As a result he submits to it less and less until he becomes an avowed rebel against the constraints of society. He is not only indifferent to social standards; he is actively hostile toward them.

A particularly unfavorable pattern exists when these two are combined, one in each parent. This was the situation that prevailed in the Whipley family studied in our clinical introduction.[8] The father was severe, critical, at times violent in his denunciation of the son, yet a noisy and hypocritical upholder of the moral order. The mother was indulgent, exacting no return payment for her many acts of babying and protection. The father preached stable and persistent behavior but did not himself embody it, and he constantly

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[7] Levy, D. M., *Maternal Overprotection*, New York, Columbia University Press, 1943, pp. 220–226.

[8] See above, pages 136–137.

shattered it in the son by belittlement and ridicule. The mother, who was capable of giving affection, still further weakened the inducement toward mature behavior by never demanding it. Aichhorn in his studies of delinquency recognizes this pattern as the most fatal one for socialized development.[9]

Whether a child will reject parental standards, even when they are unlovingly applied, depends to a certain extent upon the possibility of hating the parents. If the child believes that the parents are right, and if he clings to a desperate hope of getting love from them, his hostility will be repressed and he will be in a fair way to start a nuclear neurotic process. We saw in Bert Whipley's case that rejection of parental standards was facilitated by the father's obvious hypocrisy and alcoholic delinquencies. Bert knew that his father was wrong. There was no difficulty in hating both the man and his standards. In other cases one has the impression that either *neurotic overacceptance* or *delinquent rejection* of parental standards might have occurred, the scales being finally tipped by incidents which swung the aggression inward or outward. Such was the case with Royal, a delinquent twelve-year-old studied by Healy.[10] The onset of delinquency in this case was sudden. Even the boy noticed that his behavior had sharply changed six months before the study. He had begun to be extremely greedy at table, irritable and rough with his two much younger siblings, neglectful of schoolwork; and he had taken to running away from home and stealing. Punishments, previously effective, suddenly lost their deterrent influence. The parents, who seemed to be good-natured and kind as well as serious in the imposing of standards, were at a loss to explain the change. Royal himself could not explain it until one day he suddenly burst out: "He's a liar, and she's a liar, and I am going to be bad if I want to be." It turned out that a neighbor had told Royal the startling fact that his real mother had died when he was three months old. The woman he called mother was in reality his stepmother, and the two younger children were step-siblings. The neighbor's disclosure was true. The father had concealed it from Royal because he thought this the best way to avoid a stepmother problem. The news infuriated the boy, who then felt that his stepmother had all along favored the siblings at his expense. Realizing that his parents had been wrong—that they were liars—he suddenly became able to hate them for the real or fancied discriminations they had practiced against him. The scales were abruptly tipped toward delinquency.

[9] Aichhorn, A., *Wayward Youth*, New York, Viking Press, 1935, Ch. 4.
[10] Healy, W., *Mental Conflicts and Misconduct*, Boston, Little, Brown & Co., 1917, pp. 114–125.

Aichhorn has worked out a method of treating delinquents that may be said to consist of establishing a new parental relationship and giving the delinquent a second and more favorable chance to accept socialization.[11] With boys in training institutions Aichhorn tries to make himself a substitute father, loved but respected, who maintains an acceptable balance between demands and rewards. Standards and restraints are presented in a more favorable light, and group life in the institution leads to a readier understanding of the need for ordered and controlled behavior. Aichhorn has used this method successfully even with extremely aggressive boys in violent revolt against authority. Harsh discipline would only have strengthened their antagonism, so the opposite was put into effect. The task was first to compensate the boys for the lack of love experienced at home, then cautiously and gradually to make demands upon them. One group responded to the permissiveness by smashing its living quarters beyond repair, but by long patience Aichhorn was able to bring even this group into a reasonably well-behaved social unit.

Personal Meanings Attached to Delinquency.—A variety of personal meanings can become attached to delinquency. Healy and Bronner mention the following general possibilities.[12] (1) Delinquent behavior may mean to the child an escape or flight from a tense and unpleasant situation. Truancy and running away usually have this significance. (2) The escape is made more effective by the thrill that accompanies delinquent adventure. Unhappiness and bitterness can perhaps be drowned only by intense excitement and the running of risks. (3) If delinquent acts are performed with a group, the achievement of recognition and status in the group may constitute the most important meaning. (4) To act the part of a criminal is a fairly easy way to prove oneself courageous, masculine, and a "regular guy." This is especially true in America where the gangster has been dramatized in the light of an almost heroic figure. Delinquency is thus well suited to serve as a denial of dependence, inferiority, and femininity. For girls a corresponding meaning attaches to sexual delinquency. Feelings of inferiority and rejection can be both drowned and denied in sexual promiscuity. (5) Delinquency can have the meaning of revenge against the parents. Their life is made difficult and they are disgraced by the actions of their child. (6) Finally, there is the paradoxical motive of seeking punishment in order to alleviate an unconscious sense of guilt. This

[11] Aichhorn, *Wayward Youth, op. cit.*, Ch. 6.
[12] Healy, W. & Bronner, A. F., *New Light on Delinquency and its Treatment*, New Haven, Yale University Press, 1936, Chs. 4–7, also pp. 133–134.

motive played an unmistakable part in the case of Bert Whipley and is found every so often in other cases. Strictly speaking, it is a neurotic mechanism: the presence of guilt feelings implies that part of the parental standards has been fully introjected. A mixture of neurotic and delinquent mechanisms is not impossible, as we learned from Bert Whipley.

The complexity of personal meanings is illustrated in the following case, one of those reported by Alexander and Healy in a psychoanalytic investigation of criminal careers.[18] Richard Vorland's history from eight to twenty was marked by a succession of thefts. During these years he lived in foster homes when not in jail. Psychoanalytic investigation disclosed that his stealing was "chiefly determined by irrational, emotional, and unconscious motives." These motives centered around his widowed mother and his older brother. Somewhat sickly in early childhood, he received much attention from the mother and became fixated in the role of dependency. As he grew older and more active he leaned on his stronger brother for support, but was also jealous of him. He resented his mother's pressure toward growing up and her less exclusive concern for his welfare. His stealing began in company with his brother. Gradually it enlisted the following group of motives, sufficiently strong so that stealing became irresistible and compulsive. (a) Stealing gave him a feeling of strength and toughness, serving to deny his passive dependence. (b) It denied also the guilt he felt because of his jealousy of the brother. By helping the brother and exposing himself to danger for the brother's sake—*on certain occasions* even going to jail for him—he successfully denied his own hostility. (c) Stealing served as a *spite reaction* toward the mother. Alexander and Healy phrase the motive as follows: "If you spend your interest and love on the brother and not on me, then I take revenge on you by disgracing you as a criminal, and at the same time if you don't give your love to me and don't support me as I want to be supported, then I will take by force and robbery what I need." (d) Finally, numerous dreams indicated a real desire to be caught and put in jail where he could "indulge in a carefree, vegetative existence, gratifying his infantile, parasitic wishes." The authors conclude: "It was really a fascinating and unexpected result of the analysis to detect in the depths of this young bandit's personality the desperate little boy crying for his mother and seeking help from his older and stronger brother."

[18] Alexander, F. & Healy, W., *Roots of Crime: Psychoanalytic Studies*. New York, Alfred A. Knopf, 1935, Ch. 2.

Membership in Delinquent Groups.—In an earlier chapter we studied the importance of group memberships in the development of personality.[14] We saw that in early adolescence group membership rose to a peak of importance in the individual's life, taking over to a considerable extent the functions of emotional support hitherto concentrated in the family. Many delinquents are unhappy at home. Long before puberty they welcome and need whatever support and recognition can be obtained from group memberships. The group may early become the boy or girl's only home in an emotional sense. Groups outside the home generally mean more in the lives of delinquents than they do in the lives of other children.

Of itself, however, this fact does not explain the superior attraction of delinquent groups over those that stay out of conflict with law and order. Even in an area that suffers from maximum social disorganization there is a choice of groups. The peculiar attraction of the delinquent group arises from the exciting and lawless character of its activities. Delinquent groups are often in a state of crisis. The excitement is highly advantageous to one who wants to drown the memory of a distressing home life. Even more important is the lawlessness. The individual who needs support in his rebellion against parental standards finds this support in good measure in a group that rebels against all of society's standards. Bert Whipley's career as a joy rider in stolen cars clearly illustrates these advantages. Bert was quite aware that he had chosen delinquent companions when others were available. To him joy riding was more fun than anything the non-delinquent children were doing. He found welcome esteem from older boys when he successfully stole some number plates for them. He greatly enjoyed the thrill of riding at high speed while a rain of police bullets spattered around the tires. Particularly important was the chance to defy, insult, and outwit the police. Joy riding in stolen cars is easier than might appear. Bert completed something like fifty such missions without being caught or hurt. It was a perfect means of demonstrating the powerlessness of all that his father espoused.

The significance of delinquency areas becomes clearer in the light of this analysis. The average child, relatively contented at home and at school, is but mildly attracted by delinquent acts and is prevented from joining in them by fear and guilt. For the child who is in rebellion against parental standards, however, delinquency is peculiarly attractive and satisfying. But a bent in this direction may never lead to overt behavior unless it is encouraged by others. In

[14] See above, pages 156–162.

socially disorganized areas there is a strong invitation to delinquency arising from the presence of numerous street corner gangs. One might express it by saying that in such areas no one who would like to be delinquent need lack the opportunity. Bert Whipley found the organized sport of joy riding already in existence when his family moved into a slum area. He did not have to create his own opportunities for the behavior that proved so satisfying.

Difficulty of Abandoning Delinquency.—It is always hard to change an established pattern of personal tendencies. Unless new behavior receives a certain immediate encouragement, the person finds it easier to stick to the old, even in the face of some frustration. In the case of delinquent and criminal behavior the dice are badly loaded against change. Case studies of criminals repeatedly reveal a kind of social processing in crime. The young delinquent comes in contact with older delinquents who teach him the secrets of the trade. He responds strongly to group recognition and takes over the ideals of the gang. He absorbs the philosophy of getting things the easy way. A respectable and law-abiding life begins to look dull and stupid. As he progresses he becomes increasingly skilled. His capacities are far more fully engaged by the planning and execution of burglaries than by the unskilled trades taught him in reformatories and jails or available to him as a plodding wage earner. Thus he can stand the inconvenience of an occasional jail sentence more easily than the effort required to "go straight." He can stand it all the more easily because he has the group support of other convicts who are similarly awaiting return to their accustomed mode of life.

Perhaps the greatest obstacle to abandoning a criminal career is the attitude of society. The well-behaved are as hostile toward the criminal as the criminal is toward the well-behaved. If an ex-convict is fortunate enough to get a job—and he is likely to be the last to be chosen—he is treated with suspicion by everyone around him. Everybody is on the watch to see when he will resume his criminal activities. If he goes to a place where his earlier career is unknown, he lives the uneasy life of one who has to keep extensive secrets. Often a delinquent who tries to go straight, even one who is much befriended by well-meaning persons who want to help him, experiences a tremendous sense of joyful homecoming when he runs into members of his old gang. Thus quite apart from the original motives that lead to delinquency there are strong secondary forces that tend to perpetuate a delinquent way of life.

Treatment of Juvenile Delinquency.—Everything that has been said points to the necessity of dealing with delinquent tendencies as early as possible. In treating juvenile delinquency there is a place for psychotherapy, but unless the family is included in the process, and unless problems of education and a suitable environment are considered, the chances of success are small. We have already seen that Aichhorn's insightful method of dealing with delinquent boys calls for small groups under institutional conditions. It also calls for a large and well-trained staff, thus requiring a greater financial outlay than society is generally willing to make for its delinquent members. In any attempt at treatment, moreover, the therapist starts at a serious disadvantage. To the delinquent he is an enemy; he represents law and order and is presumed to be trying to convert his patient to the hated cause. Few delinquents come willingly to psychotherapy. The therapist has to convince them that he is friendly and truly permissive.

In view of these difficulties it is not surprising that therapeutic attempts frequently fail. Not often are the results as good as those reported by Healy and Bronner for a group of cases treated under highly advantageous conditions.[15] With these cases intensive treatment was directed at both the delinquent child and his parents. School authorities and social agencies worked together with psychiatrists and social workers to produce a maximum therapeutic and educative influence. Under the influence of this "total push," just over 50 per cent of the cases were benefited to the extent that delinquency ceased. From follow-up studies covering four to seven years it appeared that 72 cases were non-delinquent, 15 were much improved though with occasional mild delinquency, and 51 continued to be as delinquent as before.[16]

Psychopathic Personality

A Problem in Psychiatric Classification.—For a long time there has existed a diagnostic category variously called *psychopathic personality* and *constitutional psychopathic inferiority*. Theoretically these titles refer to a specific class of mental disorders, but in actual practice they are used as a sort of wastebasket to contain disorders that do not belong anywhere else. The concept originated with an

[15] Healy, W. & Bronner, A. F., *New Light on Delinquency and Its Treatment*, *op. cit.*, pp. 141–157.

[16] A more detailed discussion of treatment by a psychoanalytically oriented psychiatrist will be found in Friedlander, K., *The Psychoanalytic Approach to Juvenile Delinquency*, New York, International Universities Press, 1947, pp. 191–287.

English psychiatrist, Prichard, who in 1835 described a "form of mental derangement" in which intellect seemed unimpaired but in which the "power of self-government" was lost or lacking, so that the individual was incapable of "conducting himself with decency and propriety in the business of life." [17] Prichard called such patients "morally insane" or "morally imbecile," terms which still persist in British psychiatry. Toward the end of the century the hypothesis was advanced that people who answered the description given by Prichard probably suffered from some hereditary weakness of the nervous system; hence the term *constitutional psychopathic inferiority*. This was only an hypothesis—an inference from the way the patient behaved—but it fitted the prevailing scientific fashion and thus preserved for another fifty years Prichard's notion of a specific mental derangement.

These two ideas—a defect in the realm of socialized behavior and an innate weakness lying behind it—have continued to dominate most thinking about psychopathic personality. It has proved impossible, however, to reach general agreement as to what should be included under this heading. Kraepelin distinguished seven subtypes: the Excitable, the Unstable, the Impulsive, the Eccentric, Liars and Swindlers, the Antisocial, and the Quarrelsome. Some current textbooks add sexual deviations to the list, and others include addiction to alcohol and drugs. Such liberality tends to defeat the purpose of psychological understanding. In a recent contribution Preu makes it clear that the whole concept of psychopathic personality has become scientifically unsound.[18] It is not a diagnostic entity in the ordinary sense, with its own specific pattern of symptoms. The diagnosis is established by a process of exclusion; it is applied to long-standing social maladjustments which do *not* belong under the headings of defective intelligence, psychosis, or neurosis. Obviously this is no way to isolate a specific form of mental derangement. Psychopathic personality has become a true wastebasket category designed to receive, as Partridge neatly expressed it, "the unclassified remainder of mental disorders." [19]

The problem can be clarified by introducing the psychogenic hypothesis and by restating the nature of the alleged disorder. The people now diagnosed as psychopaths have this in common: they have developed in such a way that parental and social standards

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[17] Prichard, J. C., *Treatise on Insanity*, London, 1835.

[18] Preu, P. W., "The Concept of Psychopathic Personality," in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders, op. cit.*, Vol. 2, Ch. 30.

[19] Partridge, G. E., "Current Conceptions of Psychopathic Personality," *American Journal of Psychiatry*, 1930, Vol. 10, pp. 53–99.

have never been introjected. They have failed to accept the process of socialization. Our study of delinquency and crime has shown that many factors may contribute to such a result. It is the outcome of development under a combination of circumstances that does not favor accepting the constraints of society. Various developmental disorders, quite different in their nature though alike in their antisocial result, are thus thrown indiscriminately into the class of psychopathic personalities.

When the problem is viewed in this light it becomes possible to limit the category rather than treating it as a scrap heap. A thoroughgoing attempt of this kind has been made by Cleckley.[20] He rules out those cases in which social standards are rejected only in respect to some one particular kind of behavior: for example, alcoholism or deviant sexual behavior in a person otherwise adapted to social demands. He also rules out those cases in which delinquency and crime have been adopted as a positive way of life—in which the person is an enemy of society but is capable of being a loyal and stable member of a delinquent gang. There remains a group characterized by a diffuse and chronic incapacity for persistent, ordered living of any kind. These are, in Cleckley's view, the true psychopathic personalities. They need not be diagnosed negatively, by exclusion of other possibilities. They constitute a true clinical entity with a characteristic pattern of symptoms.

Questions of psychiatric classification need not long detain us in this book. But Cleckley has succeeded in isolating a relatively homogeneous group of disordered personalities, and these we should endeavor to understand.

Typical Psychopaths.—We begin with two examples. The first is a young woman of twenty whose behavior was so erratic that she was admitted to a mental hospital.[21] Starting at eleven she had caused her family great annoyance by truancy and by telling highly improbable stories about herself. Twice she set fire to the house in order to make her parents move to a better one. She borrowed money and lied freely in order to avoid returning it. She remained out at night in company with men. Attempts to place her in institutions and schools were unsuccessful. She continued to lie and steal and was found flighty and changeable in her affections. Given a chance to take a business course, she appropriated her carfares and

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[20] Cleckley, H., *The Mask of Sanity*, St. Louis, C. V. Mosby Co., 1941, esp. Chs. 21, 22.

[21] Henderson, D. K. & Gillespie, R. D., *A Textbook of Psychiatry*, New York, Oxford University Press, 1933, pp. 385–387.

tuition fees to attend moving pictures and buy trinkets. Soon she began spreading stories that the daughters of various neighbors were pregnant, a fact which proved to be true about herself. She moved rapidly from job to job, often marking her departure with a substantial theft.

Examined at the hospital she proved to be of average intelligence with a good grasp of facts and considerable skill in conversation and repartee. She was full of plausible excuses for everything that had happened, but explained some of her escapades as done to annoy her father for his harshness. She ran the hospital staff a merry chase with her lies, destructiveness, and threats of violence. Usually she expressed regret afterwards and promised to do better. After her release from the hospital she again moved rapidly through a succession of jobs, never staying long in one place. Her last job was at a hospital, where she found some poison and ended her life.

For a second example we shall summarize one of Cleckley's cases.[22] The patient was studied during his several visits to a mental hospital. These occurred when he was in his thirties and early forties. He was the only child of parents who were active church members and much respected members of the community. As a child he was well-adjusted and popular, but in high school his adjustment underwent steady deterioration. At home he began to be petulant and dishonest, at school arrogant and irritable so that he drifted out of all group memberships. At sixteen he began to run away from home. The second time this occurred his father sent him money and helped him to find a job. He soon began to drift from job to job, each move being occasioned by a quarrel with his employers. He loafed a good deal, preferred to live in a dreary section, and found transient companionships with prostitutes and with the street corner gangs. He exhibited downward social mobility, but as he descended the social ladder he more and more took to boasting about a mythical great past. Alcohol proved irresistibly attractive. He sometimes lay out in a field all night, at other times staggered home uproariously, waking the neighborhood.

The father meanwhile played what looked like a helpful part, getting his son out of trouble, finding him jobs, never publicly referring to his disgraceful behavior. When at last the father saw no course but hospitalization, the son submitted, but to the psychiatrist he denied ever having used alcohol and expressed resentment at his father's meddling. In all he visited the hospital three times,

[22] *The Mask of Sanity, op. cit.*, pp. 80–94.

leaving each time with protestations of reform. Between these visits his behavior became more and more erratic, his drinking sprees more serious, his antagonism toward his parents more open. To get money he would call on quiet old ladies, friends of the family, even rousing them from bed to provide him with needed cash. On one occasion he moved into the temporarily closed house of family friends, taking a prostitute with him. When the friends returned they found the house in the greatest disorder, filthy and rather badly damaged.

Central Pattern of Traits.—After studying a great many cases of this kind, Cleckley finds it possible to draw up a "clinical profile" of the characteristics they have in common. In interviews the patient makes an unusually pleasing impression: alert, well-informed, able to talk well. Intelligence is good and does not deterioriate. One soon finds out that there is a marked absence of sense of responsibility in matters both great and small; this includes an inability to tell the truth. The patient does not accept blame for any of his conduct nor feel shame about it. He readily gives a plausible excuse for everything that has occurred. While he is able to reason satisfactorily, in some cases even brilliantly, he shows the most execrable judgment about attaining his ends, whatever these may be. He gets into the same trouble over and over again, so much so that Cleckley describes him as regularly failing to learn from experience. No life plan is followed consistently unless it be a plan to make life a failure. On the side of affect there are grave difficulties. The psychopath seems incapable of real love and real attachment. Strong, deep, and lasting feelings do not seem to exist. Although the patient talks a great deal about feelings, he gives the impression of merely using words without insight into the nature of real feeling.

A very similar picture is sketched by Henderson, with emphasis on the immature character of the behavior.[28]

> From every point of view, it is clear that the psychopath, irrespective of his particular type, is a person who cannot accept things as they are; he is unable to fit into the life of the herd, but tends to lead an independent, individualistic type of existence with no thought or feeling for his family, his friends, or his country. He is as blunted emotionally as many a schizophrenic, he shows a "belle indifference" equal to that of the hysteric, an absence of judgment and reason as great as that of a wayward spoiled child. With all his faults, for a time he

[28] Henderson, D. K., *Psychopathic States*, New York, W. W. Norton & Co., 1939, pp. 128–129.

> may prove very charming, but as his attraction fades, bewilderment, pity and alarm arise when it becomes evident that maturity is exerting no mellowing influence. For some inscrutable reason he fails to grow up, he remains at the level of a primitive savage with a distinct distaste for reasoning and an "impermeability to experience" which allows him to live, think, feel, and act in a manner foreign to his more civilized neighbors.

It is clear that we are dealing with a fairly serious disorder. There are grave disturbances in the patient's affective life as well as in foresight and the control and organization of behavior. Cleckley considers the condition serious enough to be classed as a psychosis. Although the patient outwardly presents a "convincing mask of sanity" and a "mimicry of human life," he has lost contact with the deeper emotional accompaniments of experience and with its purposiveness. To this extent he may be said to have an incomplete contact with reality, and it is certainly very hard to approach him and influence him therapeutically.[24]

In considering how such a disorder comes about, we shall do well to allow both for psychogenic and for somatogenic possibilities. It may be that the narrower conception of psychopathic personality evolved and delimited by Cleckley will put us back on the trail of an organic weakness.

Psychogenic Aspects of the Disorder.—Many features of the psychopath's behavior *can* be explained as of psychological origin. Unfortunately we have as yet little means of proving whether they *should* be so explained. As we saw in the instance of Bert Whipley, it is sometimes possible to make a strong case for an unconscious need for punishment as the cause of constant self-defeat. In childhood, success has acquired the personal meaning of danger because of association with parental punishment or rejection. Another motive that can be ascribed to the psychopath is that of wanting to disgrace and distress his parents. Only in these two respects—constant self-defeat and disgracing of parents—is it possible to find real consistency in the psychopath's behavior. It is not at all clear, however, that the psychopath's consistency on these two points is a consequence of motivation toward goals. It may be simply an accidental by-product of general disorganization. Again, it is possible to explain disorganization itself along psychogenic lines. Rejected, unhappy, distressed children tend to be restless and changeable, as if they were constantly seeking for something new to relieve their

[24] Cleckley, *op. cit.*, Ch. 23.

pain. It is possible to conceive that a person might give in to every impulse simply because he could find no other way to drown chronic tension and sorrow. The case just described, which ended in suicide, seems to imply some such background of distress.

All these hypotheses are possible, and they are probably true in certain cases. Whether they are sufficient to explain all cases of psychopathic personality is a question that can be answered only in the future. Partridge has emphasized the infantile character of the psychopath's reactions, his excessive demands and his failure to be ruled either by conscience or by reality.[25] This implies that development has become arrested and fixated at an early stage. Both Partridge and Greenacre find a rather striking frequency of antagonism toward the parent of the same sex, a situation that tends to block the development of strong identification.[26] The existing evidence, however, is altogether too small to lift us from speculation to established fact.

Somatogenic Aspects of the Disorder.—The other possibility is that the psychopath suffers from a true brain disorder. Weakness might be ascribed to the inhibitory side of neural activity or to those areas of the brain that mediate chiefly inhibitory processes. Henderson argues the case as follows, without insisting that the argument is wholly satisfactory.[27]

There are several abnormal brain conditions in which the patient's behavior changes in the direction of impulsiveness, childishness, and a lack of controlling foresight. Among these are disorders arising from lesions of the hypothalamus, changes following the surgical destruction of frontal lobe tissue, and conditions that result from head injuries and attacks of encephalitis. If known impairments of nervous tissue result in behavior resembling the psychopath's, then one is justified in proposing the hypothesis that similar but more subtle impairments exist from the start or are acquired along the way by the psychopaths themselves. It is plausible that a weakness of inhibitory capacity should make it hard to accept the restraints of socialization.

The technique of the electroencephalogram offers a new approach to the problem of abnormal brain conditions. We saw in connection with juvenile delinquency that abnormal EEG's occurred with

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[25] Partridge, G. E., "Psychopathic Personalities Among Boys in a Training School for Delinquents," *American Journal of Psychiatry*, 1928, Vol. 8, pp. 159–186.

[26] Greenacre, P., "Conscience in the Psychopath," *American Journal of Orthopsychiatry*, 1945, Vol. 15, pp. 495–509.

[27] Henderson, *Psychopathic States, op. cit.*, pp. 30–39.

unusual frequency only in cases marked by highly impulsive behavior, many of these cases having a history of head injury and encephalitis. As far as behavior goes, however, these were just the cases that most closely resemble the impulsive adult psychopath. Two recent studies show a considerably higher incidence of abnormal EEG's in psychopathic personalities than is found in comparable normal subjects.[28] Various complications prevent these results from giving a clean-cut answer to the problem, but they are straws in the wind suggesting that the search for specific brain pathology is by no means hopeless.

Treatment would be much assisted by a better knowledge of causes. As things stand now, the treatment of the psychopath is anything but an inviting task. He brings no motivation to psychotherapy, which is therefore very hard to initiate. Under present laws governing commitment to mental hospitals, he cannot be kept long at an institution because he is not mentally deranged in the sense of intellectual confusion or disorientation. For the most part psychopaths move in and out of the portals of institutions as readily as they move in and out of jobs, spending a good part of their time at liberty where they are costly to society. Cleckley believes that the only solution is to create a new kind of custodial institution expressly for this type of patient.[29] In cases where psychotherapy seems possible, the preferred technique, according to Lindner, should be hypnotherapy.[30] The quick development of a childlike transference offers the most promising means of drawing the psychopath, immature as he is at best, into the therapeutic process. But the possibility of producing stable gains in a person so characteristically unstable should not be exaggerated.

Deviant Sexual Behavior

Next to be considered is a group of disordered reactions that are focalized on sex. Delinquents and psychopaths often include deviant sexual behavior in their repertory of rebellion against social standards, but their disorder centers upon the rebellion rather than upon sexual satisfaction. The cases to be considered here are those in which deviant sexual behavior constitutes the chief or sole de-

[28] Simons, D. J. & Diethelm, O., "Electroencephalographic Studies of Psychopathic Personalities," *Archives of Neurology and Psychiatry*, 1946, Vol. 55, pp. 619–626; Gottlieb, J. S., Ashby, M. C. & Knott, J. R., "Primary Behavior Disorders and Psychopathic Personality," *ibid.*, 1946, Vol. 56, p. 381.

[29] *Op. cit.*, Ch. 25.

[30] Lindner, R. M., *Rebel Without a Cause: the Hypnoanalysis of a Criminal Psychopath*, New York, Grune & Stratton, 1944, pp. 15–24.

parture from social standards. In other respects the person has accepted the process of socialization. In this one respect he finds it impossible to channel his needs in the way that society demands.

Deviation as a Developmental Abnormality.—In an earlier chapter we took up the normal course of sexual development and the various points at which maladjustment might arise.[31] Sexual excitability and sexual interests exist in early childhood. They take the form of masturbation, curiosity about the genitals, self-display, mutual investigation with other children, and crushes and affectionate relationships sometimes accompanied by possessiveness and jealousy. For the most part the sexual tendencies of children are such as would be called perverted if they persisted into adult life. An extensive process of relearning goes on at puberty, with the result that childish object choices and childish modes of satisfaction are put aside in favor of the normal, adult, socially expected pattern.

In our society the child's sexual interests typically undergo a stormy struggle with parental and cultural disapproval. In certain social classes and in some primitive societies the cultural pressure is much lighter. Malinowski's studies in the Trobriand Islands showed that when growing boys and girls are allowed more or less complete freedom in regard to sexual interests and sexual experimentation, the result is a minimum of deviant sexual behavior.[32] If the sex urge is left to itself it seems to flow easily into normal adult channels. In other primitive societies there is often an attitude more repressive than our own. Seward points out that in the Manus our mistakes in this respect are exaggerated to the point of caricature.[33] Roughly speaking, there seems to be a positive correlation between the frequency of sexual deviations and the severity with which the culture suppresses sex.

It was Freud who first offered the theory that deviant sexual behavior represented a repetition of childhood sexual tendencies. The diffuse "partial impulses" that constitute the child's sexuality are normally gathered into a new pattern at puberty. The excitability of the genitals becomes the primary factor, and the act of orgasm the central goal. Freud classified sexual aberrations under two headings: deviation in respect to sexual *object* and deviation in respect to sexual *aim*.[34] The chief deviation in respect to object is homo-

[31] See above, pages 118–124.
[32] Malinowski, B., *Sex and Repression in Savage Society*, New York, Harcourt, Brace & Co., 1927.
[33] Seward, G. H., *Sex and the Social Order*, New York, McGraw-Hill Book Co., 1946, Ch. 8.
[34] Freud, S., *Three Contributions to the Theory of Sex*, tr. by A. A. Brill, New York & Washington, Nervous & Mental Disease Publishing Co., 1930, Ch. 1.

sexuality, the choice of an object of the same sex. This, as we have seen, is a natural and normal object choice in later childhood, when boys associate mainly with boys and girls with girls. Deviations in respect to aim include such phenomena as *exhibitionism* and *voyeurism*. In the former, displaying the genitals or the naked body becomes an essential element in obtaining a satisfactory sexual experience. In the latter, observing the bodies and sexual acts of others plays the same indispensable part. These can be regarded as exaggerated perpetuations of childish display and curiosity. *Sadism* and *masochism* have similar counterparts in childhood when the relation between sexual and aggressive feelings is often misunderstood and confused. The sadistic deviation makes violence and the giving of pain an indispensable condition for sexual satisfaction. The masochistic deviation similarly associates sex and the receiving of pain.

Deviant sexual behavior is thus conceived as a developmental abnormality. The relearning required at puberty is not accomplished, or is so feebly accomplished that regression to childhood sexual orientations remains easy. When this happens, the full force of genital sexuality becomes channeled into some childhood pattern of sexual behavior. The urge is as great as it is in normal people, but the problems it creates are obviously far more difficult. Sex becomes firmly associated with the forbidden, the dangerous, the disgraceful. It loses its chance to enrich and strengthen a marital relationship and to serve as a constructive force in the individual's life.

Comparison with Neurosis and Delinquency.—Traces of childhood sexual tendencies are doubtless present in everyone. Normal sexual development does not imply that these traces have gone out of existence. It implies merely that their attraction is too small to compete with adult sexual interests. Many healthy people remember the sexual inclinations and episodes of their childhood, remember them even with a certain pleasurable interest. They are not bothered by such feelings because they do not find them uncontrollable or of an attraction comparable to that of adult sexuality. Sexual inclinations cannot be classed as deviant unless they tend to crowd out a normal sexual adjustment. There is a world of difference between the young fellow who merely as a pastime trains his field glasses on the windows of the women's dormitory and the Peeping Tom who, indifferent to normal sexuality, knows a genuine erotic thrill only when climbing on fire escapes. We can speak of sexual perversion only when the deviated inclination is stronger than

the normal one and prevents normal sexual activity from yielding satisfaction.

Neurosis disturbs most human relationships, including sexual ones. In many neurotics the traces of childhood sexuality are strongly activated. This activation does not, however, result in overt deviant behavior. It results rather in an equally strong activation of the childhood conscience—the super-ego—and the perverse inclinations are repressed. In the neuroses, deviant sexual tendencies are associated with great anxiety. They simply cannot be tolerated in consciousness. If they give rise to symptoms, these are disguised and are experienced as ego-alien. In sharp contrast stands the psychopath and the habitual delinquent, who is often fully aware of such tendencies and may practice them without any sense of guilt. The typical sexual deviant stands midway between these two extremes. His perverse inclinations do not have the status of neurotic symptoms. They are not experienced as ego-alien or forced upon him; he recognizes them as *his* inclinations which if expressed give him genuine sexual satisfaction. In short, his deviant urges are in no way associated with childhood anxiety. On the other hand he cannot practice them with complete comfort. They entail real dangers in the form of social disgrace if not legal action. Furthermore they conflict with his mature conscience and his ego-ideal. The person often wants to function as a good member of society in every respect except that he would like to lead his sexual life in his own peculiar way. Sexual tendencies alone seem to have been exempted from the process of socialization.

Deviant sexual behavior is thus not usually understandable as a form of delinquency or as an aspect of psychopathic personality. It is also not usually understandable as a symptom of neurosis. Sexual deviation represents a focalized failure to accept socialization, a failure of development in respect to one specific urge. The scientific problem is to explain this failure within a personality that in other respects has not proved averse to adjustment.

Homosexuality.—It will be more profitable for us to concentrate on one kind of deviant sexual behavior than to describe superficially the many varieties that exist. The most common and well-known variety is homosexuality. Until the advent of psychoanalysis this deviant form of object choice was believed to be a biological abnormality. In the writings of Havelock Ellis, for example, great importance was attached to the fact that many homosexuals reported having preferred members of their own sex as far back in childhood

as they could remember.[85] In view of what has since been learned about early childhood sexuality and about repression, this kind of evidence is clearly of no value. Following Freud, emphasis shifted to the psychogenic side of the problem. Homosexuality was perceived as a developmental rather than a biological abnormality.

The evidence for biological abnormality has recently been reviewed by Seward.[86] It is not particularly impressive. The most important finding has to do with the androgen-estrogen balance in male homosexuals. Androgen (the male sex hormone) and estrogen (the female sex hormone) are both present in the human body, the former predominating in males and the latter in females. Several studies have shown that in a majority of male homosexuals the balance is somewhat shifted in the direction of estrogen. Some investigators further claim to have shown a certain association between homosexuality and feminine body characteristics in men. Taken together, these findings suggest that men of a somewhat feminine biological make-up are a little more likely than others to have homosexual inclinations. But the relation is a slight one and does not go far toward explaining the homosexual object choice. Many men with somewhat feminine bodily habitus are quite free from homosexual interests, and some male homosexuals are of distinctly rugged and powerful physique.

The problem is further complicated by the fact that the concept of homosexuality includes two rather different kinds of deviation. The disorder may be strictly limited to the choice of object. In so-called active male homosexuality and passive female homosexuality the individual takes a role entirely appropriate to his sex, stipulating only that the partner shall be of the same sex. The situation is different with passive male homosexuals ("fairies") and active female homosexuals ("Lesbians"). Here the role appropriate to the opposite sex is desired. It would be only in the latter cases that one would expect the contribution of biological factors to be significant.

The simplest psychogenic explanation of homosexuality would be that the individual became fixated upon this object choice because of gratifications happening in childhood or early adolescence. It might be argued that because of the strong pleasure associated with sexual excitation a small number of homosexual experiences would serve to fixate a preference. This explanation proves to be an inadequate one. Figures obtained from questionnaires and interviews show

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[85] Ellis, H., *Studies in the Psychology of Sex*, 3rd ed., Philadelphia, F. A. Davis Co., 1928, Vol. 2, Ch. 3.
[86] Seward, G. H., *Sex and the Social Order*, *op. cit.*, pp. 176–179.

that between a third and a half of normal men and women have had homosexual experiences in childhood and adolescence.[87] In some cases these experiences were quite extensive, yet they did not interfere with later normal adjustment. It is evident that early gratifications by no means block the relearning that is normally accomplished at puberty.

It becomes necessary to assume, therefore, that the preference for objects of the same sex is really based on a distaste for objects of the opposite sex. Some emotional obstacle prevents the person from feeling a sexual interest in members of the opposite sex. Sometimes a person lingers in the homosexual orientation because of timidity over trying his or her luck at attracting heterosexual partners. This motive is usually transient, but it points the way to understanding those cases in which the disinclination toward the opposite sex is more fixed and lasting. In cases of enduring homosexuality there is a strong connection of some kind between heterosexual interest and anxiety. To this extent the basic process resembles the nucleus of a neurosis. Childhood punishments or experiences of a terrifying character elicit the defense of repression; thereafter the person is unable to become aware of heterosexual feelings, and may even fortify his defense by experiencing disgust at such inclinations. Under these circumstances an interest in the same sex becomes the most available substitute for the repressed inclinations.

This way of explaining homosexuality is not complete unless it is possible to show how the deviant object choice remains available. In some neuroses, heterosexual and homosexual trends are both strongly repressed. We are probably justified in assuming—though the facts are still insufficient to prove the point—that in cases of homosexuality repression falls selectively on heterosexual interest. Suppose that a small boy has sexual play with his sister and his brother. He is punished for play with the sister, but he does not understand this to mean that it is wrong to play with the brother. Thus a certain amount of childish homosexual activity might go on for a long time, even up to puberty, becoming well fixated before it was understood to be "perverted." In this way we might explain why the homosexual interests are experienced not as ego-alien but as a true aspect of the self. They were never mixed up with the childish super-ego.

Psychoanalytic study of patients with homosexual inclinations shows that the repression of heterosexual interest often goes back to

[87] Seward, *op. cit.*, p. 176.

anxiety over the anatomical differences between the sexes. The little boy may be led to fear that his penis will be cut off as a punishment for sexual play. If this preoccupation is active at the time he discovers anatomical differences, his fear may be abruptly increased. He may assume that girls and women have already been punished in this way, and that the danger is really acute. Women's genitals become phobic objects because they remind him too strongly of the danger of castration. Thus the possibility of being interested in them, curious about them, even of seeing them, becomes firmly repressed. In the case of girls the motives entering this neurotic nucleus are somewhat different. The lack of a prominent genital organ may be sensed as an inferiority and a cause of envy. If anxiety on this subject is strong, it may override and repress any erotic interest in the opposite sex. In both cases fear causes sexual interest to be deflected from heterosexual objects. Homosexual objects become the only safe ones.[88]

Sexual Perversions Leading to Crimes of Violence.—Every so often one reads in the newspaper that a murder has been committed by a "sex fiend." In those cases where sex is really involved, there is found to be a deep confusion between sexuality and aggression. The aggressive act does not occur in response to immediate irritation or even as a consequence of long-stored resentment. It is pushed by far less rational motives, generally not in the least understood by the person himself, but having the persistent compulsive force that characterizes the sex urge. These are cases of deep sexual perversion in which the force of sexuality becomes channeled almost exclusively into fantasies and acts of violence.

Healy has shown that certain cases of juvenile stealing result from an association between this delinquent act and sexual excitation.[89] Such association occurs most readily before puberty, when sexual excitation is still diffuse and none too clearly understood. Healy's cases include many like the following: A girl of eight went around with older girls who taught her to steal in shops and who also aroused her interest by free talk about sex. Presently this girl began compulsive stealing accompanied by unmistakable sexual excitement. A boy of eleven often went to the beach with other boys who would steal from shops along the way and later, when undressing, practice mutual masturbation. Before long the boy felt an irresistible impulse to steal whenever he heard talk about sex. These examples

[88] Fenichel, O., *The Psychoanalytic Theory of Neurosis*, New York, W. W. Norton & Co., 1945, pp. 328–341.
[89] Healy, W., *Mental Conflicts and Misconduct, op. cit.*, Ch. 14.

are not too serious cases, but they shed a certain light on those which become more serious. There is a plastic quality to the sexual urge, especially in childhood. Under a peculiar combination of circumstances, presumably involving serious anxieties and repressions, it can be drawn into channels very remote from normal sexuality.

The strange complications in such cases can be illustrated by the following example. A seventeen-year-old student was found guilty of three brutal murders and a large number of burglaries.[40] On the wall of one apartment, in which he killed a young woman, was found written with lipstick, "For heaven's sake catch me before I kill more; I cannot control myself." Sexually deviant behavior began in his case at the age of nine and took the form of fetishism. He repeatedly stole women's underclothing, took it to his room, and dressed himself in it with great sexual excitement. At thirteen he began securing the desired objects by going into houses through windows. Sexual excitement gradually became concentrated on this act. He often struggled to prevent himself from leaving home at night, but sometimes desire would break down his resolutions. At the sight of an open window at a place that might be burglarized, he experienced sexual excitement with erection. Usually as he passed through the window he experienced orgasm. If so, he generally left without taking anything. The impulse to kill came only if he was startled in the act of burglary. On one occasion, however, he experienced orgasm when he hit a woman who interrupted him, and he left at once without hitting her again.

Reports on this case do not disclose the sequence of events and fantasies that led the sexual need into such peculiar channels. They do show, however, that there were severe blocks on normal channels. At first he indignantly denied that he had ever practiced masturbation, but he later admitted having tried it twice without being able to secure any sexual excitement. With equal reluctance he admitted occasional petting with girls, but reported the experience to be so upsetting and repulsive that he usually burst into tears. The pattern of guilt feeling could hardly be stranger. He was much less upset in speaking of his brutal murders than he was when questioned about normal sexual behavior.

Treatment of Deviant Sexual Behavior.—Psychotherapy with sexual deviants involves no new principles beyond those already discussed. An initial difficulty lies in the patient's motivation. Even

[40] Kennedy, F., Hoffman, H. R. & Haines, W. H., "A Study of William Heirens," *American Journal of Psychiatry*, 1947, Vol. 104, pp. 113–121.

when he is distinctly uncomfortable over his deviant fantasies or greatly embarrassed by his overt behavior he is apt to have decidedly mixed feelings about changing. His fantasies and behavior have at least been sexually satisfying, whatever their practical consequences. Thus the patient is sometimes not scared enough and not badly enough handicapped by his disorder to endure the emotional hardships of treatment. Nevertheless the results of treatment are often satisfactory. In his analysis of the results of psychoanalytic therapy Knight shows that sexual disorders distribute themselves as follows: apparently cured or much improved, 48.5 per cent; slightly improved or unchanged, 51.5 per cent.[41] Herzberg's report on a consecutive series of 100 patients includes 6 cases of homosexuality, 2 being greatly improved, while 4 broke off treatment without significant improvement.[42] Both the psychoanalytic results and those obtained by Herzberg's active therapy are less good than the results reported for the neuroses.[43] The lower intensity of the patient's motivation probably accounts for the difference.

The chances of overcoming a sexual deviation depend a great deal upon the patient's age. However far back in childhood the initial difficulty may lie, relearning at puberty plays a peculiarly crucial part in this form of disorder. In passing from childhood to adult sexuality, everyone has to abandon his earlier orientations in favor of new ones. One might say that every normal person is cured of perversions at puberty. The presence of homosexual and other deviant inclinations in the adolescent period is thus not necessarily a matter of concern, especially when external or ethical considerations have discouraged growth in a heterosexual direction. Relearning is not accomplished in a day. Concern is appropriate only when adequate opportunities fail to produce relearning.

Success is also related to another factor which might be described as the magnitude of the deviation. Homosexuality is a deviation of small magnitude: the object is another person, the feeling is affectionate and tender, the goal is sexual contact of some kind, and the only peculiar feature is the insistence on an object of the same sex. Perversions that lead to crimes of violence are deviations of much greater magnitude. Sexual excitement is completely divorced from love and linked up with feelings that are antagonistic to affectionate human relationships. For the most part these criminal cases are placed in penal rather than medical institutions, and this in

[41] Knight, R. P., "Evaluation of the Results of Psychoanalytical Therapy," *American Journal of Psychiatry*, 1941, Vol. 98, pp. 434–446.
[42] Herzberg, A., *Active Psychotherapy*, New York, Grune & Stratton, 1945, p. 136.
[43] See above, pages 337, 367.

itself adds to the difficulty of reclaiming them for socialized living. But in any event their treatment would be extremely difficult. Even when they are young, the nature of their deviation injures the constructive forces, especially the capacity for human relationships, on which successful therapy depends.

Chronic Alcoholism

The excessive use of alcohol is a psychological problem, but it is not a separate variety of disordered behavior. If one had to list the psychological causes of alcoholism, one would simply set down the whole array of problems studied thus far in this book. Doubtless there are always specific factors that make drinking the preferred symptom. But there is no such thing as a specific alcoholic neurosis based on a particular developmental disorder. Alcohol can be woven into the texture of almost any kind of disorder.

The Effects of Alcohol.—Although we often speak of its stimulating effects, alcohol is actually a narcotic. This is clear enough when a person is quite drunk, with failing locomotion and incoherent speech. The initial stimulating effect results from the fact that alcohol acts selectively on neural mechanisms. Its narcotic action first touches the most recently evolved areas of the cerebral cortex, which have a predominantly inhibitory function. Disinhibition produces a sense of well-being and relaxation, freedom of thought and pleasantness of affect. It is conducive to conversation, hence the wide use of alcohol as a social lubricant.

As intoxication increases, events take a fairly regular course. There is a difference of opinion about this course, depending upon whether or not the observer participates. To a slightly narcotized judgment it will be apparent that everyone is talking with great zest, wit, and wisdom. The world is full of glowing possibilities; the heart is full of warm, friendly, and expansive feelings. But an observer who enters the field at this point in a state of zero narcosis will be apt to see the picture a little differently. He will agree on the zest and expansive feelings, but he will be likely to detect the effects of narcosis on matters of judgment and intellectual keenness. It will occur to him to question whether the gentleman who is informing the company how to construct outdoor fireplaces is really an authority on that subject, and he will doubt whether the great plans for world reform that are being loudly developed in another part of the room will prove practicable in the cold light of morning reality. If he stays around long enough, he will observe further

signs of deterioration as narcosis progresses to other parts of the nervous system. Speech, hand coordination, locomotion become increasingly impaired until finally a state of stupor is reached.

Normal and Abnormal Drinking.—There are many people who use alcohol frequently but never to excess. In some circles moderate drinking is part of the routine of life, though immoderate drinking is regarded as reprehensible. These facts make it possible to speak of *normal drinking* and to look for some kind of a line beyond which drinking can be called *abnormal.* Such a line might be drawn according to external signs: drinking in the morning, being unable to face any important situation unless "fortified," being unable to drink socially without getting drunk, etc. All of these external criteria, however, get their meaning from the strength of motivation toward alcohol. The crucial question is how urgently and for what the alcohol is needed. The mild disinhibition that is obtained from one or two drinks, with its relaxation, sense of well-being, freedom from restraint, and easy flow of conversation, is a temporary benefit that most people can appreciate. A person who needs alcohol for this benefit and for nothing more is a normal drinker and is likely to remain so. He is under no serious temptation to drink beyond the point where this benefit is obtained, and it is not worth it to him to wake up next morning with the slightest trace of hang-over. Furthermore, he is not so dependent on this benefit that he cannot forego it when circumstances so require. The normal drinker, in short, has no strong further motive for using alcohol beyond the enjoyment of its mild disinhibitory effects.

Alcohol has further potentialities, however, and these constitute its appeal for the person who becomes an abnormal drinker. As intoxication increases, as restraint and judgment become increasingly narcotized, impulses may come to expression which are in no way satisfied in everyday life. Take the case of a college student whose outward personality was marked by a tendency toward derogatory verbal criticism and a certain aloofness from all but his closest friends. Under the influence of sufficient alcohol he became extremely belligerent, picking quarrels and coming to blows with men in bars. His friends often had to rescue him because, although he fought like a demon, his slight physique was really unequal to these encounters. At mixed parties he regularly passed through the belligerent stage to expressions of a different character. He would lay his head on a girl's lap and weep piteously for her loving care, describing himself as a lonely outcast. The following day he would

dimly remember his aggressive adventures but his extreme show of dependence would be safely wrapped in complete amnesia.

This is the sort of case that is likely to progress from normal to abnormal drinking. There is a *repressed* but still active craving for loving maternal care. There is also a very strong aggressive need, *suppressed* by circumstances to the extent that it comes to expression only in verbal form. Alcohol does a lot for these two needs. It permits the young man to act as aggressively as he really feels, without forcing him to assume full responsibility for his actions. It permits him to gratify his dependent cravings without forcing his sober consciousness to become aware of them. Alcohol thus allows him to satisfy strong needs without disturbing the neurotic protective organization that ordinarily keeps them in check. One can easily see the fatal attraction of alcohol for a personality organized on these lines.

Abnormal drinking sets in when alcohol fits into personal problems in some such way as the one described. When it temporarily alleviates conflict by allowing expression to otherwise blocked needs, especially when its amnesic properties are utilized to prevent realization of the needs that have been expressed, alcohol is likely to become irresistibly attractive. In such a case the charm of mild disinhibition is but a minor part of the motive for drinking. The major goal is relief from conflict and the expression of cravings that cannot be satisfied in real life.

Motives for Excessive Drinking.—As previously indicated, there is no one motive or motive-pattern that predisposes a person to chronic alcoholism. Perhaps feelings of inferiority and feelings of uneasiness in social relations, both of which are so readily altered by alcohol, fixate its initial use more strongly than other motives. But the deeper motives vary greatly from one case to another. Repressed homosexuality and other sexual deviations may play a part. Aggression and dependence have already been mentioned. K. A. Menninger considers alcohol addiction to be a form of self-destructive behavior derived from inwardly directed aggression.[44] All these suggestions are undoubtedly correct for certain cases, but it is a mistake to generalize and insist that any one of them plays an exclusive part. In considering any given case it is necessary to take account of the deeper motives, but it is equally necessary to investigate the patterning of these motives and the peculiar circumstances

[44] Menninger, K. A., *Man Against Himself*, New York, Harcourt, Brace & Co., 1938, p. 160.

that led to the choice of alcohol as a symptom. External circumstances may be of considerable importance. This is well illustrated in William Seabrook's autobiographical studies.[45] Although his life was marked by a variety of emotional problems, Seabrook became seriously alcoholic only at a certain crucial point in his career. This was the point at which he was able for the first time to establish ideal conditions for writing, free from economic pressures and the many harassing circumstances that had handicapped all his previous efforts. Faced at last with the challenge as to whether or not he was a great writer, with no excuses in case he failed, he found himself drinking more and more heavily until at last he sought voluntary commitment to a mental hospital.

The complex patterning of motives and circumstances can be further illustrated by an example reported by Strecker and Chambers.[46] The only son of wealthy parents was much overprotected by his mother. The parents were unhappily married and the father, reacting scornfully to the mother's pampering attitude, took the opposite one of stern domination. Neither parent encouraged independence. Entering college at the age of eighteen, the son was completely bewildered. He was quite unable to meet the practical problems of life, felt timid and insecure, wanted tremendously to be accepted and respected by his fellow students, yet had no techniques for bringing this about. "I remember my first visit to the village inn," he wrote later, "and my excitement and relief at discovering that alcohol would dissipate my feelings of insecurity and inferiority to the point where I felt socially secure." He soon became established in a group that drank frequently, and his use of alcohol became so free that he was dropped from college. He started in business with a new burden of inferiority created by his college failure. It proved impossible to keep away from his drinking companions, with whom he could forget his failures and feel accepted. At one point he tried to go "on the wagon" but found he could endure neither the boredom and restlessness caused by abstinence nor the irritations and bickering at home. Returning gladly to his drinking companions, he presently was intoxicated so much of the day that he lost his job. The next step was all-day drinking at the club, and this led him to a sanatorium for alcoholics.

Treatment of Alcoholism.—The treatment of alcoholism offers one peculiar difficulty. The patient's main symptom is so available

[45] Seabrook, W., *Asylum*, New York, Harcourt, Brace, 1935; *No Hiding Place: an Autobiography*, Philadelphia, J. B. Lippincott Co., 1942.
[46] Strecker, E. A. & Chambers, F. T., *Alcohol: One Man's Meat*—, New York, The Macmillan Co., 1938, pp. 61–66.

and so attractive that he often cannot resist it. At any point where treatment proves emotionally costly, he is under a terrific temptation to escape into drunkenness. Alcohol constantly offers him an easy solution to the problems both of life and of treatment. Most patients stubbornly cling to the idea that after being cured they will become normal drinkers. Most therapists, on the other hand, believe that only total abstinence will work in a person who has been alcoholic. Once the patient has been in love with the easy solutions offered by intoxication, he can rarely be so fortified against them that he learns to stop after the second drink. Records of treatment are full of relapses which begin when the patient decides that his improved condition has made him capable of normal drinking.

Special methods therefore have to be employed to block a relapse into drinking. Hope has been entertained that certain drugs would reduce the craving for alcohol. Benzedrine, atropine, strychnine, and caffeine have been tried with some success. Particularly valuable for reducing acute alcoholic states, they reportedly serve also as a means of lowering the chronic craving for alcohol. Marked success has been claimed for a rigorous method of treatment which consists of establishing a conditioned avoidance response: the patient is given alcohol together with a strong emetic that causes prolonged nausea and vomiting.[47] These methods, like hospitalization itself, should be regarded as technical aids to treatment. The real work has to be done on the problems of maladjustment that have made the patient an abnormal drinker in the first place.

Strecker and Chambers describe a representative method which combines psychotherapy with certain supportive measures designed to prevent relapses.[48] The purely psychotherapeutic part of the program runs to somewhere around 100 hours of interview and does not involve principles beyond those already studied in this book. The patient is called upon, however, to adhere to certain rules. He is required to abstain completely from alcohol during the period of treatment. He is also required to be entirely frank and honest with the therapist, notifying him as soon as possible in case of a relapse. In addition, steps are taken to assure an optimal physical condition. Nutrition and metabolism are carefully watched, exercise and diversion are called for, and the patient is particularly cautioned against fatigue. Finally, a re-educational program is laid out in some detail. This includes reading on psychological problems, adherence to

[47] These techniques are described, with references, in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders*, New York, The Ronald Press Co., 1944, Vol. 2, pp. 1145–1147.

[48] *Op. cit.*, pp. 133–230.

a schedule of daily activities, attention to the development of hobbies, and vocational guidance.

One of the most successful methods of dealing with alcoholism is the movement known as *Alcoholics Anonymous*. This movement was originated by a group of cured alcoholics. It is now represented in a great many American cities. The nucleus is a sort of social club. The meetings are given over partly to entertainment and partly to discussions of the common problem, usually with testimonials from members who have been cured. There are no specific religious affiliations, although the members are expected to believe in some higher power beyond themselves. When a new member is added, very likely still deeply alcoholic but genuinely desirous of changing, he is at once given some office or responsible task in the society so that he will more readily become identified with the group. In short, every attempt is made to provide an immediate sense of fellowship and group support as a counterpoise to the member's old haunts and drinking companions. The new life must be more attractive than the old.

Another feature of the program consists of providing strong individual support when a member is in the grip of his old temptation. This can be illustrated from the case of a professional baseball player. He was admitted to *Alcoholics Anonymous* in his home city, but suffered a bad relapse when he reported at the team's spring training camp. Threatened with jail and loss of his job, he was taken in hand by a local member, a total stranger, who accompanied him on a trip for a few days until he recovered his equilibrium. From that point on, some member was in touch with him in each city where the team played. If he had a particularly bad day on the diamond, the member would make himself available and might spend the whole evening with him to keep him from relapsing into drink. The success of such maneuvers naturally depends on the fact that every member has had his own troubles with alcohol. When a patient is really struggling to overcome his addiction, he welcomes the help of someone who has been through it all himself. In certain respects a fellow-sufferer can be a better therapist than a trained person who has never been alcoholic. The success of *Alcoholics Anonymous* gives testimony to the healing power of both group membership and sympathetic insight.

SUGGESTIONS FOR FURTHER READING

A good initial survey of delinquent and criminal personalities can be obtained from L. G. Lowrey's chapter in J. McV. Hunt's *Personality and the Behavior Disorders* (New York, The Ronald Press Co., 1944), Vol. 2, Ch. 26.

Two books can be strongly recommended for their insight into psychological dynamics, although each deals with a somewhat special group of delinquents: *Roots of Crime: Psychoanalytic Studies,* by F. Alexander & W. Healy (New York, Alfred A. Knopf, 1935), and *Wayward Youth,* by A. Aichhorn (New York, Viking Press, 1935).

The concept of psychopathic personality is reviewed by P. W. Preu in Ch. 30 of Hunt (*op. cit.*). The most thorough study of this disorder, liberally illustrated with interesting histories, is H. Cleckley's *The Mask of Sanity: An Attempt to Reinterpret the So-Called Psychopathic Personality* (St. Louis, C. V. Moseby Co., 1941).

Freud's monograph, *Three Contributions to the Theory of Sex* (New York & Washington, Nervous & Mental Disease Publishing Co., 1930), represents the first attempt to understand deviant sexual behavior as a developmental disorder. The current psychoanalytic theory of these disorders is given by O. Fenichel, *The Psychoanalytic Theory of Neurosis* (New York, W. W. Norton & Co., 1945), Ch. 16, and a somewhat modified theory is described by H. V. Dicks in Chs. 7 and 8 of *Clinical Studies in Psychopathology* (Baltimore, Wm. Wood & Co., 1939).

A good introduction to alcoholism, its problems, and its treatment, will be found in *Alcohol: One Man's Meat—,* by E. A. Strecker & F. T. Chambers, Jr. (New York: The Macmillan Co., 1938). *Alcoholics Anonymous* (New York, Works Publishing Co., 1939) tells the story of a most interesting experiment in treatment. A more thorough account of alcoholism is made by H. Haggard & E. M. Jellinek in *Alcohol Explored* (New York, Doubleday, Doran & Co., 1942).

CHAPTER 12

PSYCHOSOMATIC DISORDERS

Up to this point we have been concerned almost entirely with the psychological side of abnormal behavior. Maladjustment and neurosis are problems in psychological development, or, to put it another way, problems of motivation, learning, anxiety, and defense. The same can be said of psychotherapy, which is always an attempt to remove the inner obstacles that interfere with psychological development. In the last chapter we strayed a little from the psychological theme. It proved necessary to consider the social conditions that contribute to delinquent and criminal careers. We also could not overlook the possibility that brain disorders play a part in chronic maladjustment to social requirements. Nevertheless we were dealing primarily with developmental disorders rather than diseases or purely external conditions. Apart from concepts like constitution, temperament, and somatic compliance, our study has proceeded with little reference to the body and the nervous system. This is not because of an inclination to regard people as disembodied spirits. It is because we know absolutely nothing about the neural changes that accompany learning. Thus far we have studied disorders in learning, and neurology offers nothing to assist us.

Our attention must now be turned to a group of disorders in which the somatic complications are fully as important as the psychological. Disorders of adjustment are linked up with bodily processes in such a way as to produce real organic illness. The patient complains of stomach trouble or heart trouble; perhaps it is asthmatic attacks or skin diseases or excessive fatigue that bring him to the physician's office. His ailments are not in the least imaginary. Examination discloses serious malfunctioning in the organs about which he complains, sometimes even tissue changes such as ulcers in the stomach or eruptions on the skin. The somatic disorders require treatment in their own right. Ulcers must be dealt with by rest and diet or by surgical means; acute asthma attacks must be checked with adrenalin. But there is a growing body of evidence that disorders of this kind do not always result from organic weakness or from purely local tissue changes. Sometimes the

bodily disorder is the end-product of emotional maladjustment. Medication can temporarily relieve it, but recurrence is almost certain unless the emotional maladjustment can be set right.

Disturbances in which emotional maladjustment leads to chronic dysfunction in some organ system are nowadays referred to as *psychosomatic disorders*. As so often happens, the title is not particularly suitable. The term appears to include every disorder in which psychological and somatic factors both play a part, but in practice no one intends to give it such a sweeping meaning. It is best to limit it to those disorders in which chronic maladjustment is the primary process and somatic dysfunction the result or by-product. One might keep in mind the opposite term, *somatopsychic disorders*—though it is not widely used—for those cases in which bodily disorder is primary and psychological changes secondary. Such a term could be applied to head injury or encephalitis, for example, in which dysfunction of the cerebral cortex produces the result of impulsiveness and poor control so that the person has difficulty in accepting social restraints.

In practice, the term *psychosomatic disorders* is further limited to cases in which the somatic dysfunction is in organs controlled by the autonomic nervous system. This serves to exclude hysteria, which otherwise qualifies perfectly as psychosomatic but which long custom classifies as a neurosis. The bodily symptoms of hysteria—the sensory and motor symptoms such as paralysis and anaesthesia—occur in organs innervated by the cerebrospinal portion of the nervous system. Psychosomatic disorders occur in such regions as the gastro-intestinal tract or the circulatory and respiratory systems, which are under the control of the autonomic division.

Currently there is a tremendous increase in the frequency of psychosomatic disorders. To mention but one illustration of the general trend, studies of neuropsychiatric disorders in the British forces during both World Wars show a relatively smaller incidence of hysteria and anxiety neurosis in World War II, but a much greater frequency of psychosomatic disturbances, especially gastro-intestinal disorders which constituted "the single most prevalent type of disease among military patients." [1] To some extent, changes of this sort result from fashion in diagnosis. Some disorders are now called psychosomatic which would have been classed as hysteria a generation ago. To a certain extent, moreover, increase in the frequency of a given disease may reflect the advances of medicine in

[1] Dunn, W. H., "Gastroduodenal Disorders—an Important Wartime Medical Problem," *War Medicine*, 1942, Vol. 2, pp. 967–983.

treating other diseases. The greater frequency of cardiac disorders, for instance, may partly reflect the hard pace of modern life, but it also arises from the fact that a larger proportion of the population now survives into the middle and later decades when cardiac disorders are in any event more common. Neither of these considerations, however, seems sufficient to account for the reported increase of psychosomatic disorders. It is interesting to speculate on causes of the relative decline of hysteria and rise of psychosomatic disturbances, but there are as yet no real answers. In the meantime psychosomatic disorders constitute an active focus of contemporary research, and we must set ourselves to understand them.

Emotion and Bodily Changes

Emotion is obviously related to certain bodily states. There are many common phrases in which this is recognized. The heart is said to ache or be broken; in its more turbulent moments it can be in one's mouth or go down to one's boots. The color of the face can change over a wide range from white as a sheet to purple or even black with rage. We say that we have no stomach for a job or that we haven't the guts to do it. In China it is appropriate for a man to say to his lady love that his intestines tie themselves in knots while she is away. Language would hardly have become so replete with psychosomatic phrases without some kind of factual basis.

Everyday Observations.—Turning from metaphor to observed fact, we still need not set up an experimental situation in order to find examples of psychosomatic relationships. Everyday observation teaches us quite a few lessons on this subject. As a first example we can take the nervousness that many people feel when they have to make a speech or appear in some other capacity before an audience. Stage fright carries with it a number of well-known bodily reactions. For the last meal preceding the public appearance there is poor appetite, possibly even a complete inability to eat. As the great moment approaches, the heart beats rapidly, the mouth becomes dry, the hands tremble and grow cold, and there is a strong desire to urinate and move the bowels. The upset state of mind is reflected in an upset state of body. A contrasting example is offered by the emotion of joy. This will show itself not only in erect posture, springy step, bright eyes, and smiling face, but also in systems under autonomic control. The joyous person usually shows a good color, has a strong deep pulse, breathes deeply, has a good appetite, enjoys

his food, and digests and eliminates well. His viscera share in his mental well-being.

For a third example we can examine the state of grief. In a study of acute grief Lindemann has shown that somatic distress is one of the most frequent complaints.[2] One or more of the following sensations are almost certain to be reported. There is apt to be an aching tightness in the throat, sometimes a choking sensation, shortness of breath, and a frequent need for sighing, all of these being related to a feeling of wanting to cry. Another element is a feeling of weakness and easy exhaustion, so that the bereaved person can scarcely summon energy to climb the stairs or walk for any distance. Disturbances of eating are highly characteristic: appetite is extremely poor and there are complaints such as that all food tastes like sand. Grief ramifies throughout the body, affecting a large number of functions controlled by the autonomic nervous system. We have no reason to doubt that other feelings and emotions besides nervousness, joy, and grief have a widespread influence on the whole bodily economy.

Hypnotic Experiments on Psychosomatic Processes.—Hypnosis offers a means of extending the study of psychosomatic reactions. By suggesting various emotional states rather than waiting for them to arise in the course of life it is possible to observe the somatic reactions under well-controlled conditions.

An experiment by Wolberg illustrates this kind of study and at the same time affords an interesting comparison between neurotic and psychosomatic mechanisms.[3] In hypnotically susceptible subjects it is possible to create a state of post-hypnotic conflict. This is done by giving contradictory suggestions which are to be executed post-hypnotically with amnesia for the fact that suggestions were given. Wolberg's instructions to the hypnotized subject were as follows:

> When you awaken you will find next to you a bar of chocolate. You will have a desire to eat the chocolate that will be so intense that it will be impossible to resist the craving. At the same time you will feel that the chocolate does not belong to you and that to eat it would be very wrong and very bad. You will have no memory of these suggestions when you awaken, but you will, nevertheless, react to them.

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[2] Lindemann, E., "Symptomatology and Management of Acute Grief," *American Journal of Psychiatry*, 1942, Vol. 101, pp. 141–148.

[3] Wolberg, L. R., "Hypnotic Experiments in Psychosomatic Medicine," *Psychosomatic Medicine*, 1947, Vol. 9, pp. 337–342.

Wolberg reports the results with three different subjects. One was a patient under treatment for conversion hysteria, and the reaction was a characteristic hysterical symptom: a psychogenic blindness. Although he saw everything else, the patient simply could not see the bar of chocolate that lay beside him. Even when the investigator picked it up and tossed it down, the patient asserted that he saw no chocolate bar. Conflict was avoided by not perceiving the stimulus that would have set it off. The patient maintained his negative hallucination for twenty minutes; thereafter, he saw the candy but refused to eat it. Another subject reacted to the post-hypnotic conflict with symptoms of anxiety and neurocirculatory collapse. Though he tried to avoid looking at the chocolate bar, this defense was insufficient. He complained of dizziness and faintness, proved unable to walk, became pale and cold, then broke out in violent tremor. When his pulse was taken it was found to be rapid and thin. So distressing was his anxiety attack that it became necessary to rehypnotize him and remove the conflict. Very different was the reaction of the third subject, who maintained complete outward composure but showed the effects of conflict by a psychosomatic symptom. At first he talked loquaciously about food and eating, remarked that visitors were expected to accept food when it was offered, and started to eat the chocolate with gusto. Before he finished, his face showed sudden surprise and he remarked that the chocolate tasted bitter. A moment later he complained of stomach pains and nausea, then went to the bathroom and vomited. In this last case one of the conflicting impulses utilized psychosomatic channels. The impulse to eat was not resisted, but the feeling that this act was "very wrong and very bad" came to expression through reversed gastric peristalsis.

The effects of hypnotic suggestion on the digestive system have been considerably investigated. It has been shown, for example, that gastric peristalsis is increased by suggestions that a meal is being relished, decreased by suggestions that the food is poor or disgusting. In similar fashion, the acid secretion of the stomach can be increased by suggestions of relish or decreased from normal by suggestions of disgust. Even when no meal is eaten, the digestive apparatus responds appropriately to suggestion. If a hungry person is made to hallucinate the eating of food, the contractions of his stomach ("hunger pangs") may cease entirely. Furthermore, the secretions of the digestive tract apparently vary according to the composition of the hallucinated meal, just as they do according to the composition of a real meal. The suggested drinking of clear

soup produces a thin yellow secretion appropriate for digesting soup, while suggested eating of butter produces a dark viscous secretion.[4]

Experiments of this kind are often classed with the wonders of hypnotism. It is more accurate to class them with the wonders of psychosomatic processes. The contribution of hypnotism is not uniquely important—it consists merely in heightening the imaginative processes so that the somatic reactions are evoked more strongly than would otherwise be possible. Similar effects can be obtained by imagination without hypnosis. Digestive secretions can be provoked merely by talking about thick juicy steaks or other relished foods. For our present purposes the important thing is the close relation between psychic and somatic processes. States of conflict, feelings of relish or disgust, thoughts and fantasies about eating are all closely linked to bodily processes governed by the autonomic nervous system. This is the basic fact that lies behind psychosomatic disorders.

Hypnotic experiments have not been confined to digestive processes. One of the most interesting lines of investigation is the production of blisters by hypnotic suggestion. The technique consists of touching the hypnotized person on the forearm with a pencil which is declared to be burning hot; as a control, a like spot on the other arm can be touched with the same pencil now stated to be cool. It has frequently been claimed that under these circumstances a true blister will presently be formed on the spot supposedly burned. A few years ago Pattie reviewed all the reported experiments on blisters, numbering more than a dozen.[5] Some of the experiments were not sufficiently controlled and some gave negative results, but there remained a few in which true blisters were raised at or near the stimulated spot. The production of blisters in response to real burns is mediated in part by local circulatory changes. Apparently the hypnotized person can imagine the burn so vividly as to bring about the local changes appropriate for healing a burned area.

The Autonomic Nervous System.—The autonomic nervous system, sometimes called the "involuntary" or the "vegetative" nervous system, is a system of motor nerves governing what Cannon has called "the domestic affairs of the interior of the organism." It

[4] The experiments up to 1933 are reviewed by Hull, C. H., *Hypnosis and Suggestibility: an Experimental Approach*, New York, D. Appleton-Century Co., 1933, pp. 274–284. See also Scantlebury, R. E. & Patterson, T. L., "Hunger Motility in a Hypnotized Subject," *Quarterly Journal of Experimental Physiology*, 1940, Vol. 30, p. 347; and Lewis, J. H. & Sarbin, T. R., "The Influence of Hypnotic Stimulation on Gastric Hunger Contractions," *Psychosomatic Medicine*, 1943, Vol. 5, pp. 125–131.

[5] Pattie, F. A., Jr., "The Production of Blisters by Hypnotic Suggestion: A Review," *Journal of Abnormal and Social Psychology*, 1941, Vol. 36, pp. 62–72.

is intimately connected with the cerebrospinal system, having centers in the medulla, midbrain, hypothalamus, and cerebral cortex, yet it is to some extent set apart both anatomically and functionally. In general, the axons of autonomic neurons do not proceed from the central nervous system directly to muscles or glands; instead, they pass to outlying ganglia which serve as relay stations on the way to the final goal. In contrast to the cerebrospinal system which innervates the striated muscles responsible for movement and posture, the autonomic system acts upon the glands and smooth muscles of the viscera and blood vessels.

The autonomic is divided into two subsystems which have somewhat antagonistic effects. The *sympathetic* system is mainly concerned with mobilizing the resources of the body for use in work or in emergencies. Anatomically it is well designed to act more or less as a whole: the sympathetic ganglia lie in an interconnected chain so that excitation at any one level is likely to spread upward and downward to reach all the organs affected by the system. The *parasympathetic* division is mainly concerned with conserving and storing the bodily resources. Its action is less unified, the ganglia not being interconnected, but some of its nerves branch in such a way as to reach several organs. The vagus nerve, for example, reaches the heart, the bronchi, the stomach, and the intestine. Thus both divisions of the autonomic act with less precision and more diffuseness than the cerebrospinal system.

It is easy to exaggerate the antagonism between the two divisions. As we saw in an earlier chapter, Cannon originally conceived that all strong emotions such as anger and fear activated the sympathetic, suppressed the effects of the parasympathetic, and thus put the organism on an emergency footing. The studies of Gellhorn and others have shown that this conception of an emergency reaction is somewhat too simple. If the organism is to react effectively in a crisis, a rise in parasympathetic activity must closely follow the initial burst of sympathetic discharge. When this does not happen, for instance when acute danger persists so that the parasympathetic is unable to catch up and balance the sympathetic activity, then panic and collapse ensue rather than vigorous emergency behavior. But while reciprocal action is necessary to maintain an effective bodily state, it remains true that the two divisions have an opposite effect on various bodily processes. We shall note a few examples that are important in psychosomatic medicine.

In general the parasympathetic activates the *digestive processes* whereas the sympathetic inhibits them. The parasympathetic stimu-

lates the musculature of the stomach and small intestine, thus starting peristalsis, and at the same time activates the various secretions that participate in the process of digestion. It is also responsible for relaxing the sphincter muscles that permit urination and defecation. The opposite effects are produced by the sympathetic: peristalsis and secretion are inhibited and activity of bladder and rectum is stopped, the sphincters being contracted. It is easy to understand why a person with stage fright does not feel inclined to eat, and why if he forces himself to do so his food seems to rest like a lump in his stomach. Gastric motility, secretion of gastric juices, and peristaltic movements of the intestine are all inhibited by the sympathetic discharges that go with fear.

The *circulatory system* is similarly affected in opposite directions. Parasympathetic activity causes inhibition of the heart muscle and constriction of the coronary vessels. It also produces dilation of blood vessels throughout the body. The result of this action is to keep the blood pressure low and to allow the heart as much rest as possible. The sympathetic accelerates the heart, dilates the coronary vessels, and produces constriction of the blood vessels, thus elevating the blood pressure. This pattern of reaction is useful when violent exertion is necessary. It has the effect of withdrawing blood from the viscera and sending a more profuse supply to the brain and muscles. Flushing of the face in anger results from the increased circulation of blood to the head. People with heart disease are sometimes advised not only to avoid strenuous exercise but also to keep from getting angry. The ailing heart is endangered by sudden acceleration such as results from the sympathetic discharges that go with rage.

The effect of the autonomic system on respiration is to some extent subject to individual differences. One quite regular effect of sympathetic activity is to dilate the bronchioles in the lungs, thus increasing the intake of oxygen and output of carbon dioxide. The parasympathetic has the opposite effect of constricting the bronchioles. Otherwise breathing during strong emotion varies somewhat from one person to another. Gasping, catching the breath, panting, and labored breathing may occur in response to threatening or challenging situations.

Normally the two divisions of the autonomic nervous system maintain an effective equilibrium. Strong emotion is accompanied by overactivity in some part of the system, but strong emotion is usually transient. Anger subsides, and heart rate and blood pressure go back to normal levels. Acute grief passes, and appetite returns

to its customary state. The healthy digestive tract, heart, circulation, and respiratory system are equal to quite a large amount of overactivity if occasion demands. Naturally there are limits, however, beyond which prolonged overactivity tends to create serious dysfunction and even permanent injury. Psychosomatic disorders occur when some autonomic pattern remains persistently overactive. The bodily accompaniments of an emotional reaction do not subside, although the person himself is unaware of emotional disturbance. Perhaps the blood pressure remains consistently high, causing unpleasant symptoms and danger of possible heart injury. Perhaps organic injury actually develops as is the case with gastric ulcers. In order to explain psychosomatic disorders it is necessary to show why certain patterns of autonomic discharge remain persistently active in the absence of what appear to be suitable circumstances.

Hypothesis of Specific Psychosomatic Relationships.—The simplest hypothesis in regard to psychosomatic disorders would be that autonomic overactivity results simply from an overflow of tension. The patient is in a state of chronic tension because of unresolved conflicts and unsatisfied urges. The tension overflows diffusely into autonomic channels, producing chronic hyperactivity. This hypothesis makes no serious attempt to explain the particular form of the illness. It resorts to the easy notion that each person breaks down at his weakest point: the person with a sensitive digestive tract has gastritis or ulcers, the one with a sensitive skin has eczema or some other inflammation, the one with inherent breathing difficulty has asthma. Innate constitution is liberally invoked to fill out the gaps in the theory.

Constitution may have something to do with it, as we shall see, but students of psychosomatic disorders are no longer satisfied with this incomplete type of explanation. Different emotional states have different patterns of autonomic discharge. This makes it possible to offer the following hypothesis: Each variety of psychosomatic disorder results from a specific emotional constellation. As Alexander expresses it: "Just as the nature of the chronic unrelieved emotional state varies, so also will the corresponding vegetative disturbance vary." [6] In order to justify the hypothesis of specificity it is necessary to demonstrate a close correlation between type of somatic disorder and type of emotional maladjustment. The argument becomes much stronger if it is possible to go further and show

[6] Alexander, F., "Fundamental Concepts of Psychosomatic Research: Psychogenesis, Conversion, Specificity," *Psychosomatic Medicine*, 1943, Vol. 5, pp. 205–210.

a rationale for the correlation, a credible chain of processes leading from the unrelieved emotional state to the end result of organic dysfunction. Considerable evidence has now been accumulated which favors the hypothesis of specific relationships. In the rest of this chapter we shall examine some of the best-studied examples.

As we have done several times before, we shall concentrate on a small number of psychosomatic disorders rather than try to survey all varieties. It is more important to understand one disorder thoroughly, to see how it probably works and what problems arise in its study, than to take a rapid and confusing tour of what is now a very active field of research. We shall give disproportionate attention, therefore, to one class of psychosomatic disturbances, those located in the gastro-intestinal system, and within this group we shall somewhat concentrate on peptic ulcer. Most of the problems of psychosomatic medicine can be demonstrated in connection with this one disorder. Not all, however; we shall therefore save space for chronic high blood pressure and bronchial asthma.

Gastro-Intestinal Disturbances

Digestive and eliminative processes are subject to many kinds of disorder. There are disorders of appetite and eating: at one extreme stands *bulimia,* marked by inordinate appetite and excessive eating; at the other extreme *anorexia nervosa,* a loss of appetite so severe that it sometimes threatens life. Next to be mentioned is *gastritis,* sometimes called "nervous stomach," marked by gastric distress and pain, occasionally with vomiting. In gastritis there is irritation of the walls of the stomach but no sharply localized injury. *Peptic ulcer,* on the other hand, is a focal lesion of the mucous lining of stomach or duodenum, an inflamed crater that may even cause an internal loss of blood. At the eliminative end of the tract the two possibilities are *chronic constipation* and *chronic diarrhea.* The latter is usually called *colitis* (inflammation of the colon); it may be associated with chronic spasm of the smooth muscle of the colon or it may involve ulceration of the inner walls. None of these disorders is necessarily psychogenic. Infections, metabolic disorders, glandular malfunctioning, structural defects, long-continued faulty diet, and many other conditions can throw the gastro-intestinal system off balance. There is reason to believe, however, that each of these disorders is sometimes truly psychosomatic. They are sometimes cured by psychotherapy.

Disturbances of Appetite.—Excessive appetite and overeating often occur under circumstances that clearly reveal their psychological character. In infancy there is a close association between being fed and being loved. This linkage apparently makes it possible in some cases for eating to serve as a substitute for receiving love. The following case of *bulimia* is fairly typical.[7] A young woman, much deprived and exploited in childhood by her father and stepmother, developed irresistible cravings for food which caused her to gain weight excessively. These cravings regularly struck her when she felt lonely and frustrated. They struck particularly hard when she was disappointed in some relationship from which she had expected to obtain love. Sometimes after such a frustration she would enter a restaurant in a daze and realize only later that she had eaten a prodigious meal.

There is some evidence that obesity and overeating in children is associated with maternal overprotection involving discouragement of activities outside the home and a strong emphasis on the importance and pleasure of eating.[8] Constitutional factors, however, are probably important in such cases. Sheldon's description of the softly rounded endomorphic physique, with its healthy and well-developed viscera, suggests that certain people would find it easier than others to substitute eating for love. Only when eating is naturally very satisfying can it take on substitute functions.

In *anorexia nervosa* the psychological situation is more complicated. Appetite and eating are suppressed, the thought of food being positively unpleasant to the patient. In some cases the symptom is so stubborn that much weight is lost, and in a few cases it has been impossible to prevent death by starvation. It is hard to believe that so damaging a disorder could occur unless eating were associated with severe anxiety. The probable mechanism of this association has been worked out in a good many cases, but the results show little uniformity. The one uniform finding is that eating has come to mean something to the patient that awakens severe anxiety and guilt. The particular personal meaning varies from case to case. In a paper on eating disturbances in childhood, Rose makes the point that eating may be associated with growing up and with advancing to more difficult levels of adjustment.[9] Eating is the focus of certain

[7] Saul, L. J., "Physiological Effects of Emotional Tension," in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders*, New York, The Ronald Press Co., 1944, Vol. 1, Ch. 8.

[8] Bruch, H. & Touraine, G., "The Family Frame of Obese Children," *Psychosomatic Medicine*, 1940, Vol. 2, pp. 141–206.

[9] Rose, J. A., "Eating Inhibitions in Children in Relation to Anorexia Nervosa," *Psychosomatic Medicine*, 1943, Vol. 5, pp. 117–124.

early and crucial developmental steps—the advance from nursing to drinking from a cup, the advance from being fed to feeding oneself, etc. Refusal to eat is an easy way for the child to resist these steps when he is given no love or help in making the required adjustments. Many mothers concentrate on getting their children to eat, show frustration when eating is resisted, and thus provide their children with a perfect weapon for showing hostility and resisting unwelcome change. Not to eat can thus acquire the personal connotations, doubtless unconsciously, of not growing up or of not giving in.

More specific personal meanings have been disclosed in detailed studies of anorexia. The disorder is much more common in women than in men, and occurs with more than accidental frequency in connection with such steps in growth as puberty, sexual relationships, and marriage. Sometimes the motivation seems to turn on the desire to remain thin, flat-breasted, and sexually unattractive; there is anxiety connected with becoming sexually mature. In other cases the anxiety arises from an unconscious fear of oral impregnation, the association between food and impregnation being based on a childhood misconception as to the nature of the latter process.[10] In still other cases anorexia has the significance of an aggressive resistance to parental demands, together with a self-punishment for guilt-laden dependent or grasping tendencies. The diversity of personal meanings in one sense negates the hypothesis of specific psychosomatic relationships. One has to be satisfied with the following limited specificity. There is an effective association between eating and some anxiety-laden or guilt-laden step in development. So close is the association that inhibition against taking the required step carries with it an inhibition against eating.

Mechanisms of Peptic Ulcer Formation.—We next turn our attention to peptic ulcer, a disorder in which the psychosomatic mechanisms are much better understood. The formation of ulcers usually comes after a prolonged period of chronic gastric distress. The discomfort is felt about two hours after eating and can be alleviated by taking food. During the day the patient can keep fairly comfortable by frequent snacks, but at night his distress is likely to increase. Ulcer formation results from chronic overactivity and oversecretion by the stomach. Under normal circumstances the stomach becomes active when a meal is to be digested. With the accomplishment of this task and the passing of the meal into the

[10] Waller, J., Kaufman, M. & Deutsch, F., "Anorexia Nervosa: a Psychosomatic Entity," *Psychosomatic Medicine*, 1940, Vol. 2, pp. 1–16.

intestines, the stomach comes to rest and its acid secretion stops. In ulcer patients the stomach continues to be active just as if more food were on the way. The acid secretions are poured forth, but as there is no food to absorb them they only irritate and inflame the mucous lining of the stomach. They similarly irritate the upper part of the small intestine (duodenum). If this goes on long enough, ulcer craters are formed, and the continuing hyperacidity makes it difficult for them to heal.

Various experiments have been performed with animals to show that prolonged acid secretion in the stomach eventually produces ulceration. These results are sufficiently conclusive, but hardly as dramatic as those obtained with a human patient by Wolf and Wolff.[11] The patient at the age of nine had drunk some scalding soup which seriously burned his esophagus so that it became closed with scar tissue. In order to feed him, a surgical opening (gastric fistula) was made directly into the stomach through the abdominal wall. At the age of fifty-six the man was in excellent health and rarely suffered digestive difficulties. The fistula was in regular use; it was sufficiently large to permit observation of the stomach walls, and, to make matters perfect for science, a collar of gastric mucosa had grown out to surround the fistula, thus exposing to direct view a small amount of tissue essentially similar to that which lines the stomach. We shall have more to say about this man in a moment. What is important here is the experimental demonstration that gastric juice produces ulceration. A small erosion occurring on the exposed gastric mucosa, where the supply of mucus was poor, was artificially kept moist with gastric juice for four days. The erosion increased in size, resembled in every way a chronic ulcer, and was painful when touched. When a dressing was placed so as to protect the ulcer from gastric juice, the area healed completely in three days leaving no trace of a scar.

What is the cause of the increased motility and acid secretion on the part of the stomach? Why do the digestive processes go on night and day instead of rising and falling in response to the taking of food? We saw that digestive peristalsis and secretion were stimulated by the parasympathetic division of the autonomic nervous system, acting through the vagus nerve. Various experiments have shown that chronic vagal stimulation, resulting either from injuries in the midbrain or from appropriate drugs, produces gastric ulcera-

[11] Wolf, S. & Wolff, H. G., "Evidence on the Genesis of Peptic Ulcer in Man," *Journal of the American Medical Association*, 1942, Vol. 120, No. 9. Reprinted in Tomkins, S. S. (ed.), *Contemporary Psychopathology*, Cambridge, Harvard University Press, 1943, Ch 10

tion. This carries our inquiry back into the brain. Why does the parasympathetic keep the digestive processes going twenty-four hours a day? As there is no reason to assume local brain injury in all peptic ulcer patients, especially those that are cured, we reach the point where a psychosomatic hypothesis is in order.

Dependence in Cases of Peptic Ulcer.—Peptic ulcer occurs much more frequently in men than in women. It often appears in men with strongly ambitious, hard-driving tendencies. It has sometimes been called a disease of business executives and others in important and responsible positions, and it once had the nickname of "Wall Street stomach." When such patients were carefully studied, however, a very different emotional constellation was found to exist beneath the surface. Desires for rest and comfort, cravings for support and loving care proved to be active in the lives of these otherwise assertive, competitive men. There were very strong dependent tendencies against which the outward assertiveness and responsibility constituted a reaction formation. It was clear that the patients felt ashamed of their dependence. They wanted to fit the American masculine pattern. Sometimes they even assumed more responsibilities than were required of them. But these strenuous efforts did not prove sufficient to drive their dependence out of existence. Longings for rest, care, and affection came out in their fantasies and dreams. The same longings came out in chronic parasympathetic stimulation of the digestive processes.

The last statement is the crux of the psychosomatic problem. The conflict between active assertion and dependent longings is readily understandable, especially in a competitive business society which places a high value on the former trend. The crucial point that requires explanation is the relationship between dependent longings and the process of digestion. On this point Alexander offers the following hypothesis.[13] When dependent longings are severely suppressed either by reaction formation or by the pressure of external circumstances they receive no gratification and hence remain in a more or less chronic state of tension. This tension activates the digestive processes because of a long-standing associative link between the receiving of loving care and the receiving of food. In infancy these benefits are received all at once: the baby is taken up, cuddled, stimulated, fed, loved, then put down again to go to sleep.

[13] Alexander, F., "The Influence of Psychological Factors Upon Gastro-Intestinal Disturbances." *Psychoanalytic Quarterly*, 1934, Vol. 3, pp. 501–539. Reprinted in Tomkins, S. S. (ed.), *Contemporary Psychopathology*, Cambridge, Harvard University Press, 1943, Ch. 8.

Being fed is the predominant element in this complex of affectionate care; and a conditioned response is formed which links anticipatory digestive activity with all the rest of the complex. Very likely this linkage exists in everyone. Most people, however, either sufficiently outgrow their dependent longings so that no great tension accumulates on that score, or at least do not react violently against them, allowing them sufficient indulgence to reduce the tension. It requires a quite special situation to evoke chronic stimulation of digestive processes. The situation must be such that dependent longings are strong but are denied any overt satisfaction. As an added support for his thesis Alexander points out that ulcer patients sometimes recover without medication when they go to bed or go to the hospital. Recovery could not occur unless parasympathetic stimulation ceased, relieving the digestive tract of its acid excess. The fact of his illness removes the patient from strenuous activity. He can now legitimately relax and accept the attentive ministrations of nurses or members of the family. At last his dependent longings are satisfied and do not have to expend themselves in chronic stimulation of the digestive process.

The medical measures used to cure peptic ulcers include rest, a bland diet to minimize irritation of the stomach and duodenum, and frequent feeding in order to utilize the acid excess. If the ulcers do not heal under this regimen it becomes necessary to remove them surgically. Occasionally the vagus nerves are severed at the stomach in order to prevent further hypermotility and hypersecretion, but this is an operation of last resort. With the exception of the last operation these measures do not prevent a recurrence of the disorder. When a strenuous reaction formation plays an important part in the genesis of ulcers, the only permanent cure is psychotherapy. The aim of this therapy is to relax the patient's defenses against his dependent longings. When he is able to admit them and ease his overdriving reaction formation, he alters the crucial situation that kept his digestive tract ceaselessly active. He learns to permit himself a certain amount of passive gratification without shame, and he avoids the extremes of activity that only serve to build up dependent longings. In short, he learns to conform to an emotional regimen that suits his personal pattern of motives and that likewise suits his autonomic nervous system. In many cases this opens the way to a further outgrowing of dependent longings.

Alexander and his co-workers at the Chicago Institute for Psychoanalysis have successfully treated a number of peptic ulcer patients whose response to other medication was only temporary.

There is little doubt that the emotional constellation just described is the crucial factor in some cases. Certain other studies confirm the importance of passivity and dependence while showing that repression and reaction formation are not essential aspects of the picture. Rubin and Bowman, for example, studied a series of male peptic ulcer patients and found that only a quarter of them exhibited an energetic reaction formation.[13] The other three-quarters appeared to have accepted their passivity and dependence, which showed in certain aspects of overt behavior such as not changing jobs, giving in to their wives, and assuming a passive attitude toward friends. This finding does not controvert Alexander's thesis which allows that external pressure as well as internal guilt or inferiority feelings might suppress the dependent longings. Presumably the majority in Rubin and Bowman's study were strongly dependent individuals upon whom the ordinary responsibilities of life acted as a constant frustration.

Aggression in Cases of Peptic Ulcer.—The facts thus far described support the hypothesis of specificity. A distinctive emotional constellation, consisting of dependent longings frustrated either by external conditions or by a strenuous reaction formation, has been correlated with a distinctive somatic disorder, peptic ulcer. Moreover, a series of steps has been proposed whereby dependent longings through early association with feeding become capable of setting off the gastric stimulation that ultimately leads to ulceration. These findings, however, have not remained unchallenged. Other investigators believe that resentment and hostility play a central part in the genesis of peptic ulcer. Mittelmann and Wolff, for example, induced emotional states in ulcer patients and in normal subjects by discussing with them various emotionally charged situations in their lives.[14] When these discussions gave rise to anxiety, hostility, and resentment, there was increased motility and acidity in the stomachs of all ulcer patients and of some normal subjects. Acidity and motility could be reduced by inducing feelings of contentment and well-being. The man with the gastric fistula reported by Wolf and Wolff behaved in a similar fashion. Gastric changes suitable for ulcer formation—increased motility and acidity—came at moments in his life when he was dominated by feelings of anger and resentment. They were particularly acute when he was discharged from

[13] Rubin, S. & Bowman, K. M., "Electroencephalographic and Personality Correlates in Peptic Ulcer," *Psychosomatic Medicine*, 1942, Vol. 4, pp. 309–318; also reprinted as Ch. 9 in Tomkins, *Contemporary Psychopathology*.

[14] Mittlemann, B., Wolff, H. G. & Scharf, M., "Emotions and Gastroduodenal Functions," *Psychosomatic Medicine*, 1942, Vol. 4, pp. 5–61.

a small outside job on grounds of inefficiency, and when a man who lent him money tried to meddle in his affairs. When he experienced fear or sadness, on the contrary, the gastric mucosa became pale and motility and acidity dropped.

Facts of this kind have recently been discussed in a paper by Szasz and co-workers.[18] Their discussion brings out the full difficulty of reaching valid conclusions in regard to psychosomatic mechanisms. Where Alexander postulates an association in infancy between feeding and the reception of love, Szasz postulates an association between feeding and anger. The infant responds to frustration by angry crying. When his frustration takes the form of hunger, he cries with mounting fury until he is fed. The emotion of anger is thus followed directly by feeding, and this temporal connection is sufficient to establish a conditioned response. Presumably the connection is gradually weakened in the course of life, the sequence being one that ceases to occur as the child grows older. Nevertheless the traces are not lost and the connection can be reanimated, a process termed by Szasz "regressive innervation," under special circumstances such as prolonged suppressed anger.

The disagreement between two groups of workers as to the specific emotional constellation associated with peptic ulcer serves to underline the inherent difficulties in psychosomatic research. This particular controversy does not imply that emotional states are of no importance. The facts clearly show that in certain patients dependent longings evoke vagal stimulation and digestive overactivity, while in certain other patients these changes are evoked by hostility and resentment. A plausible process of infantile conditioning can be hypothesized for each group of cases. How are these hypotheses about infantile learning to be proved? There is simply no way to go about it. Even if it were possible to observe gastric motility and acid secretion in infants and to record the conditions that preceded their increase, it would be impossible to tell just what was becoming a conditioned stimulus. The emotions of the infant are too diffuse and too undifferentiated to be broken down into descriptive pieces. Thus there is little chance of verifying those parts of a psychosomatic hypothesis that depend on infantile learning. It would furthermore be arbitrary to assume that the conditioning had to take place in infancy. One might suggest the hypothesis that conditioning took place at the family dining table during later periods of child-

[18] Szasz, T. S., Levin, E., Kirsner, J. B. & Palmer, W. L., "The Role of Hostility in the Pathogenesis of Peptic Ulcer: Theoretical Considerations with the Report of a Case." *Psychosomatic Medicine*, 1947, Vol. 9, pp. 331–336.

hood. If mealtimes provided an opportunity for the children to receive affectionate attention from otherwise busy parents, the infantile connection between being loved and being fed would be progressively strengthened. If meals were the occasion of family quarrels or the smouldering resentments of sibling rivalry, an association between anger and digestion might well be formed.

Further research may disclose that the hypothesis of a specific emotional constellation in cases of peptic ulcer cannot be sustained. Where it is necessary to posit a *learned connection* between a somatic process and emotional states there is room for a wide variety of different learnings. The situation is different when the connection is more or less innate. The association between rage and high blood pressure appears to be universal for man and the higher animals. It is therefore probable on the face of it that psychogenic high blood pressure will be associated with a specific emotional constellation involving rage. But the moment learning comes into play, especially infantile learning and unconscious learning, the hope of demonstrating specificity begins to dwindle. One is then moving over into the sphere of *personal meanings,* a realm always marked by great diversity.

Somatic Compliance.—The foregoing discussion seems to conjure up baffling difficulties in psychosomatic research, but we have not yet exhausted the problem. What does the body contribute, and what part is played by constitutional predisposition in cases of peptic ulcer? We introduced the concept of somatic compliance when studying the formation of hysterical symptoms. Obviously it cannot be neglected in the psychosomatic disorders.

It has long been noticed that ulcer patients tend to the linear, lanky type of physique. In the terms introduced by Sheldon, they incline away from the soft, round, endomorphic component and toward the slender, fragile, ectomorphic component, generally with a certain secondary strength in the sturdy, muscular, mesomorphic component. On the basis of anthropometric measurements, Draper describes male ulcer patients as follows.[16] They are generally of slender build, a little above average in height but below average in weight. Head and face tend to be narrow, features small, the chest particularly narrow and of small circumference. The male physique tends to be of somewhat feminine character, though not as markedly as is the case in certain other disease groups. Draper points out

[16] Draper, G., Dupertuis, C. W. & Caughey, J. L., *Human Constitution in Clinical Medicine,* New York, Paul B. Hoeber, 1944, p. 117.

that not all ulcer patients conform to this physical description. Yet their tendency in this direction is so marked that one cannot consider it a chance phenomenon. A certain type of physical constitution is more liable than others to develop peptic ulcer. Not all the cases studied by Draper are necessarily psychogenic, but even the most enthusiastic supporters of psychogenesis remark on the frequency of the linear physique among their ulcer patients.

Draper's detailed study of ulcer patients begins with the observation that they incline to autonomic irritability, as shown in such signs as ready sweating of the palms and frequent changes in the pulse rate.[17] He reports also that they run to better than average intelligence, often have a keen sense of humor, and show an emotional responsiveness that is "swift and intense." "They are often conscientious to the extreme, high principled, and forever striving to attain some goal notwithstanding difficulties which most men would regard as insurmountable." One sees emerging from this description the picture of a sensitive, responsive type of individual who lacks calmness and who lacks solid strength. Draper believes these qualities to be innate. The collision of such a person with his environment produces a distinctive pattern of traits. Outstanding is an inner sense of insecurity based on actual or supposed physical inferiority: the slender frame, light musculature, and possibly the somewhat feminine appearance of the body. In a series of eighty cases of peptic ulcer, 84 per cent showed this feeling of inadequacy. The second outstanding trait is persistent dependence on the mother or on some substitute mother figure, with fear of losing this person's love and approval. This trait was found in 97.4 per cent of the cases studied. Jealousy and aggression appeared in 64.9 per cent of the patients, and compensatory striving in 56.2 per cent.[18] The patients are ill-equipped for competitive struggle; their natural mode of adjustment is to seek the security of a "maternal protectorate," and they achieve assertiveness, if at all, only at the extra cost that goes with compensatory strivings.

Draper works out with great care the history of the patient's attacks of gastric pain and ulceration. Many times an acute attack is precipitated by conflict with a mother figure in which the patient feels rejected. Quite frequently the wife's pregnancy and the withdrawal of her interest from the patient to a newborn child provokes gastric difficulties. Often the patient has an extreme sense of guilt over sexual relations, but his guilt revolves chiefly around pleasing

[17] *Ibid.*, pp. 206–238.
[18] *Ibid.*, p. 230.

or not pleasing his partner. On the other hand an event that creates a sense of failure can be the precipitating cause. In addition, it happens not infrequently that anger and aggression are the outstanding emotions just prior to an attack. These findings argue against a specific emotional constellation as the cause of the gastric conditions that lead to ulceration. The cases vary; in some, dependent longings and their frustration appear to be uppermost, while in others the linkage would seem to be with hostility and resentment. In nearly all cases, however, a certain passivity and dependence forms some part of the total constellation.

Any attempt to understand peptic ulcer must take account of Draper's constitutional studies. Constitution clearly has something to do with the tendency to break down in this particular way. Constitution still falls short, however, of explaining the localization of the symptom. One can say that people of a certain make-up have a special susceptibility to gastric irritation or to overstimulation of the digestive processes, but this is if anything even more speculative than what has been said concerning the conditioning of feeding responses in infancy. Psychogenic peptic ulcer, the best understood of the psychosomatic disorders, is still very far from being understood. Somehow the parasympathetic innervation of the stomach is selected as the channel along which emotional tension will be discharged. Somehow the patient lacks confidence, at least latently, in his own assertiveness and has difficulty in separating himself from maternal protection. These two facts loom in all the material, but the detailed mechanisms, motives, defenses, and frustrations still remain in the state of controversy that is likely to exist when knowledge is incomplete.

Other Varieties of Gastro-Intestinal Disorder.—The study of peptic ulcer has given us a good idea of the difficulties that beset psychosomatic research. We cannot examine other disorders in as much detail. There is no reason to suppose that they are simpler and clearer than peptic ulcer, but we shall have to make them sound so in the interests of condensing our description.

Alexander and his associates at Chicago have advanced several hypotheses in regard to the disorders of elimination.[19] Chronic constipation and chronic diarrhea (colitis) have to be understood, these workers claim, with reference to the child's early experiences with elimination. Moving his bowels at the required time and place is one of his first experiences of giving something when it is expected.

[19] Alexander, F., *op. cit.*

Moving them at the wrong time and place, on the other hand, constitutes one of his early aggressive gestures. The function of elimination is therefore mixed up with problems of giving or retaining and with problems of conforming or rebelling. Just as the desire for affection and support retains in later life the power to activate the digestive process, so the desire to express angry contempt, for instance, keeps its power to activate untimely and spasmodic movement of the bowels. Similarly the wish to be autonomous and free from the demands of others retains the power to affect the colon so that feces are not passed. Alexander's views are an extension of his theories in regard to peptic ulcer. When a tendency is suppressed by circumstance or repressed because of anxiety, it may activate some autonomic pathway with which it was connected earlier in life.

As was the case with peptic ulcer, however, many workers are unwilling to assign so much weight to early childhood conditioning of autonomic responses. A less speculative approach is represented in the work of White, Cobb, and Jones, who studied sixty patients suffering from mucous colitis.[20] This particular form of eliminative disturbance usually begins with chronic constipation which later passes over into diarrhea, generally of a painful character and accompanied by excessive secretion of mucous in the colon. The condition seems to be provoked by chronic overaction of the parasympathetic pathways which govern the colon. It has not proved possible to produce colitis by direct stimulation of parasympathetic fibers, but there is strong indirect evidence for their overactivity. The authors showed that mucous colitis patients had little in common in the way of physique but were alike in exhibiting marked emotional tension. "The three emotions, anxiety, guilt, and resentment are those most commonly associated with tension in patients with mucous colitis." [21] The patients were generally overconscientious, dependent on the opinion of others, easily thrown into a state of guilt. Acts of injustice to themselves or others filled them with resentment which brought guilt in its train. Of particular importance was the tendency toward rigid, obsessive thinking which led to long periods of brooding preoccupation. This constant preoccupation was presumed to be responsible for the prolonged tension and hence for the action of the parasympathetic system on the colon.

The whole question of psychogenic eliminative disorders is still in a stage of preliminary study. The question of somatic compliance

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[20] White, B. V., Cobb, S. & Jones, C. M., "Mucous Colitis: a Psychological Medical Study of Sixty Cases," *Psychosomatic Medicine Monographs*, 1939, No. 1.
[21] *Ibid.*, p. 95.

certainly should be raised, but as yet there has been little work that takes this into account. Whether the hypothesis of specific emotional constellations will be sustained for disorders of elimination remains for future research to decide.

Essential Hypertension

It was stated earlier that not all the problems of psychosomatic research could be examined in connection with gastro-intestinal disturbances. In the remainder of this chapter we shall briefly describe two forms of psychosomatic disorder, both of which bring up important new points. Each sheds a little new light on the relation between emotion and bodily changes.

Nature of the Disorder.—The term "hypertension" does not refer to general tenseness but rather to the specific symptom of high blood pressure. Chronic elevation of blood pressure can result from various organic conditions, especially diseases of the blood vessels and of the kidneys. Hypertension is called "essential" only in those cases which prove to be free from organic disease. In such cases there is a presumption that the hypertension is being maintained by continuing action of those sympathetic nerves which have the function of accelerating the heart and constricting the blood vessels. Hypertension can create unpleasant symptoms such as headache and dizziness; if prolonged, it may lead to fatal vascular accidents or cardiac failure. These dangers can be averted by radical surgery in which the sympathetic fibers to the heart are cut. This operation allows the patient to lead a fairly normal life. But he has to observe certain restrictions in regard to effort; his heart rate can no longer be much increased to meet extra demands.

There is no apparent organic cause for essential hypertension. The sole pathological feature is the chronic overactivity of the sympathetic nerves that control blood pressure. This opens the way for a psychosomatic hypothesis. Constant vasoconstriction and acceleration of the heart might result from an enduring state of emotional tension. The emotion of anger immediately seems implicated, inasmuch as rage produces precisely this effect on the circulatory system. If something were wrong in the patient's management of aggression, this might tend to produce a state of chronic hypertension.

The Specific Emotional Constellation.—A psychoanalytic study of cases of essential hypertension is reported by Saul.[22] Based on

[22] Saul, L. J., "Hostility in Cases of Essential Hypertension." *Psychosomatic Medicine*, 1939, Vol. 1, pp. 153–161. Reprinted in Tomkins, S. S. (ed.), *Contemporary Psychopathology*, Cambridge, Harvard University Press, 1943, Ch. 14.

seven cases, it must be accepted as a strictly preliminary study, but it revealed certain psychological patterns that were common to all the patients. In all cases there was at least one parent who took a very dominating attitude. The patient responded with submissiveness and even with considerable dependence. This submissiveness became characteristic of all his important relationships, but was always a cause of annoyance to him. A state of constant hostile but unsuccessful rebellion was the result. Occasionally there would be outbursts of overt rebellion, but these were difficult to sustain because of the guilt feelings they engendered. As Saul puts it, "These patients were neither passive and dependent nor hostile and aggressive. They could give in to neither trend. During periods when they could and did, their blood pressures were markedly lower."

As an example we may take the case of Miss D., a woman in her early twenties, who was the breadwinner for her widowed mother and younger sisters. Of quiet and gentle manner, she sacrificed her own life and pleasure to care for the rest of the family and put her sisters through college. When she was at home her relation to her mother was highly dependent. The mother fed her and cared for her, yet her longing exceeded the supply and her dreams harped on the theme of being fed by her mother. At the same time she was aware of a bitter resentment against her submission to the mother and had to be careful to control her hostile feelings. Even harder to conceal were her violent feelings of anger against her boss. Several times a day at the office she was likely to boil with rage at his inconsiderate behavior and arbitrary ways. Her blood pressure was constantly elevated.

Another of Saul's cases, Mr. B., in early middle age was a model citizen and a compliant subordinate in business. Both parents had been domineering, creating in him a dependent and submissive attitude. Mr. B. was aware of a furious desire to defy his boss and rebel against his own submissiveness, but he never dared express even a hint of this lest he lose the esteem of his boss and business associates. Mr. B. found an occasional outlet in solitary drinking followed by a search for promiscuous sexual relationships. These attacks of rebellion always followed some situation in which he submitted when he wanted to show defiance. His escapades gave him no real satisfaction and did not serve to lower his chronic high blood pressure.

Saul reports that the problems of these patients are deeply ingrained. The personal pattern of tendencies seems rigidly organized so that psychotherapy proceeds with difficulty. Psychoanalytic treat-

ment has "at least some effect in reducing or arresting the progress of the hypertension," but definite conclusions cannot yet be drawn.

The problem of hypertension has been studied with a larger number of cases by Binger and co-workers.[28] The findings are not necessarily inconsistent with those obtained by Saul, although the authors offer their results in a considerably more tentative spirit. In general their hypertensive patients exhibited a group of characteristics that might be gathered under the headings of social maladjustment and timidity. Their social activities were restricted, their sexual interests were poorly developed, and they tended to be uncomfortable and submissive in the presence of others. They were somewhat reserved and detached, somewhat fearful, inclined to feel weak and defenseless. This pattern of characteristics could easily lend itself to conflict between resentful feelings and fear of expressing them.

Status of the Hostile Impulses.—Saul has advanced an interesting hypothesis concerning hostility in his hypertensive patients. In spite of their generally gentle outward manner, his patients suffered from intense and chronic anger. Inside, they boiled with rage. Their anger was strongly inhibited, but it was in no sense repressed. All the patients were well aware of their rebellious hostility, recognizing it clearly even though they controlled it. This was a unique feature of the psychological impasse in which the patients found themselves. They seemed unable to reach a solution either by expressing the hostility more openly or suppressing it more firmly in favor of dependent tendencies. Saul raises the question whether this curious midway position of the hostile impulses, neither expressed nor repressed, might be the specific feature that produces essential hypertension. In itself there is nothing unique about a conflict between dependent submission and hostility. The conflict can be solved in various ways, such as avoiding situations that evoke submissive behavior, expressing the rebellion more openly, or repressing the hostility more deeply so that it manifests itself, if at all, in neurotic symptoms rather than a psychosomatic disorder. It is only this particular constellation that is found associated with essential hypertension: a double blocking in which the patient submits but is never reconciled to submitting, feels furious but never discharges his fury.

These studies suggest a new aspect of psychosomatic relation-

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[28] Binger, C. A., Ackerman, N. W., Cohn, A. E., Schroeder, H. A. & Steele, J. M., "Personality in Arterial Hypertension," *Psychosomatic Medicine Monographs*, 1945, No. 8.

ships. Perhaps the type of hypothesis advanced to explain essential hypertension will be found to have a more general significance. It may be that in looking for a specific emotional constellation to go with each form of disorder one should not rest content with describing the impulses and defenses that are involved; one should rather pay particular attention to the status of the impulses. Are some of them trapped in a midway position between being expressed and being repressed? Is it specifically this status of an impulse that allows it to activate autonomic pathways and spill its trapped energies into the viscera? If this way of looking at the problem were extended to Alexander's theory in regard to peptic ulcer, one would have to examine carefully the status of the dependent longings. Do they activate the digestive processes when they are suppressed but not deeply repressed? There are at present no factual answers to these questions, and it is of course a difficult matter to define and determine the status of an impulse. We raise the questions here not because they can as yet be answered but because they clearly deserve consideration in the theory of psychosomatic disorders.

Bronchial Asthma

The suggestion that asthma may sometimes be a psychosomatic disorder is often met with immediate opposition. Asthma is one of the fields in which medicine has in recent years scored a triumph. Many chronic asthmatics have been given allergy tests, found allergic to certain common substances, and cured by regular inoculation with these substances. When there is chronic asthma without discoverable allergic sensitivity, it is at least as reasonable to suggest that an undiscovered allergen is provoking the attacks as it is to assume emotional factors. It is sometimes observed, moreover, that a tendency to asthma runs in families, suggesting an inherent structural weakness or innate sensitivity of the breathing apparatus. In the face of these facts one should not assume that asthma can be psychogenic unless the claim can be supported by very strong evidence.

There is certainly no ground for assuming psychogenesis in all or even in a majority of asthma cases. Evidence exists, however, that in certain cases the breathing difficulty has become curiously linked to emotional problems. The central piece of evidence is that asthmatic attacks occur in these cases in a specific type of emotional situation. Otherwise there is no regularity and no lawfulness in the occurrence of the attacks. When the attacks are thus regularly as-

sociated with a certain emotional situation and not regularly associated with anything else, one is justified in assuming that the disorder is psychosomatic.

Emotional Precipitation of Asthma Attacks.—The results of psychoanalysis with twenty-four patients who suffered from bronchial asthma are reported by French.[24] In all of these cases allergy played a part. Outwardly the patients presented a wide variety of personality patterns, and many of them were seeking treatment for problems other than asthma. The first method of approach was therefore to notice with great care the situations that preceded those asthmatic attacks which occurred during the period when treatment was going on. There proved to be considerable regularity in these incidents. Even dreams from which the patients awakened wheezing dealt with similar situations. "In each case," French states, "the patient is exposed to a temptation which would estrange him from a parental figure, usually the mother." Further study showed that the temptation was generally of a sexual character. In the male patients it was typical to find that the mother had been overprotective, binding the child in a dependent relation, yet sternly thwarting any behavior that had a remotely erotic character. In the female patients there were recollections of childlike sexual interest in the father which seemed to have been permitted by him but vigorously suppressed by the mother. Thus sex became closely linked with losing the mother's love. It was the cardinal sin; it meant maternal rejection.

Detailed study of the patients led French to conclude that the problem of separation from the mother played an important part in all their lives. "The common feature," he writes, "in the otherwise divergent personalities of our asthma patients is the fact that the personality of these patients is built up in large part around the task of mastering by one means or another the patient's fear of being separated from the mother." When this dread event threatens, there is a sharp mobilization of anxiety. It is also true of these patients that they show a strong urge to maintain the maternal bond by promptly confessing their evil thoughts and thus asking forgiveness. A male patient, for instance, was seduced by a girl, but before the situation reached its logical climax he rushed home to his mother to confess the episode. With most patients, however, situations of this kind lead to a severe block. Sexual temptation is felt to endanger

[24] French, T. M., "Psychogenic Factors in Asthma," *American Journal of Psychiatry*, 1939, Vol. 96, pp. 87–101. Reprinted in Tomkins, S. S. (ed.), *Contemporary Psychopathology*, Cambridge, Harvard University Press, 1943, Ch. 13.

the mother's love, yet just because it is sexual it cannot be confessed. To control his anxiety the patient wants to confess, cry, and obtain forgiveness, but this impulse is balanced by equal anxiety lest the mother become angry and reject the patient anyway.

French believes this to be the specific situation that precipitates an attack of asthma. The urge to confess and cry, itself driven by anxiety, is blocked by an equal anxiety lest the confession be rejected. The asthmatic wheezing can be interpreted as a blocked cry. Instances were observed in which an asthma attack turned into crying, at which point the asthmatic manifestations ceased. It seems likely that a blocked cry can set off an asthmatic reaction only with the help of previous allergic sensitivity. The reaction must be first prepared, so to speak, on an allergic basis if it is to be available as a substitute for inhibited crying. The exact mechanism still remains to be worked out. French reports, however, that "in a number of patients" the attacks were "greatly relieved" by analytic therapy. They gave place to a willingness to cry, and this was followed by a lessening of the fear connected with sexual temptation.

Emotional Constellation and Choice of Symptom.—The personality pattern in asthma patients has been investigated in a different way by Rubin and Moses.[25] These workers studied the life histories and behavior of fifty-four male cases of bronchial asthma. They also studied the electroencephalographs of the same patients. Previous work with the latter technique has shown considerable individual differences in the proportion of alpha waves (10 per second) to faster waves. A dominant alpha record, one in which the slow waves are extremely prominent, is associated with a passive and dependent personality structure. Rubin and Moses found three times as many dominant alpha records in their group of asthmatics as would be obtained from a normal control group. The personality data were entirely harmonious with this finding. The asthmatics displayed a "single fairly definite personality constellation" marked by passive dependence and a history of maternal overprotection and dominance. The patients "have not cared for, striven for, or gained any marked degree of independence in life and continue to seek care and protection from the environment."

These findings fit well with French's hypothesis, but one notices that much the same description would fit the majority of peptic ulcer patients. Draper's constitutional studies represent the ulcer patient

[25] Rubin, S. & Moses, L., "Electroencephalographic Studies in Asthma with Some Personality Correlates," *Psychosomatic Medicine*, 1944, Vol. 6, pp. 31–39.

to be very similar to this account of the asthma patient. Those ulcer patients, of course, who develop a vigorous reaction formation against dependence behave in a different fashion. But dominant alpha records are obtained in about three quarters of ulcer patients.[26] Many ulcer patients are passive dependent individuals like many asthma patients, yet they do not have the same psychosomatic disorder. This brings us again to the point raised in connection with chronic high blood pressure. In tracing the pathway from emotional state through autonomic activity to bodily dysfunction, it is impossible to be satisfied with a general and vague description of the psychological constellation. Passive dependence is much too common to explain any particular disorder. The tracing of pathways must be far more specific, and depends on obtaining precise psychological descriptions. It is thus tremendously important to study whenever possible the precise situations in which psychosomatic symptoms appear or become intensified. One of the virtues in Saul's study of essential hypertension and French's of bronchial asthma is that they specify the emotional constellation in great detail. A blocked situation in which the patient cannot submit with grace and cannot express his resentment appears to be the highly specific constellation that leads to hypertension. A blocked situation in which the patient feels impelled to confess yet does not dare to do so appears to be the specific precipitant of psychogenic asthma. Only through highly detailed psychological study can we put to a fair test the hypothesis of specific psychosomatic relationships.

Implications for General Medicine

While it is true that psychosomatic medicine is a new development and is taking only its first infant steps in research, many observers are highly impressed by the facts thus far disclosed. Psychosomatic research raises far-reaching problems and carries radical implications as regards the general practice of medicine. How many of the supposedly bodily ailments that bring patients to the office of the general practitioner are really based on emotional maladjustment? There is no telling, but many conservative observers are putting their estimates as high as fifty per cent. A new meaning is being given to the old ideal of a sound mind in a sound body. Two generations ago the implication of this phrase was that you could not have a sound mind unless you had a sound body. Today we begin to wonder whether it is possible to have a sound body unless you have a sound

[26] Rubin, S. & Bowman, K. M., *op. cit.*

mind—or, as we would be more likely to say, unless you have a sound emotional adjustment. For the general practitioner and family physician this is a startling change. Possibly half the time he is dealing with emotional maladjustments that have come to some kind of bodily focus.

It is foolish to exaggerate the psychogenic point of view. A doctor would be stupid to diagnose a case of high blood pressure as psychogenic without making thorough tests for kidney, vascular, and other possible organic disorders. Equally foolish would be a recommendation of psychotherapy for asthma without making skin tests or taking a history of seasonal and geographical variations in the attacks. When we speak of psychosomatic disorders we do not mean that the somatic part of the disturbance has ceased to be important. The phrase implies only that the psychological aspect may also be important.

The general practitioner is at present neither well trained nor well situated to practice psychotherapy. Patients do not currently expect their physician to advise in other than strictly bodily matters and might well resent it if he seemed to be meddling in their "private affairs." These expectations will change slowly, and the doctor must always respect them. Furthermore, the training of physicans does not generally include a sufficient background in psychology to warrant their meddling in the realm of emotional adjustment. More harm than good is done by the doctor who, having excelled in chemistry and learned to regard a patient as a complex piece of machinery, leans back in his chair and tells the piece of machinery how to lead its life. Psychotherapy is a difficult art that calls for practiced skill. Some psychiatrists believe, however, that it is both possible and necessary to train the general physician along this line. In any event it is important that he recognize the patient's emotional maladjustments and show the patient *that* bodily changes can be closely related to emotions. He must not, as so often happens now, encourage the psychosomatic patient to sink into a routine of invalidism and medication if there is a chance that his emotional adjustment can improve. The physician must be capable of psychosomatic diagnosis. He must know when and how to refer a patient for psychotherapy, just as he knows when to send him for any other kind of specialized treatment. He should be able to understand *not* only his patient's bodily economy but also his economy of happiness.

Psychosomatic medicine opens up the area where mind and body overlap, where it is no longer possible to distinguish between them. The physician of the future, whether he be general practitioner,

specialist, or research worker, must be a psychosomatic physician. He must be able to describe with equal precision the tissue changes in organs, the neural pathways, and the emotional constellations that may have sent traffic over the neural pathways. The physician will be forced more and more to take account of man's emotional nature. In this he is but a part of the great twentieth-century revulsion against purely mechanistic and materialistic thinking. Neither the disorders of the body nor the disorders of the world can be cured without reference to problems of emotional adjustment.

SUGGESTIONS FOR FURTHER READING

Most of the material on psychosomatic medicine is still in the form of journal articles. The field is reviewed in condensed form by L. J. Saul in Hunt's *Personality and the Behavior Disorders* (New York, The Ronald Press Co., 1944), Vol. 1, Ch. 8. Six excellent journal articles are reprinted in S. S. Tomkins' *Contemporary Psychopathology* (Cambridge, Harvard University Press, 1943), Chs. 8–11, 13–14. Most of these papers have been referred to in the text of this chapter. The whole field is surveyed in a book by Flanders Dunbar, *Emotions and Bodily Changes* (2nd ed., New York, Columbia University Press, 1938). This is a standard reference and guide to research reports.

CHAPTER 13

EFFECTS OF INJURIES AND ABNORMAL CONDITIONS IN THE BRAIN

In our clinical introduction we made the acquaintance of a patient with a severe brain disorder. The case of Martha Ottenby formed a sharp contrast with those patients whose disorders arose from personal problems. She was the victim of a disease, an impersonal affliction that struck her without the slightest relation to her emotional adjustments or her economy of happiness. In studying psychosomatic disorders we saw that it is possible for a bodily dysfunction to come as the result of chronic emotional maladjustment. We now turn our attention to disorders in which the situation is chronologically reversed. Disordered behavior, disordered emotions, disordered mental processes come as the result of bodily dysfunction that directly affects the nervous system. The trouble starts in neural tissue; the psychological changes are secondary. The cause lies in certain states of the body, and the cure, if any exists, must be effected by somatic rather than psychological therapy.

The disorders to be discussed in this chapter depend directly upon somatic dysfunction, but they nevertheless bring us to some new and fascinating aspects of mental activity. Maladjusted and neurotic people are disordered as regards their feelings and human relationships, but they do not differ from the normal in their manner of perception or mode of thought. Anxiety and defense may serve to distort in certain ways the neurotic's conception of the world and of his fellow men, but this is the result of a persistent selection of experience rather than an alteration in the mechanics of understanding. Thus far in our study we have concentrated chiefly on *psychodynamics*. We have been concerned with abnormalities in that part of the learning process whereby the individual attempts to adjust his needs and his security to the demands of socialized living. Abnormal psychology does not end with the study of abnormal psychodynamics. It includes the *mental and behavioral changes* that result from injuries or other abnormal conditions in the nervous system. These changes have to be described and measured, which is in itself

no small undertaking. Then they have to be related insofar as possible to changes, either general or local, in the central nervous system.

Varieties of Pathological Process

What mishaps can befall the central nervous system, especially the brain? Encased within bony walls, the brain, like the spinal cord, is protected against certain obvious hazards. But it is by no means immune to injury or to internal conditions that impair its proper functioning. By way of initial orientation we shall quickly survey the pathological processes that affect brain activity.

Survey of Pathological Processes.—The first possibility is an inadequate development of brain tissue, technically called *aplasia.* Occasionally a child is born with almost no development of the cerebral cortex, a truly rudimentary brain. In cases of less severe defect the brain may be completely formed but of smaller than average size and with less well-marked convolutions, suggesting a primitiveness of structure. One variety of severe mental defect, microcephaly, is characterized by a greatly diminished size of the upper skull; within this constricted space the brain is small and poorly developed. In Mongoloid deficiency the abnormality in the shape of the head is less marked, though still distinctive, and the brain shows few obvious structural defects, but mental performance is sluggish and rarely rises above the imbecile level. These severe shortcomings in development can be regarded as sporadic accidents caused by faulty growth of the embryo. They do not seem to run in families. In contrast, there is a strong familial tendency in the higher grades of feeble-mindedness lying in the I.Q. range from 50 to 80. In these cases the brain shows no structural abnormality, but something of the sort must be assumed in order to explain the inheritable character of the condition.

Next on the list of cerebral mishaps is *trauma,* some direct physical injury to brain tissue. The head and the underlying cerebral tissue may be traumatized at the time of birth if the labor is extremely prolonged and difficult, so that the head is exposed to severe pressure. Any severe blow on the head may produce swelling and injury of brain tissue. Most children, of course, fall on their heads from time to time without damage, but occasionally one of these accidents produces temporary and even permanent brain injury. If the skull is fractured, and especially if brain tissue is penetrated as is the case in bullet or shrapnel wounds, a marked change in mental

performance may result. Even when the wounds heal there may be atrophy and scar formation in the brain which impairs its normal functioning. Another form of direct injury is caused by *cerebral tumors*. As a tumor grows, it crowds and distorts the surrounding brain tissue. Up to a certain point, especially if the growth is slow, the brain tissue can adapt itself to the change without functional impairment, but eventually the crowding prevents normal metabolism in the nerve cells.

The nervous system may become the seat of *infection* by microorganisms. Certain not very common forms of illness such as encephalitis lethargica (epidemic "sleeping sickness") represent an inflammation of cerebral tissue resulting from infection. In the first chapter of this book we used another infectious disease, general paresis, as an example of the somatogenic disorders. Although resistant to most varieties of infection, brain tissue has certain susceptibilities that may lead to serious damage.

The functioning of the brain can be disturbed by unfavorable alterations in its internal environment. The maintenance of an internal condition that is optimal for cerebral functioning is part of the general process of homeostasis. *Metabolic disorders* may throw out the balance in one way or another so that optimal functioning is impaired. Certain endocrine disorders, for instance, especially those affecting the thyroid gland, bear a direct relation to mood, initiative, and intelligence. Furthermore, recent research has shown that vitamin deficiency plays a part in certain kinds of mental disorder. The internal environment can also be altered by the action of *toxins* or poisons. The toxic effects of excessive alcohol come under most frequent observation, but analogous changes result from opium and its derivatives, certain metals like lead, and certain gases like carbon monoxide. *Shortage of oxygen* has a marked effect on mental activity and may permanently injure the nervous system. *High fever* produces a gross though temporary interference with normal brain activity that is reflected in the mental state of delirium.

Finally, the central nervous system is subject to *degenerative changes*. Usually these are associated with old age, but sometimes, as in Pick's disease (from which Martha Ottenby suffered) and the rather similar Alzheimer's disease, changes of an apparently degenerative character begin in middle life. Sometimes a thickening and hardening of the arterial walls is at fault (cerebral arteriosclerosis), so that the supply of blood to the brain cells becomes progressively less adequate. A nutritional deficiency in brain tissue can probably be assumed even when the arteries are not radically

hardened. Much remains to be learned about the cerebral changes that go with old age, but there is little doubt that these changes play the predominant part in the mental disorders of later life.

Classification of Pathological Processes.—The foregoing survey shows that the brain is exposed to numerous and diverse ailments. The concept of somatogenesis begins to need further refinement. Cobb has proposed that somatogenesis be broken down into three parts according to the character of the bodily disorder.[1] These subdivisions are called *genogenic*, *histogenic*, and *chemogenic*. The psychogenic factor remains as a fourth category.

(1) *Genogenic disorders* have their source chiefly in heredity. The largest group of disorders which is at all heavily weighted with genogenic factors is the manic and depressive psychoses. These did not enter our survey because the pathological process or structural defect has thus far completely eluded scientific observation, but there is no doubt that these forms of psychosis tend to run in families. The less severe forms of mental retardation have already been mentioned as showing familial trends, and the same seems to be true of epilepsy. The evidence for abnormal genes has to be sought in these familial trends rather than in observable lesions or malformations of the nervous system. The latter may be too minute or obscure for detection by present methods, and the structural defects may even lie outside the nervous system, influencing it in some indirect way.

(2) *Histogenic disorders* are those in which the predominant part is played by nonhereditary lesions of the nervous system. Here belong the disorders that result from trauma, from cerebral tumor, from infection with resulting inflammation, and from degenerative changes. In these disorders the abnormality in the nervous tissues is sufficiently great to be either grossly or at least microscopically visible. The term *histogenic* is derived from histology, the branch of biological science that deals with the structure of tissues.

(3) *Chemogenic disorders* have their origin in the effects of chemical agents on the nervous system. Too much or too little of some substance upsets the chemical balance of nervous tissue. In this category belong the metabolic disorders and the disorders that result from toxins or poisons. The classification is admittedly arbitrary. Some toxins and metabolic disorders produce visible lesions

[1] Cobb, S., *Borderlands of Psychiatry*, Cambridge, Harvard University Press, 1943, pp. 20–21.

of nervous tissue, while some inflammations are believed to create chemical products that progressively injure neighboring tissues. But this difficulty can be settled by considering primacy—when the chemical action comes first the resulting disorders may be classed as chemogenic.

Overlap in classifications is to be expected. Cobb's three headings are not intended to represent exclusive categories. They should rather be conceived as component factors in the total somatogenic process. No disorder, strictly speaking, can be assigned to a single category; it can be *weighted* with respect to all three, and also, of course, with respect to psychogenic factors. Future research will very likely improve and refine this classification. In the meantime it is convenient.

Plan of the Next Three Chapters.—If this book were a textbook in psychiatry, intended to train medical students to meet their manifold professional obligations, it would be necessary at this point to embark upon a detailed description of the organic psychoses. There are many varieties, subvarieties, and cross-varieties of these disorders. Most of them occur infrequently, but the psychiatrist must be in a position to recognize them and establish a differential diagnosis. The student of abnormal psychology is in a more fortunate position. It is his privilege to select those disorders which are most instructive, which have the most to teach him as regards mental processes and their cerebral correlates. Not yet in professional training, he can afford to concentrate on topics that will most effectively contribute to his understanding of disordered personal reactions, thus ultimately to his understanding of human nature.

This privilege is reflected in the plan of the next three chapters. We shall first examine rather briefly some examples of chemogenic disorder. This section will illustrate the general notion of the internal environment and its effect on brain activity. Then we shall consider in much greater detail the effects of brain injury. Although brain injuries are not particularly common, they have recently been investigated by ingenious new methods which have yielded important information. Similar advances have lately been made in the study of epilepsy, the topic which concludes the present chapter. In the two following chapters we shall take up the common symptom syndromes of psychosis. Here we shall be dealing with disorders that occur with some frequency and that have been rather thoroughly investigated. To one psychosis, schizophrenia, a whole chapter is allotted. Not only is schizophrenia the most com-

mon of the psychoses, but it is also the subject of very active current research which includes new methods of treatment. Further special interest arises from its indeterminate status as regards psychogenesis and somatogenesis. It is the outstanding example of a *functional psychosis,* bringing us face to face with the meaning of this difficult concept.

Some Examples of Chemogenic Disorder

Effects of Anoxia.—Nervous tissue is highly dependent upon oxygen. Complete deprivation of oxygen, even for a few seconds, causes irreparable damage to nerve cells, especially to those in the brain. Partial deprivation produces less drastic effects which are nevertheless of great practical importance to mountain climbers and airmen who operate at altitudes where the supply of oxygen is markedly reduced. Experiments on the effects of anoxia have been conducted at high altitudes and, more conveniently, in specially built chambers in which the concentration of oxygen can be controlled. As the oxygen content of inspired air is diminished, a fairly regular sequence of changes takes place. According to McFarland and his associates, these are as follows.[2] First comes a loss of self-criticism and judgment. Sometimes this is accompanied by feelings of exhilaration similar to those produced by mild alcoholic intoxication. Attention and concentration then begin to show impairment, and the speed and accuracy of mental work decline; scores on mental tests fall off. Motor and sensory performances resist somewhat longer, but as the anoxia increases there is a loss in such skilled acts as handwriting and an impairment of visual and auditory perception. Ultimately there is loss of consciousness.

The effects of long-continued low-grade anoxia are less clearly established. People who live for a long time at high altitudes usually become acclimatized, but there are individual differences in this compensation. Certain individuals become irritable, get along badly with their companions, suffer mild feelings of depression, and experience difficulty in concentrating on mental tasks.[3] With a return to lower altitude the symptoms disappear. There has been considerable discussion as to whether or not the cumulative effects of slight anoxia cause a loss of efficiency in airplane pilots after years

[2] McFarland, R. C., "The Psychophysiological Effects of Reduced Oxygen Pressure," *Research Publications of the Association for Research in Nervous and Mental Diseases,* 1939, Vol. 19, pp. 112–143.

[3] McFarland, R. C., "Psychophysiological Studies at High Altitudes in the Andes," *Journal of Comparative Psychology,* 1937, Vol. 23, pp. 191–258, and Vol. 24, pp. 147–220.

of service. Opinions differ, but it appears unlikely that mild anoxia leaves permanent effects. Severe deprivation of oxygen, however, undoubtedly injures brain tissue. Destruction of brain tissue has been revealed at autopsy in cases of fatal poisoning by carbon monoxide.[4]

These observations on the effects of anoxia show the close dependence of the brain on its internal environment. Even a slight reduction in the oxygen content of the blood shows itself in a distinct blunting of judgment and criticism. There is probably a fairly direct relationship between anoxia and certain forms of disorder. It is likely, for instance, that anoxia of nervous tissue is the really serious aspect of head injury at birth. There is a further possibility that the degenerative changes of old age come down to a slow but persistent anoxia of brain cells. In the tissues of aged animals there tends to be an increase of inert matter which hinders the diffusion of oxygen to the functional protoplasm. If a similar situation exists in the brain cells of aged people, it might seriously interfere with cerebral nutrition. One might say that the brain cells utilized with increasing difficulty the oxygen that reached them, and the supply itself might be diminished if there were much arteriosclerosis.

Effects of Acute Alcoholic Intoxication.—The effects of alcohol on the nervous system have already been discussed in connection with the psychological significance of drinking. Chronic heavy drinking may go on for years without reaching the proportions of a psychosis. The nervous system is daily narcotized, but returns each morning to a state in which reality can be fully if somewhat grimly appreciated. Prolonged heavy dosing with alcohol, however, produces further effects which are legitimately called psychotic; the person is "out of his head" and requires hospitalization. These results follow from the fact that alcohol in sufficient quantity acts as a toxin or poison on the nervous system.

The best known phenomenon is *delirium tremens,* generally known as "the D.T.'s," which usually occurs as the result of a prolonged binge during which little food or rest has been taken. There is marked muscular tremor, particularly of the small musculature of hands, face, and tongue. The mental symptoms can be summarized as an acute hallucinatory confusion. The hallucinations are predominantly visual and have a typical content of animals in active motion. One patient while still at home reached for his bottle, only

[4] This and other evidence on the effects of anoxia are reviewed by Shock in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders,* New York, The Ronald Press Co, 1944, Vol. 1, Ch. 19.

to discover a bull terrier glowering at him from the neck of the bottle. This example shows a common feature of the hallucination, namely, a loss of relative sizes. Pink elephants may be gigantic even for elephants, but they are also likely to be minute. A procession of them may walk on the window sill or gambol on the patient's bed. Insects, bugs, and mice are prominent in the delirium. The patient is continually excited, disgusted, terrified; he frantically picks revolting creatures from his person and bed or tries to escape from the murderous assaults of great beasts and human enemies. Sometimes the patient is more calm, feeling interest and even amusement at the hallucinations. Anything that happens, any slight stimulus, is swept into the fast-moving stream of delirium. Typically, the attack goes on for about three days and ends in recovery after a long sleep.

Personal problems may creep into the delirium. A paranoid theme may develop: the patient is thrown into terror and despair by audible accusations of homosexuality or visible threats of vengeance. But these psychogenic phenomena are not our chief concern at this moment. The problem raised by delirium tremens cannot yet be answered, but it might be stated as follows. Why does alcoholic intoxication produce this particular pattern of mental symptoms, with emphasis on animals, size distortion, and an extremely free flow of ideas having hallucinatory vividness? A similar free flow of hallucinations results from taking morphine, but neither the animal content nor the agitation accompanies intoxication by this drug. These highly specific effects of different kinds of poisoning offer a fascinating field for study and speculation, as yet barely explored.

In some cases an attack of delirium tremens gives place after a few days to a characteristic symptom-complex known as *Korsakow's syndrome*. This is associated with a diffuse inflammation throughout the nervous system, even in the peripheral nerves. Occasionally it follows poisoning by some agent other than alcohol. There are two distinctive mental symptoms: a defect in memory and a covering of this defect by fabrication. The memory defect is most severe for current happenings. It sometimes extends into the past, but the events of early life and long-distant occurrences are not affected. Although the failure to record and recollect current happenings causes the patient to be disoriented in time and space, his bearing is calm and he converses with superficial lucidity. He is always ready with a detailed confabulation to cover gaps in his memory. For example, a patient who had been confined to bed for several days was asked what he did the day before. He promptly told of having

gone to the horse races, giving conversations he had with people there and telling which horses had won. Again it is an interesting speculation as to why this particular pattern of mental change—amnesia plus confabulation—results from a diffuse toxic inflammation of the nervous system.

Repeated or long-continued alcohol poisoning results in permanent damage to various organs, especially the liver, kidneys, and arteries. Considerable brain damage may be found at autopsy, but it is not known whether this comes directly from alcoholic poisoning or indirectly from the other organic disorders. At all events there is a characteristic picture of progressive mental deterioration in which memory and judgment are the earliest victims. The patient's efficiency is impaired by forgetting appointments and overlooking the details of his occupation. He shows progressive degrees of the memory defect that is acutely present in the Korsakow syndrome, and he soon begins to slip over into the other aspect of that syndrome, the tendency to cover the defect by fabrication. Mental enfeeblement may progress to a point that is generally designated *alcoholic dementia.*

Disorders Associated with Vitamin Deficiency.—Not unrelated to the alcoholic psychoses is the topic of vitamin deficiency. Recent knowledge concerning the importance and chemical nature of vitamins has led to the hypothesis that vitamin deficiency may be a crucial factor in the symptoms of alcoholic overindulgence. Alcoholic bouts are generally accompanied by a great reduction in food intake, and this necessarily restricts the vitamin intake. The Vitamin B complex is especially related to the efficiency of the nervous system. Its presence in sufficient supply is one of the conditions necessary for optimal neural functioning.

A disease known as *pellagra,* having symptoms both physical and mental, has been recognized for many years. It is now known to be caused by Vitamin B deficiency and can be cured by doses of vitamins and readjustment of diet. The physical symptoms are chiefly in the skin, consisting of painful inflammation and eruptions, and this is associated with paresthesia, a greatly heightened susceptibility to cutaneous stimulation. That the nervous system is involved in the disorder is further shown by tremor, weakness, and changes in some of the reflexes. On the mental side the outstanding change is a retardation of mental processes accompanied by somewhat depressed feelings. If not treated, pellagra may advance to a stage of convulsions, delirium, and death. Fortunately this outcome need not be reached if the patient is brought in time to medical attention.

Effects of Endocrine Disturbances.—We conclude our small sampling of chemogenic disorders by mentioning disturbances in the activity of the endocrine glands. These glands secrete directly into the blood stream and thus affect the nutrition of all nerve cells. Their influence is very great but also very complicated; the secretions of one gland affect several other glands, making it difficult to isolate the functions of any one part of the system. This difficulty is least great in the case of the thyroid, and it will suffice for our present purpose to limit ourselves to the effects of thyroid disturbance.

Thyroid deficiency from birth results in an atrophy of development known as *cretinism*. In mature years an untreated cretin is short, fat, coarse, and severely retarded. Bone development is arrested and mental development remains at the idiot or imbecile levels. Nowadays a child born with thyroid deficiency receives immediate treatment in the form of thyroid extracts to compensate for the lack in his own system. The results are not always successful, but in many cases the treatment makes possible a relatively normal development.

Gesell reports on a case followed from the age of six months to thirteen years.[8] At six months the little girl showed a picture of behavior that would be normal for the age of one month. Thyroid therapy was initiated, and within three weeks the child's behavior had risen to the three-month level. The change in alertness and responsiveness was incredibly rapid. By the end of a year of thyroid treatment the child's general development reached the lower borderline of normality. Apparently this represented her maximum potentiality; in subsequent examinations, up to the age of thirteen, her performance remained consistently at the dull-normal borderline. Special interest attaches to this case because of an unintentional experiment performed when the girl was nine years old. A druggist misread the prescription, and for one month the child was given thymus instead of thyroid extract. Even this short space of time was sufficient to bring out many signs of cretinism, including a dulling of mental activity. These symptoms retreated as soon as thyroid medication was restored.

This case illustrates with unusual clearness the dependence of the nervous system on the state of its internal environment. A brain capable of borderline performance, doubtless structurally intact, lay dormant in the infant until it was "sparked" by sufficient thyroxin. It was then capable of developing normally, or just subnormally,

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[8] Gesell, A., Amatruda, C. S., Castner, B. M. & Thompson, H., *Biographies of Child Development*, New York, Paul B. Hoeber, 1939, pp. 86–91.

from year to year, but relapsed quickly to a sluggish level of activity when the supply of thyroxin was lowered.

When thyroid deficiency begins in later life the disorder is called *myxedema*. The patient becomes dull and listless, losing interest in his environment. He feels tired, moves as little as possible, speaks in a slow and monotonous voice. Thought processes are retarded. There is a rapid gain in weight which along with other changes causes the patient to look dull and stupid. The symptoms of thyroid overactivity, *exophthalmic goiter*, are roughly the opposite. The patient becomes active and irritable; his emotions are easily aroused and he finds it impossible to relax or to sleep soundly. The ceaseless activity causes a loss of weight. The eyes protrude in a startled expression, and the patient often experiences typical states of anxiety. Thought is speeded but becomes somewhat disorganized in the process. Overactivity of the thyroid is less easy to treat than underactivity. Surgical removal of part of the gland, thus reducing its functional capacity, is sometimes successful.

General Effects of Brain Injury

In war and in civilian accidents the brain is sometimes the site of direct physical injury. This injury is chiefly to the cerebral cortex, which lies directly beneath the skull, but it may reach to the thalamus and lower brain centers as well. The effects of these injuries on behavior are very diverse. Much depends on the part of the brain that is injured. Some functions are highly localized. It can be predicted, for instance, that injury to the occipital poles will cause an interference with visual functions but not affect auditory or motor processes. Elsewhere in the cortex, however, there are extensive areas that do not seem to be correlated in this way with specific functions. It is certainly a mistake to throw all cases of brain injury into a single category and expect the patients to behave alike. Nevertheless, recent studies of brain injury, both in adults and in children, bring out certain very general changes in behavior which are found in the great majority of the cases and which bear only a slight relation to the site of the injury. These findings permit us to speak of the general effects of brain injury, contrasting them with effects that depend strictly on the location of the injury.

Brain Injuries in War.—The study of human brain injuries is one of those branches of science that flourishes most freely in time

of war. Bullets and the fragments of bursting shells and bombs penetrate the skull and cause lacerations of the underlying brain tissue. Medical treatment begins with the wound itself, with the patient's general condition, and with whatever surgery may be immediately necessary. Our concern here is not with the immediate symptoms but rather with the phenomena to be observed after several weeks or months. By that time the wound has healed, scar tissue has formed in the injured parts of the brain, and a presumably stable state of affairs has been reached.

Outstanding contributions to the study of brain injury have been made by the formerly German and now American neurologist, Kurt Goldstein. In charge of a large institution especially built for brain-injured patients after World War I, he had the opportunity to study several hundred cases for as long as ten years after their injury. Goldstein's advance over earlier workers was founded on improved observation. In part, this advance consisted of observing the patient as a whole: a person who is trying to adapt himself to the limitations imposed by injury. Furthermore, observation was sharpened by the use of new performance tests so devised as to reveal the whole process by which the patient arrived at, or failed to arrive at, any given result. Tests in which the patient merely gave answers, without revealing how he got them, proved nearly valueless in the study of brain injuries. The results merely showed an incomprehensible pattern of successes and failures. In order to grasp the true nature of the patient's defect it was essential to devise performances that would lay bare the whole course of his mental operation.

Symptoms Expressing the Struggle with Defect.—The symptoms of brain injury are not entirely a direct result of damaged tissue. It is convenient to take up first those symptoms which constitute an indirect or secondary result, which express, as Goldstein puts it, "the struggle of the changed organism to cope with the defect and to meet the demands of a milieu with which it is no longer equipped to deal." [6] In part, these symptoms show the struggle to meet demands; in part, they reveal the patient's attempt to avoid situations with which he cannot cope. The latter symptoms are analogous to defense mechanisms.

Brain-injured patients often show a very strong reaction to failure on some item of a test. Goldstein describes this reaction as follows.[7]

[6] Goldstein, K., *Aftereffects of Brain Injuries in War*, New York, Grune & Stratton, 1942, p. 69.
[7] *Ibid.*, p. 71.

> Here is a man with a lesion of the frontal lobe, to whom we present a problem in simple arithmetic. He is unable to solve it. But simply noting and recording the fact that he is unable to perform a simple multiplication would be an exceedingly inadequate account of the patient's reaction. Just looking at him, we can see a great deal more than this arithmetical failure. He looks dazed, changes color, becomes agitated, anxious, starts to fumble, his pulse becomes irregular; a moment before amiable, he is now sullen, evasive, exhibits temper, or even becomes aggressive. It takes some time before it is possible to continue the examination. Because the patient is so disturbed in his whole behavior, we call situations of this kind *catastrophic situations*.

Because this reaction occurs simultaneously with the attempt to solve the problem, rather than after the failure, and because the patient often does not have the slightest idea why he was upset, Goldstein concludes that the patient's behavior is not simply an expression of humiliation on account of failure. The reaction is more primitive and immediate. To be unable to meet an environmental demand is highly threatening to the patient. Failure in a test item, unimportant in itself, raises for the brain-injured patient the whole threat of incompetence and helplessness, a threat that he experiences repeatedly because of his actual defect in meeting environmental demands. For him, simple failure has a catastrophic meaning.

Many curious traits of brain-injured patients become explicable as attempts to avoid this type of catastrophic situation. In various ways the patient tries to find an environment or make an environment in which demands that are beyond his reduced resources will not occur. Brain injury makes it difficult to deal with anything that is unexpected. It is frequently observed that the patients start violently when they are addressed. One means of protection against sudden irritations of this kind is to be constantly busy. "Concentration upon a particular activity makes him relatively impervious to the undesired and dreaded stimulation from outside." [8] The activity may not be important in itself, but the patient cherishes it because of its protective character. Another frequent trait is excessive orderliness. All the patient's belongings are kept in the most meticulous arrangement, and he is upset and confused if something happens which disturbs this arrangement. The function of orderliness is similar to that of constant activity: it protects the patient from the unexpected. Everything can be found and used with a minimum of mental exertion, and the possibility of surprise is excluded. In these and other ways the patient tries to establish an environment to which he will always be equal.

[8] *Ibid.*, p. 74.

Brain-injured patients are remarkably unaware of their defects. They do not bemoan their limitations. A patient who has lost the capacity to read, for instance, does not find it remarkable that he cannot read. Goldstein believes that this placid unawareness is particularly complete when the patient has learned to get along without the injured function. Total loss of a function is more easily compensated in this way than partial loss. Goldstein describes a patient who was at first totally blind as the result of brain injury. He was not conscious of being blind and adapted well to his life at the hospital. Presently his injury improved so that he regained a little sight. He then began to be upset, complained of his imperfect vision which he struggled in vain to use, and became greatly depressed about his future.[9]

Symptoms Arising Directly from Defect.—Following earlier work by Hughlings Jackson, Goldstein has shown that brain injury gives rise to certain direct general symptoms that are more or less independent of the site of injury. One of the effects of injury is to raise the thresholds of excitation. The patient's receptivity is reduced and his reactions are retarded. This makes him peculiarly averse to haste; he can succeed with a task only if given an abundance of time. If he succeeds, a second effect of injury is likely to manifest itself: an increase in perseveration. Having achieved a solution that was difficult for him, the patient keeps trying to repeat this solution on new tasks. Sometimes examination has to be interrupted because the patient cannot disengage himself from a perseveration of this kind. A third characteristic of injury lies in the sphere of attention. The patient is tremendously influenced by external stimulation, and this has the effect that he is either constantly distracted or else that his attention becomes riveted on some one thing that happens to interest him.

Goldstein attaches considerable importance to a fourth consequence of cerebral injury. This is described as a blurring of the boundaries between figure and ground. It is very obvious in normal perception, especially visual perception, that a certain portion of what is perceived constitutes a clearly defined figure, the remainder being a less clearly defined ground. In certain ambiguously drawn pictures it is possible to make figure and ground reverse themselves in rapid succession, but ordinarily the two can be clearly discriminated. Goldstein conceives that this characteristic of perception applies also to any process in the nervous system. An action such as

[9] *Ibid.*, p. 78.

raising the arm constitutes figure, but is accompanied by a ground of readjustments in other muscles which keep the body in equilibrium. In brain injury, then, especially in injury to the cortex, the relation of figure and ground is disturbed and leveled.

This phenomenon can be illustrated by performance on a test devised especially for brain-injured children by Werner and Strauss.[10] The examiner takes an ordinary marble board having 100 holes arranged in 10 rows. He places marbles in some of the holes, making some kind of a figure, for example two overlapping hollow squares. He then gives the child an empty board and marbles and asks him to copy the arrangement. It may be noticed in passing that this is one of those tests which permit the examiner to observe the whole course of the patient's performance, with all its pauses, errors, and false starts. The marble board experiment proves particularly difficult for brain-injured children. Inspection of their performance shows the source of the difficulty. Unlike normal children, and unlike mentally retarded children without brain injury, these children are unable to separate figure from ground—the figure made by the marbles from the ground made by all the rest of the holes. They place their marbles in a random, disorganized fashion, and even if they get the placements approximately right they show no sign of realizing that the stimulus consisted of figures such as the two squares. Brain injury makes it difficult for figure to achieve salience over ground.

Loss of the Abstract Attitude.—Another of Goldstein's contributions is his notion that brain injury leads to loss of the abstract attitude, as contrasted with the concrete attitude. With this notion we are already somewhat familiar because it was well illustrated in the case of Martha Ottenby. In describing how she got lost when returning from the hospital workroom, how she determined whether it was winter or summer, and how she ran into the street to talk with her brother who was actually dead, we reached the conclusion that her behavior was bound by immediate and concrete impressions.[11] She was unable to detach herself from these impressions or to think about her behavior in abstract terms. Even in test performances she was blocked by the simplest abstraction, although she could perform quite well with concrete problems.

Goldstein conceives the abstract attitude broadly. It is not an acquired mental set or even a specific aptitude. It is rather "a ca-

[10] Cf. Strauss, A. A. & Lehtinen, L. E., *Psychopathology and Education of the Brain-Injured Child*, New York, Grune & Stratton, 1947, pp. 31–49.

[11] See above, pages 96–99.

pacity level of the total personality." [12] In contrast to the concrete attitude, which is realistic, immediate, and unreflective, the abstract attitude includes in its scope more than the immediately given situation. The real stimulus is transcended and dealt with in a conceptual fashion. Objects before us are seen as members of a class or category, or they are apprehended in a framework of wider implications. To take a very simple example: a patient shows great skill in throwing balls into boxes that are located at different distances from him, but he is unable to say which box is farthest away or how he manages to aim differently. He is able to function concretely but not to manage the abstract idea of distance, and he can give no account of throwing harder or less hard. Another patient can count numbers on his fingers and in other roundabout ways, coming out with results that look like good arithmetic, but he cannot state *whether 7 is more or less than 4. The importance of loss of the* abstract attitude becomes even clearer when we consider the following limitations: the patient cannot keep in mind several aspects of a situation at one time, cannot readily grasp the essentials of a given whole, cannot plan his actions ahead in ideational fashion.

Shortcomings in the capacity for abstraction make themselves apparent in tests which involve sorting. Strauss and Werner have used the technique of confronting children with fifty or more small objects, the instructions being to put those things together "which go together, which fit together." [13] The objects can be classified by function (key with padlock, light bulb with electric socket) or they can be grouped on the basis of important common features such as form (candle and crayon) or color (red poker chip and red button). Brain-injured children run to more far-fetched and peculiar principles of combination. They group on the basis of unessential details, for example putting sandpaper and match cover together because there is a little piece of sandpaper on the match cover. Again, they find far-fetched relations, such as placing a metal cover and knife together because the knife can be used to take off covers. Sometimes a merely imagined connection suffices to make a grouping: a round piece of wood and a knife go together because the wood is a loaf of bread to be sliced.

These examples give a decided impression of loose connection and poor capacity for organization, but an even clearer notion can be obtained from the picture-object test used by Strauss and Werner.

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[12] Goldstein, K. & Scheerer, M., "Abstract and Concrete Behavior: An Experimental Study with Special Tests," *Psychological Monographs*, 1941, Vol. 53, pp. 1–31.
[13] Cf. Strauss & Lehtinen, *op. cit.*, pp. 54–74.

Two pictures are put up, one showing a house on fire, the other a boy struggling in water. The child is then asked to put in front of each picture those toy objects lying on the table which go with the picture. A brain-injured boy of twelve put some appropriate objects, such as a fire engine, in front of the house on fire, but also added some very peculiar items. Wrench and pliers were supplied to repair the car in case it was burned; a "slow" sign was set up to keep people from running into the fire; a black train was introduced to match the black suits of people watching the fire; a fork was added because one of the witnesses thought he saw food in the burning building; an envelope was put in place so that the firemen could read the address and find their way to the fire. To a mind that finds these groupings appropriate, it is evident that the world might become at times a little confusing.

Loss of the abstract attitude is a general change that accompanies the majority of serious injuries to the brain. It is particularly prominent when the injury is in the frontal lobes, as was the case with Martha Ottenby. It is also found with lesions elsewhere, however, and is more marked when the lesion is in the dominant hemisphere—the left in right-handed people. Impairment of the abstract attitude affects almost all mental processes, including memory, attention, reasoning, initiative, and decision. The possibilities for retraining are much poorer when the abstract attitude has been disturbed.

Studies of Brain-Injured Children.—The subject of brain-injured children was touched upon in an earlier chapter in connection with delinquency. We saw that children with a history of head trauma or encephalitis often showed, along with an abnormal electroencephalogram, marked restlessness, emotional instability, and difficulty in accepting the restraints of socialized living. From the studies of Werner and Strauss we have just learned that brain-injured children display several distinct peculiarities, notably a ready distractibility, a blurring of figure-ground organization, and an incapacity for the abstract attitude. The behavioral peculiarities of these children are closely related to their mental peculiarities. It has often been noted, for example, that they tend to be inconsiderate of the rights and feelings of others. On what does consideration for others depend? As we saw when we studied the development of moral insight, it depends to a large extent on being able to see things from another person's point of view.[14] It calls for multiple

[14] See above, page 170.

perspectives. One of the traits used explicitly by Goldstein to define the abstract attitude is the ability to hold simultaneously in mind various aspects of a situation. If brain injury renders a child incapable of taking the abstract attitude, it also makes him virtually incapable of being considerate of others. Such a child cannot transcend moral realism. His failure to become a socialized member of groups comes partly from an intellectual inability to grasp what it means to be a considerate group member.

The difficulties experienced by brain-injured children can be illustrated from one of the case reports given by Strauss and Lehtinen.[15] The boy in question had a birth injury that evidently affected the brain tissues. His I.Q., tested on various occasions, averaged somewhere in the 60's, and his performance on the marble board test was extremely disjointed, indicating severe blurring of figure and ground. When given tests he showed the typical distractibility; "at times, despite repetition of questions, it was difficult to know whether or not he had actually heard because his attention wandered and his interest span was so short." Constant restlessness was also prominent in test situations. "He moved around continually, leaning back in the chair or yawning or handling material on the desk." When admitted to the training school at the age of ten he had to be constantly reminded of routine requirements, partly because his distractibility prevented him from remembering them, partly because he defiantly disregarded them. He "liked to fuss around with odd jobs to keep busy." Perhaps this was an outlet for his restlessness, but it may also have been an attempt to avoid catastrophic situations by constant activity. Though often "friendly and good-humored," he was "insistent about his likes and dislikes." and "made himself very unpopular with the group because of his continued interference in the business of others." On one occasion he tore down decorations for a party as fast as they were put up. On another he decided that the furniture should be moved around, shouted to the other boys to move desks and chairs, and himself seized a large table, knocking down other furniture in his path. He was frequently in fights, apparently over trifles. His best adjustment was to work in the shop, where in spite of his "enthusiastic and 'slam-bang' abandon" he was capable of functioning as a good worker. Returned to his family at sixteen, the boy made a good adjustment, handling merchandise on the shipping dock of a large hotel. He took pride in his responsibilities and in his ability to earn an independent living.

[15] *Op. cit.*, pp 35–38.

This boy was living under a grave handicap. It was very hard for him to keep still or to resist whatever impulses or emotions presented themselves. Thus, without having particularly hostile intentions, he was constantly at odds with the group. The reader should imagine himself in the position of having to discipline this boy, either at school or at home. Even with the best intentions in the world it would be almost impossible not to get furious with him. Ideas of awaiting his turn, sharing with others, remembering obligations, taking pains and doing things slowly would have little effect on a person so restless, impulsive, concrete, and disorganized. Small wonder that friction almost always exists between such a child and his mentors. Yet the outcome shows that it is sometimes possible to train brain-injured children so that within certain limits they lead a useful and contented life.

Training has to be adapted to the limitations imposed by injury. Strauss and Lehtinen describe some of the measures used to improve the child's performance, especially in schoolwork.[16] Everything must be done to minimize distraction. The schoolroom must be undecorated, bare, removed from outdoor noises, its windows painted so that the children cannot see out. Desks should be far apart, perhaps even facing the walls, so that the children will not distract each other. Gloomy as this sounds, it is often welcomed with great appreciation by the children themselves, who suddenly find themselves able to keep their minds on their tasks. Restlessness and hypermotility must be met by a program which includes many activities, and by devices which link learning with motor action. To overcome the leveling of figure and ground it is often necessary to prepare the teaching materials with a sharp outlining of the essential figures in color. All of these devices are used only to get the children started on a better educational performance; as rapidly as possible they are trained to participate in a more traditional school routine.

Training for social adjustment and for the responsibilities of adult life are clearly more complicated problems. It is hard to find general principles. In the case of the boy just described, a fortunate combination of circumstances made him feel secure, useful, and competent when he returned to his home environment, and this allowed him to reach his optimum of socialized behavior. Brain-injured children are injured children, however, and one should not expect their optimal social and vocational adjustment to be too high. Many of them require permanently simplified and limited environments.

[16] *Op. cit.*, Ch. 9.

Effects of Localized Brain Injury

The localization of functions in the brain has been the subject of considerable controversy. Certain areas of the cortex have highly specific functions. The discovery of these areas toward the end of the last century gave rise to the hope that the whole cortex would eventually be mapped according to the specific function of each minute area. This hope has not been fulfilled. The cortex has been mapped by Brodmann into forty-six areas distinguished by the architecture of the cell layers. Part of this scheme is represented by the numbers on the accompanying figure (Figure 1) which shows the

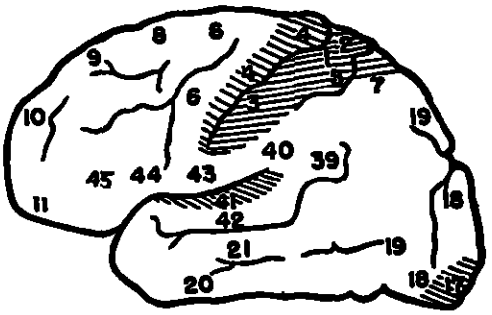


FIGURE 1

Schematic drawing of the left lateral aspect of the human cortex. The numbers are those assigned by Brodmann on the basis of cellular architecture. The shaded areas are those having fairly definite functions, as described in the text. Areas 9, 10, 11, and 45 together constitute the prefrontal area. The parietotemporal area is represented by the numbers 39, 40, 42, 43, and 44. (From Cobb, S., *Foundations of Neuropsychiatry*, Baltimore, Williams & Wilkins, 1941, p. 72.)

left cerebral hemisphere as it would be seen from the side. These structurally different areas, however, correspond in only a few cases to areas having known specific functions. The diversity of architecture is not matched by diversity of functions.

The main sensory receiving stations in the cortex occupy a relatively small space. Area 17 is the center for vision, area 41 for hearing, areas 1, 2, 3, and 5 for touch and pressure from skin and deep end organs. The areas immediately surrounding these centers probably have a somewhat restricted function; area 18, for instance, is believed to be limited to the perceptual elaboration of visual impressions. Area 4 is the motor area which when stimulated gives rise to specific muscular movements, and area 6 seems closely related to the motor sphere. This is about as far as one can go with specific localization. Of the remaining parts of the cortex, two large

ones are of particular interest. The *parietotemporal* area, represented on the diagram by the numbers 39, 40, 42, 43, and 44, bears a special relation to learned skills, especially to language and the meaning of symbols. Curiously enough, this complex array of skills is registered only in the leading hemisphere, the left in right-handed and the right in left-handed people. Injury to the parietotemporal area in the leading hemisphere is a disaster. Injury to the corresponding area in the other hemisphere is, relatively speaking, a matter of minor importance. The other important zone is the frontal area, represented by the numbers 9, 10, 11, and possibly 45. We shall consider its functions directly.

Lesions in either of these two areas produce effects that differ from one person to another. As Cobb points out, no two human brains are alike. "Lesions destroying exactly the same areas in two different brains would not cause exactly similar symptoms. This is because the life experience of each person has conditioned and changed the brain so that it is unique." [17] The effect of an injury is also influenced by the time of life at which the lesion occurs. The example of encephalitis lethargica (epidemic sleeping sickness) is instructive in this respect. The virus of this disease strikes both adults and children, and the resulting neural lesions appear from autopsy studies to be just about the same. But the effects are considerably different. When a young nervous system is affected, the behavior is that of the brain-injured children we have just been studying. When an adult contracts the disease, he may be left with tremor and other somewhat disabling motor symptoms, but there is rarely any emotional disorder or intellectual deficit.[18] Organized behavior seems less vulnerable to brain injury when it is well established and habituated than when it is still in process of being learned.

Injury to the Frontal Areas.—In order to do a proper experiment on the effects of injury to the frontal lobes, it would be necessary to test the patient with great care both before and after the lesion. This ideal scientific situation does not occur in everyday life. Frontal-lobe tissue may be destroyed by an accident, or it may be destroyed by a tumor or the surgical removal of a tumor. Neither situation allows for the possibility of testing the patient in a normal state before the lesion occurs. One must be satisfied, therefore, with information which is necessarily imperfect.

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[17] Cobb, S., "Personality as Affected by Lesions of the Brain," in Hunt, *Personality and the Behavior Disorders*, *op. cit.*, Vol. 1, Ch. 18, p. 553.
[18] Cobb, *op. cit.*, p. 561.

It was supposed at first that the frontal lobes might be the seat of the highest intellectual functions. Even the early studies showed, however, that the effects of injury were not confined to the intellectual sphere. In fact, the trend of recent thought has been in the opposite direction, emphasizing the smallness of deficit in intellectual functions. One of the best studies was made by Rylander, of Stockholm, who reported on 32 cases in which the frontal area was surgically removed on one side.[19] In the majority of the cases there was deficit in respect to memory, concentration, and speed of thought. But there was also an exaggerated sense of well-being (euphoria) in 20 cases, restlessness in 14, loss of initiative in 12, depression in 8, these changes being distinctly of a non-intellectual character. By and large, unilateral excision of the frontal area does not produce extensive changes. Cobb remarks, "On the whole I believe a man can lose one frontal pole with insignificant disability." [20]

Change is more conspicuous when both frontal areas are injured or removed. Few such cases are on record, but one at least has been studied with great care and reported in a book by Brickner.[21] The patient, a successful broker, was operated for cerebral tumor in 1930. The growth was extensive so that it proved necessary to remove from the left side most of area 8 and all of areas 9, 10, 11, and 45; from the right side a slightly larger area was excised. At the time of operation the patient was forty years old. Prior to his illness he had been an energetic, intelligent businessman, but in other respects a rather mild and submissive individual. As a child he was quiet and shy, dependent on his mother. When he married, following a courtship in which the girl took the active part, he expressed the desire to continue living in his parents' home. He rarely displayed aggression except in the form of facetious and somewhat boastful stories. Such was the man upon whom the operation was performed. The effect of removing the frontal lobes was sufficiently great so that the patient was never able to go back to work. Initiative was impaired, memory was imperfect, distractibility was increased, and the patient showed a clear deficit in judgment and logical reasoning. More striking, however, was the change in his self-criticism and self-restraint. After the operation he experienced considerable euphoria and appeared to lose all restraint over his previous mild boastfulness. He proclaimed himself the best of all business-

[19] Rylander, G., *Personality Changes after Operation on the Frontal Lobes*, London, Oxford University Press, 1939.
[20] Cobb, *op. cit.*, p. 569.
[21] Brickner, R. M., *The Intellectual Functions of the Frontal Lobes*, New York, The Macmillan Co., 1936.

men, the man whom nobody could fool, and he told stories of youthful sexual exploits and of playground fights in which he knocked down all comers. Along with boastfulness and aggression his dependent tendencies were also exaggerated. He allowed others to bathe and dress him and care for all his wants. The constructive organization of personality was more markedly injured than the intellectual processes.

Prefrontal Lobotomy.—Findings of this kind probably influenced the Portuguese surgeon Moniz to make the bold experiment of trying to relieve certain serious mental symptoms by deliberate surgical injury of the frontal lobes. In cases of intense agitation and distress, it seemed likely that such an operation might ease the symptoms and produce a more relaxed state of mind. The work was taken up in this country by Freeman and Watts, and is now in process of intensive investigation.[22] The operation is performed by making small holes in the skull and then destroying some of the connections between the frontal lobes and other parts of the brain. The gray matter of the frontal cortex is injured only at the point where the aperture is made. The important change consists of severing the white matter which connects the frontal lobes with other parts of the cortex and especially with the thalamus and hypothalamus. The result is a partial isolation of the prefrontal cortex—areas 9, 10, 11, and 45.[23] Technically the operation is fairly safe and free from complications. It can be carried out under local anaesthesia with the patient fully conscious and able to talk. Unlike the work previously described, prefrontal lobotomy creates a fairly good situation for scientific experiments. Patients can be tested before operation, when the brain is anatomically sound, and again after operation when the planned incision has been made. Of course the patients are not well before the operation, but the disturbances for which it is generally used are not of a kind that suggest cortical injury.

Patients recover quickly from the slightly stuporous and confused condition that prevails immediately after the operation. Within a few days, or at most within a few weeks, their minds appear to function about as well as before. Alertness and an interest in the environment return and may even surpass the preopera-

[22] Freeman, W. & Watts, J. W., *Psychosurgery*, Springfield, Ill., C. C. Thomas, 1942. See also a paper by the same authors, "The Frontal Lobes and Consciousness of the Self," *Psychosomatic Medicine*, 1941, Vol. 3, pp. 111–120; this is available also in Tomkins, *Contemporary Psychopathology*, Ch. 21.

[23] It is redundant to say "prefrontal" instead of "frontal," but the term is in common use to indicate that only areas 9, 10, 11, and 45 are affected, not areas 8, 6, 4, and 44.

tive state. On ordinary tests of intelligence the patients are often able to make as good a showing as they did before. It is not strictly correct, however, to say that they show no intellectual impairment. Whether there is some loss of the abstract attitude has not yet been satisfactorily tested, but there is clear evidence for at least one kind of change for the worse. The change shows itself in an impairment of foresight, deliberateness, and capacity for prolonged attention. Lobotomized patients show a deficit in the Porteus Mazes, a test in which success depends upon planning several moves ahead.[24] They are also deficient in tests that demand deliberation and a slowing down of performances in order to improve their quality.[25] In short, there is a certain amount of impairment, much less than one would suppose considering the radical character of the operation, but nevertheless a distinctive loss which future research will probably be able to describe more clearly.

It is in the spheres of mood, control, and self-consciousness that prefrontal lobotomy shows its most drastic effects. Freeman and Watts describe patients with severe and crippling obsessive states who became relaxed, expansive, and amusingly free from self-consciousness. They describe cases with agitated depressions, constantly preoccupied with their troubles and bodily sensations, who became calm and placid and resumed their interest in topics outside of themselves. Particularly interesting are the examples of "affective bleaching" in which ideas that formerly troubled the patient to the point of ruining his life simply lose their emotional pressure without being eliminated from his mind. A paranoid woman, for example, believed herself constantly persecuted by enemies who sprayed gas into her room and flew over her house in planes dropping poison. After prefrontal lobotomy she continued to describe these persecutions, but her attitude toward them had changed. Fear gave place to amusement, and amusement eventually gave place to insight and the abandonment of the ideas. The compulsive and frightening character of the ideas seemed to be weakened by severing the connections between frontal cortex and thalamus.

On the basis of their studies, Freeman and Watts offer the hypothesis that the frontal lobes are concerned with a complex function which might be described as foresight. Broadly speaking, this means the person's projection of himself into the future: his planning of what he desires to accomplish, his recognition of the means

[24] Porteus, S. D. & Peters, H. N., "Maze Test Validation and Psychosurgery," *Genetic Psychology Monographs*, 1947, Vol. 36, pp. 3–86.
[25] Robinson, M. F., "What Price Lobotomy?" *Journal of Abnormal and Social Psychology*, 1946, Vol. 41, pp. 421–436.

to be employed, his awareness of the extent to which he reaches this goal. In trying to grasp this concept we become peculiarly aware of the difficulty of describing complex psychological processes. Just what is it that the lobotomized patient loses? He can still make plans, he can still perceive means to ends, he can still make judgments about himself, but somehow these processes no longer come together into an effectively functioning whole. The patient's life no longer exhibits planned initiative. This seems to be what Freeman and Watts mean when they say that there is a loss of foresight. Closely linked to this loss is a marked change in self-consciousness. The patients become obtuse or indifferent to the impression they are making upon others. They behave with unselfconscious freedom and abandon. They are no longer restrained by images of making themselves ridiculous. This makes the world look brighter and easier, enabling the patient to feel relaxed and happy. Unfortunately in many cases it seems to make the world look easier than it really is, so that the patients sometimes get into embarrassing difficulties.

Prefrontal lobotomy is interesting both for the light it sheds on the functions of the frontal areas and for its service in relieving mental symptoms. Our discussion has suggested the type of symptom it is best suited to alleviate. The most striking success has been achieved with agitated depressions and with severe and stubborn obsessional states. In both forms of disorder the awareness of self is peculiarly exaggerated. The patient is constantly preoccupied and constantly worried about himself, his thoughts, his guilt, his health, his future, so that his interest is largely withdrawn from the environment. The condition of these patients is one of desperate unhappiness, and the relief they experience when unburdened of their self-consciousness is well worth whatever impairment may follow. It should be clear, however, that prefrontal lobotomy is indicated only for certain types of disorder, and that it is an operation of last resort, to be recommended only after all other methods have failed. Only when self-consciousness and worrisome planning dominate the picture, and only when these symptoms are extreme and painful, is the operation of lobotomy appropriate. With patients who are already disorganized, impulsive, irresponsible, and not much concerned about their condition, the operation is distinctly not indicated. In such cases one could wish for a way to make the frontal cortex more active rather than less active.

Reports on the use of the operation are currently pouring in from many hospitals in many lands. Between a quarter and a third of the patients treated are sufficiently improved to be ready for discharge

from the hospital. About a quarter remain unchanged by the operation. The remaining 40 or 50 per cent are improved, though not sufficiently to warrant their return to the community. One should not regard the improvement of this latter group as a matter of minor importance. Considering their deplorable and nearly hopeless initial condition, their gain represents a tremendous benefit to themselves as people, to the feelings of their relatives, and to the hospital staff which is responsible for their care. Present optimism may be a little exaggerated, but prefrontal lobotomy seems likely to stay as a specialized therapeutic tool in the treatment of mental disorders.

Injury in the Parietotemporal Area.—Injury to the parietotemporal area in the dominant hemisphere produces an effect chiefly on language. This area lies between the centers for vision, the centers for hearing, and the motor centers. The use of language involves vision (apprehending the written word), hearing (apprehending the spoken word), and the motor acts of speaking and writing. It is not surprising, therefore, that injury to the parietotemporal cortex disturbs the language function in one way or another. The resulting conditions are known by the general name of *aphasia*.

The results of injury are extremely complex. At first sight the disorders seem highly selective and highly restricted. Thus one patient may display only an inability to read, his understanding of spoken language and his speech and writing being uninjured. Another may have a specific inability to find words, especially nouns, to express the thoughts he has in mind. Such a patient may show by gestures and fragments of speech that he remembers perfectly the details of a walk he has just taken, but he is unable to bring out the proper words to describe the objects he has seen along the way. A patient described by Hollingworth used almost no substantives, but inserted the automatisms "seriat" and "feriat" in their place.[26] When asked where he lived, he said, "I come from seriat." When asked his occupation, he said, "I am a feriat." He drew a picture of an anvil, which he called a "seriat," and remarked that he worked at it. When the examiner called it an anvil he brightened and said, "That's it, you said it, it's a seriat." When he tried to read aloud he pronounced practically every word "seriat." Sometimes the disorder is even more narrowly selective. A foreign language is lost but the native tongue is unaffected. The extreme is represented in the case of a patient formerly able to read music who after his injury

[26] Hollingworth, H. L., *Abnormal Psychology*, New York, The Ronald Press Co., 1930, p. 455.

could read music in the key of C, with some difficulty in the key of G, and not at all in other keys. In all these cases it is apparent that general understanding is not greatly injured. The patient seems to grasp much more than his injured language function is able to represent.

The high specificity of some of these losses has tempted many workers to think that the different aspects of language are localized in small specific parts of the cortex. Injury at one spot causes word blindness, at another spot word deafness, at a third spot the comprehension of sentences, at a fourth spot the speaking of nouns, etc. The parietotemporal cortex has even been compared to a typewriter keyboard or to a complex piece of electrical wiring. These analogies exaggerate the specificity and are of little service in explaining the mixed forms of aphasia, which prove to be more numerous than the pure forms. Furthermore, there seems to be a very imperfect correlation between the location of the injury and the form of the disturbance. The most one can say is that an injury in the forward part of the area, for example in area 44, has a more marked effect on the motor aspects of language—speech and writing—while an injury farther back, say in area 39, has more effect on the perceptual side. To this argument against specificity it is always possible to toss back the answer that language is learned and that it is not necessarily learned by each individual with the same bits of cortex. Admittedly, the whole problem is difficult.

The trend of current opinion, however, is more and more in the direction of Hughlings Jackson, who conceived the aphasias to be disturbances in propositional thinking. His follower Henry Head, after much experience with wartime brain injuries, reached the conclusion that the central disorder was of "symbolic formulation and expression." Jackson and Head were joined by Goldstein, who believed that aphasic patients generally showed an impairment of the abstract attitude. These workers say essentially that aphasia is a disturbance of something more fundamental than is shown in the symptoms. The surface disorder is neither accidental nor negligible, but it by no means reveals the full extent of the disturbance. When the patient's performance is examined with sufficient care, disability is found to extend not only to several aspects of language but also to certain acquired skills that have nothing to do with language.[27] The nature of the more fundamental disturbances is not easy to describe. We find ourselves in the same dilemma as we did when

[27] Weisenberg, T. & McBride, K. E., *Aphasia: A Clinical and Psychological Study* New York, Commonwealth Fund, 1935.

we tried to characterize the effects of prefrontal lobotomy. Concepts such as "loss of foresight" and "lessened self-consciousness" fit the facts fairly well, but it is hard to anchor them to a precise meaning. The same is true of concepts such as "propositional thinking," "symbolic formulation and expression," and "abstract attitude." They refer to aspects of behavior that are hard to isolate and define in a way that is satisfactory for scientific investigation. Again we find progress delayed by the difficulty of describing complex psychological processes.

The work of retraining aphasic patients would be easier if it were possible to solve the problems described in the last paragraph. In spite of an imperfect understanding of the aphasic disturbance, however, good results can often be obtained by retraining. Generally some portion of language behavior is gone beyond repair, so that it is necessary to teach the patient some roundabout method of overcoming the defect. This is illustrated in a case reported by Gelb and Goldstein, in which the patient without loss of visual acuity had become unable to recognize any objects through purely visual experience (visual agnosia).[28] It was impossible to retrain his visual recognition, but he learned to read again by a combination of eye-movements and finger-movements. He traced the letters with his finger and followed them with his eyes, providing himself in this way with the cues necessary for recognition. Devices for retraining are discussed in detail by Goldstein and by Granich.[29]

Stuttering

One form of defect in the use of language has an origin entirely different from the aphasias. It is not associated with injury to the brain, but it is related to a certain peculiarity in cerebral function. Stuttering (or stammering) represents a failure in the temporal organization of speech sounds. The orderly production of muscular movements in the mouth and larynx is in some way thrown out of gear. The outstanding result is a spasm of the larynx. Either no sound is produced, or the initial sound of a word is repeated many times without further progress. Stuttering usually begins in early childhood when speech is still in process of being learned and refined. In 85 per cent of cases the onset is reported to be before the

[28] The case is described briefly in Goldstein, K., *Aftereffects of Brain Injuries in War*, *op. cit.*, pp. 149–152, and in more detail in Ellis, W. D., *A Source Book of Gestalt Psychology*, New York, Harcourt, Brace & Co., 1938, pp. 315–325.

[29] Goldstein, *op. cit.*, pp. 147–224; Granich, L., *Aphasia: a Guide to Retraining*, New York, Grune & Stratton, 1947.

age of eight. Stuttering is considerably more common in boys than in girls.

From the fact that most stutterers are able to speak perfectly well when alone or in relaxed circumstances, it is clear that the trouble cannot lie in an important neural defect. A word-blind aphasic is always word-blind, no matter what the circumstances, but a stutterer is not a stutterer except when there is a certain amount of stress. This fact bears an important relation to the treatment of stuttering. Many of the methods advocated for this purpose consist of nothing more than elocution lessons designed to teach trick ways of breathing and enunciation which will get around the usual blocking. Roundabout retraining is good treatment for aphasia, where brain tissue has been damaged so that substitution of a new procedure is inevitable. But it is superficial treatment for stuttering, in which neural injury plays no part. Wendell Johnson's experience with this type of treatment is typical of what happens over and over again.[30] He was taught a whole series of verbal tricks, along with breathing practice and advice to be calm in public. By speaking in the prescribed slow drawl he was able to control the stuttering while he was at the training school, but the moment he returned home his speech was as blocked as ever. Speech training is sometimes helpful to stutterers, but it is not fundamental treatment.

A hypothetical relation between stuttering and the brain has been worked out by Orton.[31] Man and his brain are not completely symmetrical, although the differences between right and left side are so minute as to escape detection. One hemisphere is usually dominant over the other, especially as regards linguistic functions and skilled acts. This dominance is most clearly expressed in handedness. But there are individual differences in the degree of dominance, these differences being probably to a large extent inherited. People who are strongly right-handed or strongly left-handed are rarely found among stutterers. It is the ambidextrous children, with uncertain dominance by the two hemispheres, who are most likely to have trouble with their speech. To some extent reading and writing may be similarly affected. Cobb describes the situation as follows.[32]

> Neither hemisphere takes the lead. When symbolization in speaking, reading, or writing is needed instantly there is delay and confusion because the leadership is mixed. Hesitant and stuttering speech results,

[30] Johnson, W., *Because I Stutter*, New York, D. Appleton-Century Co., 1930.
[31] Orton, S. T., *Reading, Writing, and Speech Problems in Children*, New York, W. W. Norton & Co., 1937.
[32] Cobb, S., *Borderlands of Psychiatry*, Cambridge, Harvard University Press, 1943, p. 46.

and in reading and writing surprising bits of letter reversals in words reveal the relation of the trouble to handedness. For example a child will revert to his early impulse to read from right to left and read aloud "saw" for "was," "but" for "tub," etc.

Although there is at present considerable controversy on the subject, a great deal of clinical evidence favors the view that uncertain cerebral dominance is a cause of stuttering. Many experiments, notably those of Travis, lend weight to this theory.[83] Supporting evidence can now be obtained from the electroencephalogram. Several investigators have taken EEG's from both hemispheres during speech, comparing stutterers with control groups of normal speakers. The results show distinctive differences between stutterers and non-stutterers, differences that are related to the balance of excitation in the two hemispheres.[84] Orton's method of training is designed to fix cerebral dominance definitely in one hemisphere, usually the left. This is highly effective with ambidextrous children who are, so to speak, wavering in their choice. Until recently a good deal of unnecessary cerebral confusion was created when teachers tried to make left-handed children write with their right hands. This educational practice is now recognized as dangerous. Even long-standing cases of stuttering are sometimes improved and cured by a return to left-handedness—by allowing the naturally dominant hemisphere to be dominant.

It is impossible to understand stuttering, however, without considering the circumstances under which it develops and the conditions under which it becomes better or worse. Uncertain cerebral dominance is probably important, but it is not a complete explanation. Not all cases of mixed dominance or of artificially forced right-handedness turn into stutterers. The speech symptom becomes fixed and troublesome only in a certain concatenation of circumstances. We know all too little as to how this comes about, but the following case reported by Cobb shows the multiplicity of causes that may help to fixate a symptom for which there is a good deal of pre-existing somatic compliance.[85] The patient showed ambidexterity, and his family tree, carried back through three generations (77 persons), showed 18 examples of left-handedness, 9 of speech defects, and 3 of reading defects. He was thus predisposed toward stuttering by an inherited mixed cerebral dominance. In his childhood, however,

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[83] Travis, L. E., *Speech Pathology*, New York, D. Appleton-Century Co., 1931.

[84] Knott, J. R. & Tjossem, T. D., "Bilateral Electroencephalograms from Normal Speakers and Stutterers," *Journal of Experimental Psychology*, 1943, Vol. 32, pp. 357–362.

[85] *Borderlands of Psychiatry, op. cit.*, pp. 49–51.

a situation existed that undoubtedly caused strong tension and anxiety. The patient was in sharp competition with two older brothers and was greatly upset by the birth of a younger sister when he was four. Some hesitancy in speech began to be noticed at this point. Then occurred an incident of acute panic that focalized sharply on speech. The patient was taken outdoors in a high wind by some older children who ran ahead and left him alone. When he opened his mouth to call after them, the wind blew in so violently that he was unable to make a sound. After this incident his stuttering became severe. From that point onward its severity went up and down, depending on the degree of emotional stress. Speech classes were of no avail. Psychotherapy was distinctly helpful, probably because it brought him to a generally better emotional adjustment. The symptom was not entirely overcome, however, even when the patient achieved a successful professional and family life. Training to fix cerebral dominance would probably have been helpful in childhood had it been available at that time.

Stuttering is sometimes called a neurosis. The justification for this practice lies in the type of case just described, in which anxiety has something to do with bringing out the speech disorder and making it worse. But with so much evidence for somatic compliance in the form of uncertain cerebral dominance, it is probably better not to throw stuttering into the general category of neurosis. It is a unique pattern in which psychogenic factors and cerebral peculiarities come to a focus on the act of speech.

Epilepsy

Epilepsy is based on a disordered condition of the brain which leads to periodic seizures. The most distinctive feature is a temporary loss of consciousness, but this may be accompanied by varying degrees of motor and autonomic perturbation. It occurs in something like one half of one per cent of the general population. This figure seems small, but it means that about 650,000 persons in the United States are afflicted with epilepsy. Although the disorder is not continuous, and the person is in a perfectly normal state between attacks, it constitutes even in its milder forms a serious handicap to adjustment.

Varieties of Epileptic Attack.—There are three main types of epileptic seizure or fit. Most dramatic and most frequent of occurrence are the *grand mal* attacks, which correspond to the idea most

people have of an epileptic fit. The second variety, *petit mal,* is not badly described as a smaller fit limited to a brief loss of consciousness with few motor accompaniments. The third variety, the least common of the three, has not yet been stably christened. It is variously known as *psychic seizures, psychic equivalents, psychic variants,* or *psychomotor seizures.* The reader will easily deduce from this fumbling with names that the third class of epileptic phenomena is still but little understood. The condition is an interesting one, however, and it may prove to be of considerable importance.

GRAND MAL.—Grand mal attacks are often preceded by warning symptoms generally called the *aura.* These may consist of dizziness, tingling, numbness, peculiar sensations in the head, discomfort in the abdomen. They last for but a few seconds and often do not give the patient time enough to prepare for the fit. The seizure itself is introduced by sudden muscular rigidity. Respiration is suspended so that the face turns dark, and if not supported the patient falls heavily to the ground. Almost at once the tonic phase (with muscular rigidity) gives place to the clonic phase of the seizure, characterized by rapid jerking movements of the muscles. The jaws are included in the jerking movements so that the tongue is often bitten and frothy saliva gathers on the lips. Autonomic disorganization is shown in involuntary urination and sometimes defecation. Within a few minutes the clonic phase gives place to coma. Consciousness may be regained almost at once or only after a matter of hours. Some patients have grand mal attacks very infrequently, perhaps once or twice a year. Usually the attacks occur more frequently, and in severe cases there may be several convulsions a day.

PETIT MAL.—The petit mal attack is of shorter duration and is limited to loss of consciousness, perhaps with a few small twitchings of the eye and face muscles. No mental confusion attends these attacks; there is simply a "mental black-out," starting and stopping suddenly and lasting from a few seconds to a minute or two. The effect may be so transient that other people set it down to a mere moment of absent-mindedness. Petit mal attacks may occur with great frequency, many times a day. While not as disturbing either to the patient or to those around him, they may constitute almost as severe a handicap as the grand mal attacks.

PSYCHOMOTOR ATTACK.—The third variety of seizure is characterized by at least a partial loss of consciousness without suspension of organized motor activity. There may be slight signs of tonic

rigidity for a moment, but thereafter the patient continues to perform purposeful acts. But he is completely out of touch with his environment, pays no attention to what is said to him, and presently returns to normal consciousness with no recollection of the attack. Psychomotor seizures may last for as much as an hour or even longer. Conceivably a person might commit acts of a violent and criminal nature during the course of an extended psychomotor epileptic attack. This possibility has to be considered when there is genuine confusion and amnesia for the period during which the offense was committed.

About one half of the victims of epilepsy have only one type of seizure. The other half have two and even three types, sometimes mixed in the same fit. The three varieties of attack are thus not three different kinds of disease. They can be assumed to spring from very similar conditions in the brain.

The Electroencephalogram in Epileptics.—At no point has electroencephalography proved of greater value than in the study of epilepsy. Whatever the nature of the underlying neural disturbance, it reflects itself with extraordinary clearness in the electrical activity of the cortex. The outstanding finding is that during seizures the EEG becomes radically abnormal, and that the pattern of abnormality is different for each of the three varieties of attack. The accompanying diagram (Figure 2) shows four tracings which are typical for grand mal, petit mal, a variant form of petit mal, and the psychomotor seizure. Each tracing begins with a section of normal record, affording a sharp contrast with the record during seizure. The tonic phase of grand mal is accompanied by very fast waves of high voltage. These give place in the clonic phase to waves still of high voltage having a characteristically erratic form. In petit mal attacks there is a typical association of slow waves with spikes, each pair coming at the rate of three a second. Sometimes the rate is even slower: at two a second it is called petit mal variant and is not usually associated with an overt seizure. The waves are shaped quite differently in psychomotor attacks. Voltage is abnormally high, and the waves frequently have square tops. They occur at the rate of between four and eight a second.

These findings were originally made by Gibbs, Davis, and Lennox.[36] The same workers were also able to show that 85 per cent of epileptic patients showed abnormal EEG's between seizures. These

[36] Gibbs, F. A., Davis, H. & Lennox, W. G., "The Electroencephalogram in Epilepsy and in Conditions of Impaired Consciousness," *Archives of Neurology and Psychiatry*, 1935, Vol. 34, pp. 1133–1148.

abnormalities consisted of short bursts of waves having higher than normal voltage and taking a form similar to those recorded during seizures. The waves that are typical of epilepsy can be obtained from all parts of the cortex. This suggests that the cerebral disorder is diffuse in character rather than focalized. All the findings

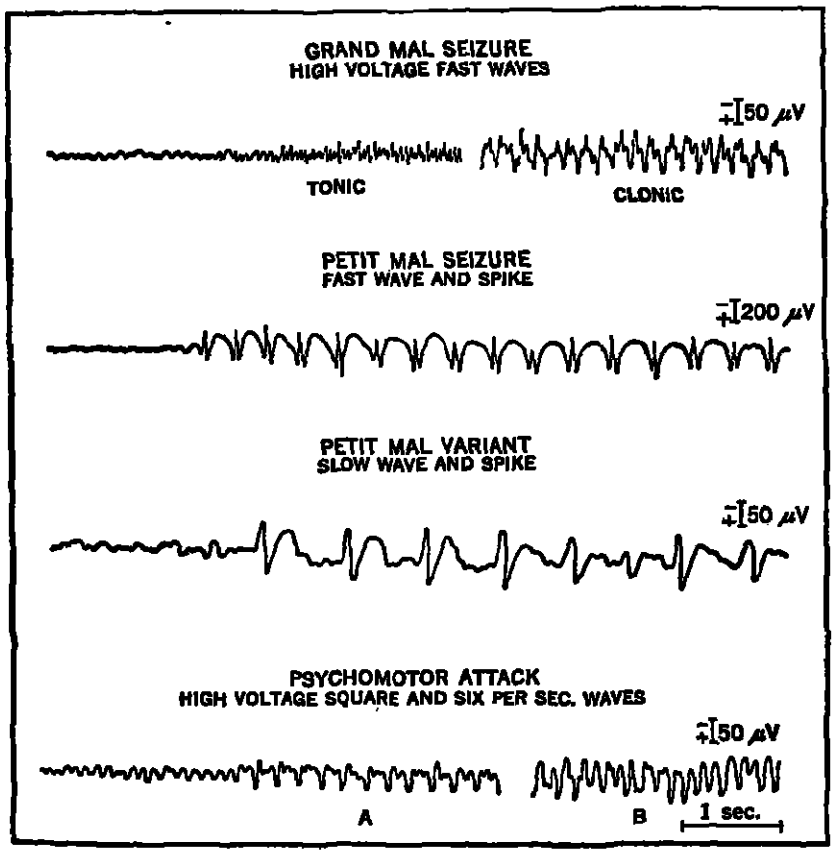


FIGURE 2

Representative electroencephalograms of four patients to show records taken before, and during, four different types of seizures: grand mal, two forms of petit mal, and a psychomotor attack. At the right is the perpendicular deflection made by a 50-millionth or 200-millionth volt potential, and at the bottom the time marked by one second. The left of each tracing is a portion of the person's normal record. The rest of the tracing was made during a seizure. The uppermost record is the tonic, and then, after an interval, the clonic phase of a grand mal convulsion. The second tracing is the three-a-second alternate wave and spike of petit mal. The third tracing is of the relatively rare two-a-second wave and spike called petit mal variant. The fourth tracing was taken during two phases of a psychomotor seizure. The tracings are about one-third their natural size. (From Gibbs, F. A., Gibbs, E. L. & Lennox, W. G., *Archives of Neurology and Psychiatry*, 1939, Vol. 38, p. 1112.)

suggest further that what is going on is an abnormal discharge of energy by the neurones of the brain.

It is reported by Gibbs and Gibbs that about 10 per cent of normal people show abnormalities in the EEG that are similar to those found in epileptic patients.[37] These people do not have seizures, but it seems not unlikely that they carry a certain predisposition in this direction. The findings may be compared with what we noticed in connection with stuttering. Predisposition to speech disorder is established by uncertain cerebral dominance, but by no means everyone so predisposed is in fact a stutterer. Similarly, the abnormal EEG probably points to a somatic compliance toward epilepsy, but only about one predisposed person out of twenty actually becomes epileptic. A further finding is of great importance, namely, that abnormal EEG's are found with great frequency in the relatives of epileptic patients.[38] Taking a group of over 200 relatives, it was found that 53 per cent (instead of the general average of 10 per cent) had abnormal records. Even more impressive is the fact that in only 10 per cent of epileptic patients were the records of both parents normal. Clearly the epileptic carries an hereditary predisposition to his disease.

Facts Bearing on the Causes of Epilepsy.—There is an unmistakable relation between convulsive seizures and brain injuries. While by no means all epileptics have a history of brain injury, in a certain number of cases the onset of symptoms follows head trauma or some other likely cause of cerebral damage. Tumor of the brain is particularly likely to be accompanied by seizures, and gunshot wounds in the head produce the same result in from 5 per cent to 20 per cent of cases. Lennox offers the following generalization: "Given a predisposition to seizures, almost any abnormality of the brain seems to be a precipitating factor." [39]

That the basic abnormality is of a chemical nature is suggested by the effect of drugs and chemical changes on the frequency of seizures. Acidosis has been found to diminish the frequency, while the opposite condition of alkalosis increases it. Seizures are increased by flooding the body with water and decreased by dehydration. Increased oxygen concentration of the blood is another condition that reduces the attacks. It is possible to control seizures to some extent

[37] Gibbs, F. A. & Gibbs, E. L., *Atlas of Electroencephalography*, Boston, F. A. Gibbs, Boston City Hospital, 1941.

[38] Lennox, W. G., Gibbs, E. L. & Gibbs, F. A., "Inheritance of Cerebral Dysrhythmia and Epilepsy," *Archives of Neurology and Psychiatry*, 1940, Vol. 44, pp. 1155–1183.

[39] Lennox, W. G., "Seizure States," in Hunt, *Personality and the Behavior Disorders*, *op. cit.*, Vol. 2, p. 946.

simply by diet and a well-planned health regimen. Still more effective, however, is the use of certain drugs such as phenobarbital and dilantin sodium. Very great improvement can often be obtained by means of these drugs, although the doses sometimes have to be held down because of other unfavorable effects on the body. This line of research holds the greatest promise for sufferers from epilepsy.

Concerning the nature of the brain disturbance, we know little more than can be deduced from the foregoing facts. An abnormal discharge of energy by cerebral cells, based on an hereditary predisposition, often but not necessarily accentuated as a result of brain trauma, probably chemogenic in character—this is about all that can be said. The influence of psychogenic factors seems to be distinctly secondary. It is true that the individual attack is often precipitated by a situation involving emotional stress. It does not follow from this, however, that emotional factors play a significant part in causing the patient to have epilepsy in the first place. There is one variety of psychogenic disorder, however, which closely resembles the grand mal attack and is sometimes mistakenly diagnosed as epilepsy. This is the *hysterical fit* that played such a large part in Mesmer's hypnotic cures. These convulsions can usually be distinguished from grand mal attacks by certain signs which indicate that the neural disturbance is less profound. In hysterical fits the patient does not bite his tongue, void his bladder, or hurt himself when falling. Otherwise the convulsion may look a good deal like a grand mal attack. One can speculate that such a symptom may be available only to the hysteric who also has a certain predisposition to cerebral dysrhythmia. In such cases one looks for a neurotic character structure and for possible cure by psychotherapy. Most convulsive seizures, however, are not psychogenic problems.

Effects of Epilepsy on Personality.—It might be supposed that severe and lasting epilepsy would produce marked mental deterioration. When tests of intelligence are chosen as the means of measurement, this deterioration appears but is not very great.[40] Mental ability as such remains unimpaired in a certain number of cases.

Concerning the effect of epilepsy on the personality as a whole, the evidence is rather more complicated. There has been much controversy over the existence of a distinct epileptic personality structure. Among those who believe that epileptics have a good

[40] Collins, A. L., "Psychometric Records of Institutionalized Epileptics," *Journal of Psychology*, 1941, Vol. 11, pp. 359–370; Collins, A. L., Atwell, C. R. & Moore, M., "Stanford-Binet Response Patterns of Epileptics," *American Journal of Orthopsychiatry*, 1938, Vol. 8, pp. 51–63.

many traits in common, there is further controversy as to whether the typical pattern precedes the illness or comes as a result of it.[41] L. P. Clark took the stand that it was possible to describe a typical epileptic personality, and that the traits composing this personality were present long before the illness began. He emphasized four traits in particular: eccentricity, supersensitiveness, emotional poverty, and rigidity. In the childhood histories he found a good deal of irritability, distractibility, and insistence on having one's own way. School records were impaired by inattention and restlessness. He found evidence also for quarrelsome, stubborn, selfish tendencies with a marked resistance to discipline. A shallow emotional life, along with frequent emotional outbursts, completed Clark's picture of the epileptic personality. Other workers who have studied epileptics have confirmed a number of Clark's observations as to current traits, but have not been convinced that a typical personality structure existed before the onset of epilepsy. They tend to emphasize explosive excitability, restlessness, moroseness, and a certain antagonism toward society.

The discoveries made by means of the EEG, taken together with the facts we have studied about brain-injured children, lead to a far better understanding of this whole problem. It is possible to group the so-called epileptic traits into two classes: (1) those about which we can make the guess that they go with abnormal conditions in the brain, and (2) those about which we can make the guess that they result from the fact of being an ill person in a society of well people. The first group of traits may well be present before overt symptoms of epilepsy develop; they may in fact be characteristic of all people who have sharply abnormal EEG's. We saw that brain-injured children tended to be overactive, distractible, poorly controlled, inconsiderate of others, insistent on their own wants, resistant to discipline and restraint. Apparently an injured and inadequately functioning brain produces this group of traits that is so inimical to ordered and socialized living. It is not far-fetched to assume that a brain with a tendency toward dysrhythmia would produce some of the same characteristics. On the other hand the fact of illness, especially when the affliction is so overwhelming and so meaningless, makes it necessarily hard for the patient to take life in a calm and joyous spirit. Especially if he has grand mal attacks, he knows that every so often he is likely to pass into a state of unconsciousness which is terrifying to others, which makes people want to avoid him,

[41] This material is summarized by Lennox in Hunt, *op. cit.*, pp. 953–963; extensive references are given

which precludes the holding of most jobs and such activities as driving a car—in short, which handicaps him severely in leading a satisfactory life. That a person should become morose and oversensitive under such circumstances, that he should appear self-centered, emotionally shallow, a little antagonistic toward others, is a most natural outcome of his psychological situation. The epileptic personality can thus be readily conceived as the combined result of an abnormal brain condition and a social handicap.

SUGGESTIONS FOR FURTHER READING

For the student who wants to review the anatomy and functions of the nervous system, the concise but clear book by Stanley Cobb is recommended: *Fundamentals of Neuropsychiatry* (Baltimore, Williams & Wilkins, 1941). A compact review of the effects of physiological factors on behavior is given by N. Shock in Hunt's *Personality and the Behavior Disorders* (New York, The Ronald Press Co., 1944), Vol. 1, Ch. 19. Cobb's Ch. 18 in the latter work is a good introduction to the subject of brain lesions. An excellent book on the endocrine glands is R. G. Hoskins' *Endocrinology: The Glands and Their Function* (New York, W. W. Norton & Co., 1941).

Goldstein's important contributions to the study of brain injury can be gleaned from his *Aftereffects of Brain Injuries in War* (New York, Grune & Stratton, 1942). Available in S. S. Tomkins, *Contemporary Psychopathology* (Cambridge, Harvard University Press, 1943), are two papers which are helpful in grasping Goldstein's notion of the abstract attitude. The first of these is a paper by Goldstein himself (Ch. 22), and the second is a superb clinical description by Eugenia Hanfmann (Ch. 23). The fact that both papers are about schizophrenia rather than brain injury does not lower their value as explications of the abstract attitude.

A recent book by A. A. Strauss and L. E. Lehtinen, *Psychopathology and Education of the Brain-Injured Child* (New York, Grune & Stratton, 1947), has already provided material for this chapter; it contains a summary of the researches performed by Heinz Werner and Strauss, and also goes into the question of training. R. M. Brickner's *The Intellectual Functions of the Frontal Lobes* (New York, The Macmillan Co., 1936) is a good example of the detailed study of a single case. For prefrontal lobotomy the standard reference is *Psychosurgery* by W. Freeman & J. W. Watts (Springfield, Ill., C. C. Thomas, 1942). A short paper by the same authors constitutes Ch. 21 in Tomkins, cited above.

For the subject of aphasia a standard reference is S. A. K. Wilson's *Aphasia* (London, Kegan Paul, 1926). The retraining of aphasics is described in the second part of Goldstein's *Aftereffects*, mentioned above. On stuttering, the book by S. T. Orton, *Reading, Writing, and Speech Problems in Children* (New York, W. W. Norton & Co., 1937) is to be recommended for its clarification of the problem of cerebral dominance.

There are two excellent books on epilepsy: *Science and Seizures* (New York, Harper & Bros., 1941) by W. G. Lennox, and *Convulsive Seizures* (New York, J. B. Lippincott Co., 1943) by T. J. Putnam. Lennox has a chapter in Hunt (*op. cit.*, Ch. 31) which summarizes the subject.

CHAPTER 14

THE PSYCHOSES: SOME COMMON SYMPTOM SYNDROMES

In any given year the admissions to mental hospitals are distributed roughly as follows: schizophrenia, 20 per cent; manic and depressive conditions, 14 per cent; disorders with cerebral arteriosclerosis, 12 per cent; senile psychoses, 9 per cent; alcoholic conditions, 10 per cent; general paresis, 6 per cent; and the remainder scattered in various categories.[1] Of the disorders named, which constitute the main problems faced by mental hospitals, we have thus far studied only the alcoholic conditions. In this chapter we shall take up general paresis, the manic and depressive conditions, and the psychoses associated with old age. A separate chapter will be reserved for schizophrenia, the most common and the most thoroughly studied of the psychoses.

The subject matter of the preceding chapter was organized around known conditions of abnormality in the brain. We pursued the theme of cerebral injury and cerebral abnormality wherever it might lead. Under chemogenic disorders we noticed some of the effects of changes in the internal environment. Under brain injuries we progressed much farther toward an understanding of the functions of higher centers. In connection with stuttering we came across a completely different kind of cerebral peculiarity, namely, mixed dominance by the two hemispheres. Still another abnormal condition, cerebral dysrhythmia representing abnormal discharges by cerebral neurones, confronted us in the study of epilepsy. In pursuing the theme of the brain we neglected for the time being the question of classification. The disorders studied in the last chapter vary a great deal in character, in seriousness, and in method of treatment. They are alike only in that they can be correlated with specific abnormalities in the brain. Otherwise they exhibit great diversity.

The distinguishing mark of *psychosis* is a serious loss of contact with reality. Roughly speaking, a disorder is called a psychosis if the patient's condition meets the legal criteria of *insanity:* the pa-

[1] *Patients in Mental Institutions, 1942*, U. S. Department of Commerce, Washington, U. S. Government Printing Office, 1945.

tient is either unable to take care of himself, or is dangerous to others, or both. When this definition is applied to the disorders studied in the last chapter, it becomes apparent that most of them occupy a dubious position. Certainly stuttering is not a psychosis. Delirium tremens and the Korsakov syndrome, on the other hand, entail falsifications of reality that certainly qualify as psychotic. But the rest of the disorders cannot be so easily tossed in or out of the category of psychosis. Epilepsy entails a loss of contact with reality which, however, is strictly temporary. Only in the most serious cases is the patient unable to take care of himself except during the actual fit. Aphasic patients are not out of touch with reality, but sometimes their linguistic confusion is so great that they can by no means take care of themselves comfortably without supervision. Is a brain-injured patient who has lost the abstract attitude to be considered out of contact with reality? This was certainly the case with Martha Ottenby, but in less severe cases the matter is by no means as clear. Brain-injured children may offer difficult problems of management, but only in extreme cases are they considered insane. In short, most of the disorders taken up in the last chapter do not really fit the rough category of psychosis. They do not fit any of the rough categories that are used to classify disordered personal reactions. It is more profitable to group them and to understand them according to their relation to abnormalities in the brain.

In this chapter, however, we turn to conditions that are indubitably psychotic. The victims of these conditions are clearly out of touch with reality, clearly unable to manage their own lives, unmistakably in need of institutional care. They are "insane" and "out of their heads" in the usual meaning of those expressions. In some of the disorders, brain damage plays an important part; in others, somatic factors have thus far not been established. Psychogenic factors play a contributory part, the nature of which we shall examine as we proceed.

General Paresis

In the historical introduction to this book we described the series of steps by which general paresis was isolated from other disorders and correlated with a specific condition in the brain. The typical symptom-complex included delusions of grandeur, mental deterioration, and progressive paralysis. The brain condition, first known from autopsy studies to consist of a widespread destruction of

nervous tissue, was later found to be produced by the infectious agent, *treponema pallidum,* that is responsible for syphilis. In certain cases of syphilis, though by no means the majority, the infection makes its way into nervous tissue and eventually produces a destructive effect. It may be many years before this effect is great enough to be noticeable in behavior. One of the tragic features of general paresis is that the early deterioration of behavior generally passes for a reprehensible weakening of the patient's moral fiber. Only later is it realized that he is the victim of a serious cerebral disease.

General Course of the Disease.—In its earliest stages the disorder takes the form of a subtle deterioration both in character and in mental and physical stamina. The patient finds it harder to keep his mind on his work, to remember appointments and the details of business, to maintain the organization of his daily life. Presently it may appear that his judgment is failing. He is planning unwise ventures and perhaps lending and borrowing money freely without keeping adequate accounts. Here and there on his clothing an undone button or an unaccustomed amount of dirt shows that he is becoming inattentive in the matter of personal neatness. Thoughtfulness and courtesy give place to cantankerous irritability. Sustained interest and affectionate relationships deteriorate into displays of exaggerated emotion followed by periods of indifference. Possibly the patient becomes excessive in the use of alcohol and in the search for promiscuous sexual pleasure. Possibly he merely begins to steal golf balls or draw foolish pictures in the margins of business memoranda. The early stages show changes that are more or less characteristic for all kinds of brain damage: irritability, restlessness, distractibility, weakened memory for recent events, shaky judgment, and poor emotional control.

If the disease progresses, the paralytic phenomena become increasingly prominent. General paresis affects all parts of the cortex and extends to lower centers. Its effects are therefore seen in writing and speech, in locomotion, in all finely coordinated activity, and even in reflexes such as the knee jerk and pupillary reflex to light. Speech is a particularly sensitive sign. The earliest symptoms of defect may consist of nothing more than an occasional hesitation, slurring, or mispronunciation. In the course of time the patient's speech may cease to be intelligible, words or syllables being omitted or run together or jumbled into a disintegrated, stuttering series of sounds. A similar disorganization can be traced in handwriting. Tremor disturbs the whole script, besides which there are omissions, elisions

a running together of words, and great variations in pressure. The spotty, erratic appearance of the handwriting is curiously similar to the spotty, "moth-eaten" appearance of the brain at autopsy. Walking is unsteady, with frequent stumbling and occasional falls. The patient is easily fatigued and may have an acute sense of his loss of strength.

With further progress of the disease, both the paralysis and the dementia become increasingly severe. The patient is likely to have seizures which resemble apoplexy or epileptic attacks. As his speech, handwriting and locomotion reach low levels, his memory correspondingly fails, and he becomes incapable of the simplest mental operations. He is disoriented even within the hospital, sometimes being unable to find his room, and his contacts with the outside world, even with his closest relatives, are completely severed. In the days when methods of treatment were still unknown, the end point of this deterioration was early death.

Individual Variations in the Pattern of Symptoms.—Thus far we have described the course of the disease as if it consisted of two elements: paralysis (motor deterioration) and dementia (mental deterioration). The original or classic pattern included a third element: delusions of grandeur. Increasing skill in diagnosing general paresis has shown that this third element is by no means invariable. For a time it was customary to distinguish three forms of paresis: (1) the *exalted* or *expansive* type having grandiose delusions, (2) the *depressed* type having characteristic symptoms of melancholia, and (3) the *demented* type showing progressive deterioration without marked emotional upsets or delusional ideas. Even this classification, however, is too simple and arbitrary to fit the clinical facts. Some paretics alternate between excitement and depression. Some develop elaborate delusions of persecution. In some cases there is extreme agitation with constant restlessness, insomnia, progressive emaciation, and death from exhaustion, while other patients with the same infection merely become feeble, discouraged, and stupid. Even on the physical side there are pronounced differences in the onset and course of the disorder. In a certain number of cases the first detected symptom is a convulsive attack or short period of unconsciousness.

These wide individual variations make the picture of general paresis more complicated, but they need not render it confusing. General paresis is a physical disease of the brain. Why it strikes some syphilitic patients and not others we do not know; the ques-

tion of differential susceptibility remains for future research to solve. But at all events the disease strikes very different people who have lived very different lives. It attacks people with different physical constitutions, different abilities, different predispositions. It strikes brains in which different personal histories have been recorded and by which different emotional attitudes have been learned. Like any other disease, general paresis does not attack a schematic organism and produce a standard effect. It attacks a living organism and injures a brain which, having lived part of a life, has become the seat of innumerable personal attitudes. Similar reasoning can be applied to all mental diseases. This outlook helps to simplify the problem of so-called "mixed forms" and sometimes amusing mixed diagnoses such as "schizophrenia with manic-depressive features and senile complications." Every case of general paresis is a case of general paresis plus features of the individual personality complicated by predispositions to other forms of disorder.

In view of this discussion, and recalling what we learned in the last chapter about cerebral dysrhythmia and epilepsy, it becomes easy to guess why certain cases of paresis show convulsions as the initial symptom. If we were right in assuming that cerebral dysrhythmia indicates a predisposition toward convulsive attacks, then the brain injury produced by *treponema pallidum* might well set off these attacks before creating any other visible symptoms. Similarly, if paresis attacks a person predisposed to mania, or depression, or manic-depressive cycles, the resulting disorder will be colored by the predisposition as well as by the injury to neural tissue. Again, if a person has restrained with difficulty his aggression, his sexuality, or his desire for personal glory, the lowered control occasioned by brain disease will release these strivings into vigorous and fantastic expression. But if he has always longed for peace and rest, he will become a rather quiet paretic; if he has always struggled to suppress anxiety, he will become an agitated one; if he has carried a heavy load of guilt, his general paresis will take the form of melancholy self-accusations. It is always necessary to consider both the disease and the person who has the disease.

The curious ideas expressed by paretic patients reflect both their strivings and their dementia. This is best revealed in the delusions of grandeur. They can be understood as wish-fulfillments, but their absurd and extravagant character clearly reflects the decreased control and judgment that betoken mental deterioration. The patients fancy that they have the strength of prize fighters, that they can lift colossal weights, that they are destined for championships at the next

Olympic games. Fabulous wealth is in their possession, marvelous inventions are springing from their brains. One morning in a hospital ward a patient began inviting everyone to his country estate for the following week end. Each staff member and each patient in the ward was asked to set down his name on a piece of paper to signify his acceptance of the invitation. The attractions were specified in great detail: the rolling acres, the vast house, the riding horses and tennis courts and golf course, the beautiful women who would grace the occasion. In a confidential whisper each guest was advised that these beautiful women would be available for whatever purposes might come to mind. The patient thoroughly enjoyed his plans for the week end and showed not the slightest sense that they were incongruous with his present situation. In the meantime he was quite willing to humor the staff by submitting to examinations and routine procedures. By the time the week end arrived he was deep in an entirely different chapter of fantasy.

When the patient is depressed the content of his thought is equally unrestrained. He stands accused of the gravest faults; the hopelessness of his condition beggars description. Ideas of persecution are also on a large scale and rarely show the stable elaboration and struggle after logic that characterized the delusional system of L. Percy King. A paretic patient is incapable of organizing a stable and continuing world of fantasy that persists from day to day. Just as his memory is weak for the real events that occur, so it is weak for the events of yesterday's fantasy.

Treatment of General Paresis.—In the last century general paresis was regarded as a fatal ailment. At least 80 per cent of the patients died within a few years of the onset. Today the situation is so changed that only 5 to 10 per cent of paretic cases come to a fatal end. General paresis responds somewhat favorably to the same drugs that are used to cure syphilis. High hopes have been entertained for salvarsan and tryparsamide, but full remission of symptoms proves to be obtainable in only a small proportion of cases treated with these preparations. Much better results are obtained by fever therapy. The patient is inoculated with tertian malaria which produces bouts of high fever reaching 104 degrees, sometimes even more. The infection can be terminated with quinine if the fever proves too taxing to the patient. Even better controlled is the more recent technique of producing artificial fever by placing the patient in an air-conditioned warmed chamber. The high body temperature is apparently fatal to the *treponema* so that further

destruction of nervous tissue is prevented. Complete remission of symptoms is obtained in some 30 to 40 per cent of cases so treated, and partial remission in another 30 or 40 per cent.

Destroyed or injured nervous tissue cannot be replaced. Technically speaking, general paresis can only be arrested, not cured. Most patients do not regain the mental level at which they functioned before illness. Nevertheless in many cases there is an improvement following malaria therapy. This must be attributed largely to reduction of the inflammation prevailing in injured tissue, and the restoration of an optimal chemical environment for the tissue that has escaped injury.

The treatment and control of syphilis are being reflected in a decreased incidence of general paresis. In countries where the medical campaign against syphilis is vigorously prosecuted, it seems likely that general paresis will become a rather rare disease.

Depressed States

Joy and sorrow are obvious and important features of human life, and their exaggerated forms, mania and melancholia, were among the earliest mental symptoms to be recognized by medical men. In some respects they seem to be opposites, but long before modern times it was observed that in certain patients mania and melancholia succeeded each other. On the whole the opinion prevailed that these were cases in which one disease transformed itself into another. Toward the middle of the last century, however, there were frequent suggestions that mania and melancholia belonged together in a single disease process, both being exaggerations in the sphere of mood. Designations such as "cyclical insanity" were from time to time proposed. Finally, in 1899, Kraepelin introduced the term *manic-depressive insanity*, including under this heading not only the alternating forms but the simple manias and melancholias as well. "In the course of years," he wrote, "I have been more and more convinced that all of these pictures are but forms of a single disease process. Certain fundamental features recur in these morbid states notwithstanding manifold external differences."[2] Thus the concept of *manic-depressive psychosis* became firmly established in psychiatric thought.

There is no question that these two disorders of mood frequently occur in the same person. In some cases, however, depression oc-

[2] Quoted by Jelliffe, S., "Some Historical Phases of the Manic-Depressive Synthesis," *Journal of Nervous and Mental Diseases*, 1931, Vol. 73, pp. 353–374, 499–521.

curs without any tendency toward subsequent mania, and in other cases mania occurs as the sole symptom. Furthermore, there are certain varieties of depression—*involutional melancholia* and *reactive depression*—which have never been included in the concept of manic-depressive psychosis, although it would tax any clinician severely to distinguish some of the cases on the basis of symptoms alone from the depressions that later give place to mania. We have seen throughout this book that psychiatric classification is full of pitfalls. With the neuroses and other psychogenic disorders the question of classification is not really important. Here the situation is different. Mistaken classification impedes the search for somatic causes. Nevertheless the classification of the affective disorders is far from satisfactory, and the relation between manias and depressions is anything but clear. We shall start our account at a descriptive level, considering depressed states and manic states separately. Then we can return to mood cycles and the problem of manic-depressive psychosis.

Characteristics of Depression.—The typical symptoms of depression can be grouped under the headings of underactivity and a dejected mood. In their mildest form they shade imperceptibly into a normal state of discouragement. The underactivity shows itself in slowness of movement and speech. Exertion is experienced as difficult; the patients prefer to sit in one place with folded hands, and cannot summon the energy to perform the simplest errands. If questioned they speak slowly, in a low tone, with great economy of words, and they prefer not to speak at all. There is a similar retardation in the sphere of thought. Ideas do not come to mind and a great inertia seems to block the solving of problems. As one patient described it, "At these times my brain feels paralyzed; I have not the strength or ambition to do anything. . . . I have the impulse to act, but it seems as if something shuts down and prohibits action."[8] Illustrative of the retardation in thought is the patient's reaction to reading. What is read seems to call up no associations; it is not assimilated, and the whole business of keeping up continuous attention is felt as painfully exhausting.

The dejected mood may take the form simply of unrelieved sadness. The patient cannot be cheered; everything looks gloomy to him. If he talks about his troubles, he paints a picture of utter hopelessness. Some patients concentrate their woes on bodily complaints,

[8] White, W. A., *Outlines of Psychiatry*, New York and Washington, Nervous and Mental Disease Publishing Co., 13th ed., 1932, p. 161.

feeling sure that they have an incurable disease or that their internal organs are rotting away. More characteristic, however, is a conviction of sinfulness and worthlessness. The patient believes he has committed unforgivable sins and is responsible for all the misery he perceives around him. He is full of self-accusations, and the one theme on which he has strength enough to converse is that of his wickedness and the dire punishments that must be in store. The mechanism of projection seems to be generally unavailable to depressed patients. Their minds are full of self-blaming, and they do not lift this burden by transferring the blame to outside persecutors. In severe cases the hopelessness is so profound that the possibility of suicide cannot be discounted.

It is convenient in the description and diagnosis of these patients to mark off three degrees of depression. The first level is generally called by such names as mild or subacute depression or simple retardation. The second level is called acute depression or acute melancholia. The third level, characterized by immobility and speechlessness, is generally referred to as depressive stupor. These levels cannot be sharply separated. Each degree represents a little more underactivity and a little more dejection than the previous one.

Example of Depression.—In our historical chapter we mentioned the autobiography of Clifford W. Beers, a book which did a great deal to establish the mental hygiene movement. Beers was in a psychotic condition with ups and downs for three years. The seriousness of his condition first become fully apparent when he tried to commit suicide by throwing himself out the window of his bedroom. For the next two years he was in a depressed state, complicated in various ways by hallucinations and other less usual features. At the end of this time he changed rather quickly to a manic condition. His account of his experiences will provide us with illustrations for both conditions.[4]

Because of injuries sustained in his jump from the window, Beers was first taken to a general hospital in his home city. He conceived that he was under a criminal charge for attempted suicide, and that his crime must be known to everyone in the city. "The public believed me the most despicable member of my race. The papers were filled with accounts of my misdeeds." The hospital was located on the street that led to the university athletic field, and a crowd of students and graduates went by on their way to a class-day game.

[4] Beers, C. W., *A Mind That Found Itself*, Garden City, N. Y., Doubleday, Doran & Co., 1931. The depressed phase of the illness is described on pp. 11–87, the manic phase on pp. 87–189.

Beers was sure that every one of these people loathed him for having disgraced his alma mater. "When they approached the hospital on their way to the athletic field, I concluded that it was their intention to take me from my bed, drag me to the lawn, and there tear me limb from limb." Some time later he was taken to a sanatorium in another community. "The day was hot, and, as we drove to the railway station, the blinds on most of the houses in the streets through which we passed were seen to be closed. I thought I saw an unbroken line of deserted houses, and I imagined that their desertion had been deliberately planned as a sign of displeasure on the part of their former occupants. I supposed them bitterly ashamed of such a despicable townsman as myself."

Nearly two years later Beers was still convinced that he was to go on trial. His brother, who visited him often, was apt to comment favorably on his health and to add, "We shall straighten you out yet." To Beers this was an ambiguous phrase "which might refer to the end of the hangman's rope, or to a fatal electric shock." He interpreted his improving physical health as a sign that the doctors were fattening him for the slaughter after his trial which, of course, could have but one outcome. Suicide seemed a preferable fate, and for many weeks he devised a series of schemes to bring about this result. Everything that happened only served to remind him of his misery. He could take no pleasure in his daily walks with his attendant, for example, because he was sure that everyone knew his black record and impending punishment. "I wondered why passers-by did not revile and stone me. It was not surprising that a piece of rope, old and frayed, which someone had carelessly thrown on a hedge by a cemetery that I sometimes passed, had for me great significance."

These examples show the pervasive effect of the dejected mood. Even quite incidental impressions receive a distorted meaning which fits them into the patient's depressed state of mind. His sense of sin and worthlessness is so dominating that he can no longer interpret experience in any other terms. This exaggeration of the self and its problems is characteristic of other psychotic conditions besides depression. We shall see presently that it is true of mania, and we have learned already from the experiences of L. Percy King that it occurs in paranoid schizophrenia. King had the same tendency as Beers to twist the meaning of commonplace events so that they bore on his all-consuming problem. He could not see a sign in a window without thinking that its words accused him, or threatened him, or represented a trap set by his pursuers. King, however,

had enlisted the service of projection which spared him the burden of self-blame. He felt himself the victim of a purely malicious persecution, whereas Beers believed himself utterly contemptible and worthless.

Agitated Depressions.—There is another clinical syndrome that includes depression without retardation of action or thought. There is the same mental content of hopelessness, worthlessness, and self-accusation that appears in the retarded depressions. Thoughts of death are prominent and suicide is a real danger. But instead of sitting silently in an attitude of despair, the patient is extremely active and talkative. He cannot keep still, he cannot sleep, he can only pace up and down with moans and sighs and wringing of the hands. The existence of this variant form of depression makes it clear that dejected mood and underactivity do not necessarily go together. As a matter of fact patients are sometimes found who combine mood and activity in the reverse pattern: action and thought are seriously retarded, but the mood is one of exaltation. The presence of these mixed states greatly complicates the search for underlying chemogenic or histogenic factors.

The following is given by Strecker and Ebaugh as a fairly typical case.[5] A fifty-three-year-old woman of apparently healthy ancestry and good educational background was admitted to the hospital in a highly agitated and deeply depressed condition. As a young woman she had been quiet, conscientious, and self-sacrificing, but distinctly sociable, well-liked by her friends, and a capable manager of the house. At twenty-five she married a man who proved to be a hopeless alcoholic and drug addict. This was the beginning of a life that grew more and more difficult. The patient was constantly worried about her husband, her children, and the family finances. When the husband's deterioration made further home life impossible, she separated from him and took to running a rooming house in order to support herself and the children. For five years before her illness she had been unable to secure help and was constantly exhausted by the work of the house. As a result she had severe attacks of grippe every winter and was in a badly run down condition. The psychosis came on suddenly. She began to moan, pace up and down, and wring her hands. She felt herself a wicked sinner for having left her husband; she ought never to have been born because she brought such trouble on the whole world.

In this condition she arrived at the hospital. She was in a state

[5] Strecker, E. A. & Ebaugh, F. G., *Practical Clinical Psychiatry*, 5th ed., Philadelphia, The Blakiston Co., 1940, pp. 356–360.

of almost ceaseless activity, squirming in her chair, walking rapidly about, pulling at her hair, pinching her cheeks, biting her fingers. Her deeply lined face bore an expression of unutterable woe. At times she was frankly terrified; at other times she shrank from a nurse's hand because she felt herself unworthy to be touched. She believed that all her family had been killed because of her wrongdoing. "Oh, what have I done!" she would exclaim. "Can't I be saved? What is in store for me?" Then she would get started on her poverty: "Not a cent left, not a cent." She made one unsuccessful attempt at suicide. In spite of her miserable state and violent self-accusations, she was not disoriented or hallucinated nor were there any discernible gaps in her memory. At the end of a year she was well on the way to recovery, with the beginnings of insight into the distorted nature of her previous ideas.

Relation of Depression to Stress.—The case just described raises an important question. What is the relation between depression and stress—either the stress of external difficulties and physical ill health or the stress of emotional conflict? This woman's psychosis cannot be understood apart from her personal history. Her life had become a constant struggle against mounting difficulties. Her physical vigor was steadily declining. The menopause had occurred some four years earlier. She was passing into the status of being an old woman, yet the future held no prospect of relief or rest. Avenues to a brighter and better life were no longer open; it was clear that she was going to be a rooming house keeper until she collapsed or died. If under these circumstances she had shown no discouragement and no apprehension about the future, she would have been pointed out as an exceptionally cheerful and plucky person. Would she have broken down if her life had been happy and successful? There is no way of knowing whether the stress was a necessary condition of breakdown, but the best guess would seem to be that it made an important contribution.

This case might have been offered as an example of *involutional melancholia;* in fact, that is the diagnosis attached to it by Strecker and Ebaugh. The concept of involutional psychosis is well established in current psychiatry. It refers to those disorders, mostly depressive in character but occasionally with a marked paranoid coloring, which have their onset in the involutional period—in women between the ages of forty and fifty-five, in men between fifty and sixty-five. If a patient has a history of previous disorders which reappear during the involutional period, his psychosis is not classed

as involutional. This diagnosis is reserved for cases having their first onset within the involutional age range. The reader may find this custom arbitrary and confusing. As a matter of fact it does represent a confusion between two principles of classification. If we stick to symptoms, the case just described is an example of agitated depression. Calling it an involutional psychosis involves a guess as to *causes*. The patient has just passed through the menopause, and this important physiological change is inferred to be a cause of her disorder.

The correlation between symptom picture and time of onset is far from perfect. The depressions of the involutional period are not always of the agitated type, nor are agitated depressions confined to the involutional period. It is thus a mistake to think of the physiological changes of this period of life as specific causes of a certain type of disorder. Nevertheless there seems to be some kind of relation, probably best conceived as that of contributing cause. The glandular changes of the involutional period constitute an important added source of stress.

The middle years of life generally bring a narrowing of personal horizons. The future no longer seems boundless. What one will accomplish in the future now has to be gauged from what one has accomplished in the past, and while there may be room for optimism it is no longer the diffuse and unrestricted optimism of younger years. This sense of limitation is increased by the decline of physical vigor. Both bodily and mental energies can no longer be treated in prodigal fashion. To these sources of stress are added the physiological changes that accompany the decline of sexual functions. These changes are earlier and more drastic in women, and involutional psychoses occur with decidedly greater frequency in women. Even when the menopause is not accompanied by mental disorder, it is apt to be a period of strain. Restlessness and fatigue, feelings of discomfort, autonomic instability, sudden crying spells give testimony to the difficult chemical readjustments that are in progress. These symptoms are often improved by the giving of estrogen, replacing the hormone that is being inadequately produced by the sex glands and thus allowing the whole chemical readjustment to proceed at a slower rate. Some workers claim that estrogenic therapy has a beneficial effect on the milder involutional psychoses, but others dispute this finding.[6]

[6] Davidoff, E., "The Involutional Psychoses," in Kaplan, O. (ed.), *Mental Disorders in Later Life*, Stanford University, California, Stanford University Press, 1945, pp. 199–200; Cameron, N., in Hunt, *Personality and the Behavior Disorders*, New York, The Ronald Press Co., 1944, Vol. 2, pp. 884–885.

While we are on the subject of stress it is appropriate to mention another variety of depression, the so-called *reactive depression.* A reactive depression is distinguished from other kinds of depression not by its symptoms but by the circumstances of its onset. When depression sets in as the direct consequence of extremely frustrating or tragic circumstances, especially in a person who has never before shown signs of depression, it is classed as reactive. Sometimes it is even described as "neurotic depression," a term which might be considered appropriate if a neurotic personality structure has contributed heavily to the frustrating situation. From a theoretical point of view the concept of reactive depression only adds to the existing confusion. Stress probably plays a part in most depressions; in reactive depressions it merely plays a proportionally greater part. But in practice there is considerable value in the notion of reactive depression. If the patient becomes depressed only as a result of intense stress, perhaps only as a result of his anxiety-laden attitude toward that stress, there is a good chance that he may be restored to health by psychotherapy. The situation might be described as follows: the patient's predisposition to have a psychosis is not very strong, but it is sufficient to produce a psychotic reaction if he is under the stress of severe neurotic conflict. Resolution of neurotic conflict takes away the stress that was maintaining the psychotic reaction. Thus we may say that a diagnosis of reactive depression means simply that the elements of circumstance and emotional maladjustment are prominent in the case. They are so prominent as to be considered the most favorable point of therapeutic attack.

In summary, it is clear that stress plays a contributing part in the onset of most depressions. This part is largest in the so-called reactive depressions, where large external obstacles combine with large emotional obstacles to produce severe frustration and despair. It is relatively large in the involutional depressions, where the shrinking personal horizons and diminished energy of middle life combine with major hormonal readjustments to lower the threshold for discouragement. It is smallest in those cases of depression, occasionally agitated but usually retarded, which start before the involution period and which bear no perceptible relation to the patient's personal life. Correspondingly, an increased importance must be allotted in the latter cases to predisposition or to whatever process one believes to be the immediate cause of depression.

Attitude Toward Self in Depression.—However strong the contributing effect of stress may be, it is rarely possible to regard

depression as a normal or proportionate response. The actual situation may be frightful, but there is an element in the depressed reaction that cannot be considered an appropriate response to catastrophe. This peculiar element is displayed in both of the cases we have used to illustrate depression. It consists of a profoundly altered attitude toward the self. The patient seems bent on reproaching himself and punishing himself without limit. In the case of the woman who ran the rooming house we might say that the life situation warranted profound discouragement, but there was certainly no reason for her conviction of sin, for her taking the blame in regard to the failure of her marriage, or for her feeling that she had brought all her relatives to their death. Here her reaction seems clearly out of bounds, just as Beers was out of bounds when he attributed the closed houses to his sin and the shouts of the crowd to his having disgraced his college. Both patients later recovered from their illness and realized the absurdity of their self-accusations. The shift from depression to mere discouragement represents a shift from being out of one's head to being in it again.

Two features of the attitude toward self are of particular interest. The first is the utter *collapse of self-esteem.* The patient can hardly use words strong enough to express the depth of his degradation and worthlessness. He constantly attacks and punishes himself in words, and will sometimes even do so in deeds if not carefully protected. It is as if his conscience went out of control and suddenly began to confront him with every conceivable shortcoming. One way to conceive this change is to say that there is a sharp increase of inwardly directed aggression. So vigorous is the attack on the self that no room is left for self-esteem. On the other hand it is equally true that the patient is abnormally *preoccupied with self.* He brings every stimulus into relation with his troubled self and spends practically all his time contemplating his miserable state. He is so wicked that he cannot stop thinking about it. As a consequence his interest is very fully withdrawn from the environment, which serves now only as a series of reminders of his wickedness. Well-meaning relatives and friends sometimes try to interest the patient in the world around him as a means of getting him "out of himself." We have seen how Beers responded to his brother's attempts to cheer him up. This is typical of the results obtained by direct efforts to break up the patient's preoccupation.

The cause of this changed attitude toward self, which is the most characteristic symptom of depression, remains the central problem in understanding this type of disorder. The answer has still

to be found. Psychogenic hypotheses have been proposed, but they are not widely accepted. Such an hypothesis has the task of explaining why the patient suddenly becomes overwhelmed by so large a quantity of guilt and inwardly directed aggression. It is necessary to assume that circumstances have aroused a tremendous amount of aggression, yet somehow conspired to throw it back upon the self.[7] A majority of workers look for the root of the disorder not in the dynamics of aggression and guilt but rather in some kind of somatic change that produces a sharp downward alteration in the feeling of well-being. The patient experiences a profound loss of buoyancy and interprets it to mean that he is a worthless and sinful creature. In point of close reasoning this hypothesis is no better than the other. There is certainly a wide gap between a somatic loss of well-being and the mental state of depression. But the somatic hypothesis holds the inside track because of clear evidence that a tendency to react with depression runs in families. We shall consider this question later. Here we merely note that a genogenic factor can be more easily conceived as causing a peculiar somatic instability than as causing a special tendency for blocked aggression to be turned inward.

Manic States

Manic states represent in certain respects the exact opposite of depressed states. The depressed patient is typically underactive, the *manic overactive. The depressed patient is dejected, the manic elated.* Self-esteem, which is at a minimum in depression, is joyfully boundless in mania. On these points the contrast is perfect. Whether it extends throughout the psychophysical system we shall consider later after describing the behavior of manic patients.

Characteristics of Mania.—In its mildest stages, often called hypomania or subacute mania, a manic state is difficult to distinguish from a normal state of good spirits and high efficiency. There is a certain amount of overactivity, expressing itself both in motor channels and in a free flow of ideas and speech. There is also a show of confidence and enterprise that may drift over into boastful self-assertion. Ordinary people are apt to envy a patient in this stage, and business offices consider him ready for promotion. The signs that

[7] Cf. Freud, S., "Mourning and Melancholia," in *Collected Papers*, London, Hogarth Press, 1925, Vol. 2; Fenichel, O., *The Psychoanalytic Theory of Neurosis*, New York, W. W. Norton & Co., 1945, Ch. 17; and for a critique, Masserman, J. H., *Principles of Dynamic Psychiatry*, Philadelphia, W. B. Saunders Co., 1946, pp. 200–209.

all is not well do not show themselves in single actions but rather in the continuity of one action or idea with another. It will be apparent that the patient flies from one idea to a different one, makes a plan one moment only to cancel it the next, and is unduly irritated if the least frustration lies in his path. Cameron compares subacute mania to mild alcoholic intoxication. The patient is gay, witty, and jolly, free in speech and high in self-confidence. He is full of plans and not bothered by the thought of difficulties or risks in carrying them out. Just as in alcoholic intoxication, his efficiency is lowered but his illusion of efficiency is raised.[8] He may be having a wonderful time and see not the slightest reason why anyone should be concerned about him.

It is customary to recognize three degrees of mania: subacute or hypomania (as just described), acute mania, and hyperacute or delirious mania. The subacute form shades down into a state of normal elation, the delirious form shades off into violent and disorganized behavior that cannot be distinguished from any other form of wild excitement. The true hallmarks of the disorder can best be perceived in the middle stage called acute mania.

Outstanding is the stream of talk, which seems never to abate. The rapid flow is full of puns and play on words. Taken in short units it is perfectly coherent, but change from topic to topic is constantly taking place. These changes reveal the patient's distractibility. Whatever he sees or hears may divert his attention completely, and may cause him to make personal remarks that take visitors aback: "My, how gray your hair is," or "Your trousers certainly need to be pressed." In the motor sphere there is constant restlessness. The patient is always busy, never tired. He sleeps little at night and is eager for action long before sunrise. If he cannot find enough ways to use up his energy, he may burst into shouts and song, smash furniture, or do setting-up exercises. The need for action amounts to an irresistible pressure. Continued over many days and through sleepless nights it presently begins to tell on the patient's health. Continuous hot baths or sedatives may be necessary to keep him quiet for a little while.

The prevailing mood is one of joyous elation. The patient is full of confidence and is quite willing to carry his enterprises to the White House, to Wall Street, to Hollywood, or wherever he believes they will be most rapidly dispatched to their splendid conclusions. The confident mood easily rises to domineering arrogance,

[8] Cameron, N., "The Functional Psychoses," in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders*, New York, The Ronald Press Co., 1944, Vol. 2, Ch. 29.

especially toward those in authority. Very inconsiderate of those around him, the patient is easily aroused to anger and fury if his activities are in any way curbed. If his thoughts take a sexual turn, he will show a similar lack of restraint. All impulses come to immediate expression in words and in acts in so far as these are permitted. Any kind of restraint is extremely uncomfortable because of the pressure to activity.

Disturbances of thought and loss of contact with reality are incidental results of the overactivity and overconfidence. The patient is too distractible to perceive the environment with accuracy, too changeable to turn his flight of ideas into consecutive thinking, too elated to take account of facts that run counter to his mood. Delusions of great wealth or accomplishment readily develop, but the distortion of reality rarely extends to hallucination. In a way a manic patient does not strike an observer as being so crazy as a schizophrenic or general paretic. The effect is rather of a person abnormally speeded up and thus seriously disorganized, but not unintelligible or queer. The patient is highly incompetent to carry on his own affairs and needs to be hospitalized for his own good and for the sake of his health. But he does not seem as far away from the normal as is the case with other psychotics.

Example of Manic Behavior.—We turn to the third year of Clifford Beers' psychosis for a concrete example of the manic state. While there were many preliminary signs that Beers' depression was lifting, the decisive change of mood came quite suddenly. The sensation was like the lifting of a cloud, and at once his mind began to be flooded with ideas for a vast program of humanitarian reform. The following day he attended a church service. Instead of discovering gloomy forebodings and veiled threats in the service, he now heard every word as if it were a personal message from God. Phrases from the psalms clearly referred to the great projects that were coursing through his mind, and to his own role as the instrument chosen to carry them out. "My heart is inditing a good matter," he heard, "my tongue is the pen of a ready writer." This surely referred to his heart and his tongue, so he began writing letters about everything that had happened to him. Soon exhausting his supply of stationery, he arranged to secure large quantities of wrapping paper which he cut in strips a foot wide and pasted together into vast rolls. "More than once, letters twenty or thirty feet long were written, and on one occasion the accumulation of two or three days of excessive productivity, when spread upon the floor,

reached from one end of the corridor to the other—a distance of about one hundred feet. My hourly output was something like twelve feet. . . . Under the pressure of elation one takes pride in doing everything in record time. Despite my speed my letters were not incoherent. They were simply digressive, which was to be expected, as elation befogs one's 'goal idea.' "

The writing of colossal letters soon proved an insufficient means of using up his energy. "I proceeded to assume entire charge of that portion of the hospital in which I happened at the moment to be confined. What I eventually issued as imperative orders were often presented at first as polite suggestions. But, if my suggestions were not accorded a respectful hearing, and my demands acted upon at once, I invariably supplemented them with vituperative ultimatums." Beers soon determined to conduct a complete investigation of the hospital. This proved very trying to the staff and resulted in serious friction. It led to his being placed in a small cell in the violent ward where for want of paper he proceeded to write all over the walls. Angered at his treatment, he rigged up a fake scene of suicide to frighten the attendants—a striking contrast to his serious and persistent attempts to take his life when depressed. Before long his mind turned to inventions. Characteristically, these were not of a minor order; he decided "to overcome no less a force than gravity itself." Tearing a carpet into strips, he managed to suspend his bed with himself in it between the window and a transom over the door. "So epoch-making did this discovery appear to me that I noted the exact position of the bed so that a wondering posterity might ever afterward view and revere the exact spot on the earth's surface whence one of man's greatest thoughts had winged its way to immortality."

The successful overcoming of gravity seemed to open endless possibilities. Great wealth would soon be in his hands, and with this he planned to transform his home city into a veritable garden spot and center of learning. Scores of parks would be dotted with cathedrals, libraries, art galleries, theaters, and great mansions, the whole scene to be crowned by the most magnificent and efficient university in the world. But his mind was presently recalled from these splendid prospects by the more immediate problem of correcting the abuses in state hospitals. With great ingenuity he smuggled a long letter to the governor, who was sufficiently impressed by the tales of violent treatment to interrogate the staff of the institution.

It is interesting to observe the continuity between Beers' inten-

tions at this time and his career following recovery. So lasting was the impression made upon him by his treatment in mental hospitals that he dedicated his life to what presently became the mental hygiene movement. He became instrumental in bringing about reforms that were much needed and highly constructive. His scientific experiments were discontinued and his plans for improving his home city fell by the wayside, but one at least of the goals conceived at the height of his illness was capable of realistic fulfillment. Again one is impressed with the fact that the manic patient is less basically confused than other psychotics. He is overdriven, speeded up, and expansive, and this results in a distorted relation to reality, but the radical change of tempo takes place in a fundamentally sound mind. When normal tempo and normal mood are restored, mental function shows not the slightest trace of impairment.

Manic-Depressive Cycles

Having completed our description of depressed states and manic states, we come back to the question of manic-depressive psychosis. Mania and depression succeed each other in the same patient too often to be regarded as unrelated disorders. Kraepelin's hypotheses can be summarized as follows: (a) Mania and depression are opposite conditions, exhibiting a sharp polarity, which are nevertheless (b) based on a single disease process, (c) consisting of some kind of metabolic instability that causes fluctuation from one extreme to the other. There is an attractive simplicity about this theory. Unfortunately the facts seem to be a little more complicated. We shall consider first the question of polarity.

Relation of Mania to Depression.—Mania and depression can be most sharply differentiated on the score of *mood.* It seems entirely legitimate to conceive that elation and dejection are polar opposites. Like joy and sorrow they stand at opposite ends of a continuum. There is also a very great difference in the *attitude toward the self.* The depressed patient is self-condemnatory and his self-esteem is at a minimum, whereas the manic patient is full of bursting self-confidence with no tendency to direct blame or accusations against himself. Whether we speak of self-esteem or of the direction taken by aggression, the two states represent polar opposition. But there are several respects in which the opposition is far less clear. Mania and depression are alike on the question of *preoccupation with self.* The depressed patient concentrates monotonously on his troubles;

the manic patient with equal monotony concentrates on the great things he is going to do and the glory that will be his. The manic patient is no real lover of his fellow man. He may want to right all wrongs and alleviate all suffering, but these plans are always wrapped in clouds of personal glory. In practice he is inconsiderate and conceited, and his capacity for teamwork is as low as that of a depressed person.

In another respect the opposition between mania and depression seems to break down. The two states are alike in that both can be *precipitated by stress,* but are also capable of coming on without discernible stress. Furthermore, when stress is a contributing cause, it is by no means true that opposite kinds of stress produce mania and depression. People rarely go into a manic state because of excessive good fortune. On the contrary, personal disaster sometimes leads directly to a manic attack. In such cases the relation between circumstances and mood is completely incongruous. Nevertheless the stress contributes to the upset in mood. In their relation to stress, therefore, mania and depression are more alike than they are different.

It is in *bodily functions* that we get the clearest evidence that mania and depression are not polar opposites. After reviewing the literature, Cameron concludes that there is no evidence for biological opposition between the two states.[9] If one takes measures such as basal metabolism, blood pressure, blood sugar level, rate of blood flow, etc., there are no important differences between manic and depressed patients. Wherever significant differences have been found, they have proved to be related to activity level rather than mood. At the biological level, therefore, agitated depressions and manic states are very much alike, both differing significantly from retarded depressions. "It is the general activity of the person," says Cameron, "rather than his particular mood that seems to correlate with whatever metabolic changes are found."

These considerations inflict severe damage on Kraepelin's hypothesis. Mania and depression are polar opposites in only a very restricted sense, and whatever metabolic instabilities may exist seem to have little to do with the fluctuations of mood. The hope of correlating mood swings with metabolic fluctuations appears to have receded into the distance. On the other hand there still remains a reasonable likelihood that the two states are related to a single basic disorder, a disorder that currently eludes the available tools of re-

[9] Cameron, N., "The Place of Mania Among the Depressions from a Biological Standpoint," *Journal of Psychology,* 1942, Vol. 14, pp. 181–195.

search. Science still has far to go before depressed states, manic states, and manic-depressive cycles yield their secrets.

The Genogenic Factor.—Disorders of the manic-depressive type have a marked familial incidence. While figures reported by different investigators do not perfectly agree, they regularly show a higher incidence of mental disorder in the parents of manic-depressives than is the case with any other major form of psychosis. For about 20 to 25 per cent of manic-depressive patients the history shows that one parent or the other had a mental illness, generally manic-depressive illness. This figure is sufficient to suggest that a genogenic factor exists, presumably some kind of a predisposition to break down in this particular fashion. Obviously, predisposition is not a sufficient explanation of any given case, but it may well function as a contributing cause of the disorder.

One way in which predisposition might be transmitted is through linkage with a particular type of physical constitution. Kretschmer pointed out a marked association between manic-depressive psychosis and the so-called *pyknic* component of physique.[10] Further research has in general confirmed this relationship. The pyknic physique can best be described according to Sheldon's components of physique.[11] It has its major strength in the first component, the endomorphic component, so that the body form is softly rounded with a relatively massive trunk and viscera. There is secondary strength in the second or mesomorphic component, imparting greater strength and energy than would be the case with a more "pure" example of the first component. It will be remembered that Sheldon found strength in the first component correlated with temperamental traits such as love of comfort, relaxation, conviviality, and sociability. While these traits are not universally found in the personalities of manic-depressive patients before their illness, there seems to be a distinct tendency in this direction. It is all the more striking that a disorder characterized by great self-preoccupation and an inconsiderate attitude toward others should appear typically in pleasant and sociable people.

Course and Treatment.—Manic and depressive psychoses do not usually start early in life. The most frequent period of onset is the second half of the thirties. The disorders are somewhat more common in women than in men. On the whole, spontaneous recovery is the rule. From a half to two thirds of hospitalized patients with manic

[10] Kretschmer, E., *Physique and Character*, trans. by W. J. H. Sprott, London, Kegan Paul, 1925.

[11] See above, pages 145–146.

or depressed states are discharged in good health and do not have a later recurrence of illness important enough to require a return to the hospital. In some cases, however, the attacks recur and repeated hospitalization is necessary, and in a small proportion of cases recovery is not sufficient to warrant discharge from the hospital.

In view of the fairly high rate of spontaneous recovery, treatment is frequently confined to keeping the patient safe and in good health, in the meantime seeking to promote his self-understanding through therapeutic interviews. The more intensive forms of psychotherapy have been used experimentally but without much success. Experiments are constantly being made with various hormones and drugs, but none of these have emerged to the status of standard treatment. When the patient's condition seems unusually severe and persistent, one or another of the shock therapies is sometimes tried. As these techniques were first developed in connection with schizophrenia, we shall postpone discussion of them to the next chapter, merely remarking here that the newer methods give promise of being successful with manic and depressive disorders. The operation of prefrontal lobotomy is coming into popularity for the agitated depressions. It is not generally used for retarded depressions or manic states.

Mental Changes and Disorders of Old Age

One person out of five entering a mental hospital suffers from a disorder associated with old age. The frequency of such disorders is steadily increasing. This is an indirect consequence of the general advance of medical science. As fewer people die of such diseases as tuberculosis, diphtheria, and appendicitis, more survive into the sixties and seventies when senile changes begin to take place. It is to be expected that this trend will continue. If medicine succeeds in conquering such enemies as cancer, pneumonia, and heart disease, an even greater part of the population will live into the seventies. In 1850 only 2.6 per cent of the population lived beyond 65; in 1940, 6.9 per cent exceeded that age. Whether this will mean a steadily increasing incidence of senile mental disorders depends upon our ability to understand and alleviate these afflictions of later life. The senile psychoses can be looked upon as exaggerated forms of the changes that are inseparable from ageing. Some of these changes are bodily, others are psychological. We shall first consider the normal course of change with advancing years, thus establishing a background for the understanding of senile disorders.

The Decline of Competence.—As age advances, there is a marked decline of physical energy. One after another the more vigorous forms of physical exertion have to be avoided. Even for a person who takes his physical limitations good-humoredly, it is hard to avoid a feeling of growing helplessness. The decrease in motor capacity is matched by a weakening of sensory acuity. Less sharpness both in vision and hearing is characteristic of the older years. There is also a decline in the speed of response. Studies of reaction time show a steady decrease, beginning in the second or third decades of life, and proceeding at a faster rate in the later decades. There are wide individual differences, but the general trend is clear. An older person registers his environment less keenly, responds to it less quickly, and is able to respond in less varied and energetic ways.

A similar decline is observed in those functions that are measured by intelligence tests. This is partly but not wholly a function of speed. In tests where speed is not important the decrease is less marked but still present. Not all types of performance are equally affected. Tests of vocabulary and tests of general information show the smallest losses with advancing years, whereas tests requiring ingenuity in new performances are particularly vulnerable. The effects of age may be markedly resisted in the case of knowledge and skills that continue in active use. Thus an elderly scholar who keeps steadily at work may show a minimum of impairment in his special field of expertness, remembering details in a way that startles younger people who do not share his interest in the field. Nevertheless, intellectual competence as a whole undergoes a definite decline comparable to the falling off of sensory and physical prowess.

Failing memory is one of the most obvious symptoms of ageing. The inability to remember names is often extremely frustrating to the person himself. Although tests of rote memory do not show much impairment until after the age of eighty, the assimilation of memories and the power to act upon them appear to decline somewhat earlier. It is a generally observed fact that the memory loss of older people is greatest in respect to recent events. They may remember current happenings so poorly as to seem almost disoriented, yet remain completely clear about the earlier events of their lives, even of their childhood. There is no fully satisfactory explanation for this fact, which is also found in cases of brain deterioration caused by general paresis and chronic alcoholism. It is possible that attention and initial registration are more at fault than recall. In any event the net result is a weakening of memory, especially for recent and current happenings.

The decline of competence can be measured at even more basic levels than those just discussed. Behind the weakening physical and mental capacity it is possible to conceive a more generalized impairment which affects the cells of all tissues, including those in the central nervous system. This general idea is developed by Shock, who points out that normal cellular metabolism becomes increasingly difficult with age.[12] In old tissues there is an increase of inert material, chiefly fibrin and collagen. This inert material surrounds many cells and simply by mechanical blocking impairs the delivery of oxygen and nutrient materials to the still active or metabolizing cells. There is, furthermore, a diminution of the number of functioning cells in older tissues. In addition, the flow of blood may be less adequate and regular, especially if the artery walls have hardened and thickened. The result of these changes is to interfere with normal cellular metabolism. If temporary anoxia occurs here and there, a vicious circle is set in motion. Anoxic cells produce more fibrin, which in turn further obstructs the delivery of oxygen even when the blood flow is restored. Vitamin deficiencies may further injure the processes of cellular metabolism. All these changes are of particular importance for the cells of the central nervous system, but Shock suggests that similar impairment may affect all the cells of the body.

The effect of this general lowering of cellular efficiency is an increasing difficulty in maintaining homeostasis. The body becomes less capable of maintaining the constancy of its internal environment and has to work harder to achieve this goal. Reserve capacities and emergency reactions must be drawn upon more freely, leaving less surplus energy for other activities. Stress continues to occur, and a greater proportion of available energy has to be devoted to restoring equilibrium. If we consider the maintaining of homeostasis as the first demand on any organism, it becomes clear that a general restriction will necessarily be felt in all activities not directly concerned with that central demand.

Psychological Situation of the Aged.—Various traits are ascribed to older people. Perhaps the most general pattern can be suggested by the three words: conservative, opinionated, selfish. Traits of this kind clearly do not result from the mere fact of declining capacities and lowering energy. They result from the interaction between these factors and the psychological situation of the aged.

[12] Shock, N. W., "Physiological Aspects of Mental Disorders in Later Life," in Kaplan, O. (ed.), *Mental Disorders in Later Life, op. cit.*, Ch. 3.

When the family unit is large, as is still the case in some primitive societies, in China, and to some extent in rural areas generally, the older people are expected to remain in the family circle. As a matter of course the household includes grandparents, parents, and children, often with a few other relatives thrown in. The grandparents continue to play an essential though reduced part in the life of the family, and they need not fear for their support. The situation is different in the small urban family unit which in the United States at least is rapidly becoming the standard pattern. The family unit typically consists of but one pair of parents and their children, and a grandparent living in the home is quite generally felt to be a burdensome intrusion. Many older people face the alternative of being an unwelcome visitor in the household of one of their children or of living by themselves in restricted and lonely circumstances. In either case they are likely to feel themselves useless and superfluous. Whereas in simpler times grandfather might putter around the farm with relatively useful results, he is now more likely to be distinctly retired and out of a job. If grandmother wants to help in the kitchen or with the children, she is likely to be told that her ideas on psychology are old-fashioned and that she must be careful not to break the kitchen machinery. The fact that our times are rapidly changing has the effect of decreasing the utility of older people. The wisdom of the aged is less wise in a time of rapid change.

Under these circumstances old age means for many people a readjustment almost as great as that which is required at adolescence. Often it is necessary to move to a new home in a new neighborhood, producing a sense of isolation from friends and old associations. If the older person remains in the same home, the situation is only relatively better. He is likely to experience a constant loss of friends by death, and he is not in a very good position to make new ones. Thus in any event he tends to become socially isolated and to lose the benefit of group membership. At the same time he is likely to become to some extent financially dependent, very likely on the same people whose diapers he used to change and whose naughtiness he used to chastise. Perhaps he has to ask his children for money to buy something at the store. In all too many cases old age raises the specter of poverty and destitution. Just as in adolescence it is necessary to establish independence, self-sufficiency, group memberships, vocation, and channels for an increased sex drive, so in old age it is necessary to adapt oneself to dependence on others, dwindling group memberships, life without a vocation, and a reduced vitality and sexual interest.

What resources are available to accomplish this readjustment? Less energy, less plasticity, less buoyancy of interest than was present at adolescence, but above all less real motive for change. The adolescent's time perspective is highly favorable. Most of life is before him. The person that he is to become is still unformulated, and many splendid achievements are still within the range of possibility. The old person's life is mostly behind him. What he has achieved and what he has become as a person are both matters of history. If an old person keeps his life rich and full to the last, it is just for the sake of keeping it rich and full. He is not helped by images of a better future for himself on earth.

These considerations are important in understanding certain traits that younger people find irritating. A young person has little interest in hearing how things used to be before he was born, especially if he must hear about them with the implication that things have been going to the dogs ever since. He wants to talk about the present and future rather than the past. Very likely the old person cannot talk about the present because his memory for current happenings is becoming poor, but in any event he is not strongly motivated to contemplate the future. The conflicting viewpoints of youth and age can be clarified by an illustration. Suppose the old person has been a successful architect in his day, designing important buildings which are now looked upon as Victorian monstrosities. In his youth his designs were new and bold, a refreshing departure from the bare, unornamented, and colorless tradition of an earlier generation. It is hard for a young listener to accept the judgment that modern architecture has deteriorated into a feeble imitation of Colonial models without elegance or originality, harder still for him to conceal his contempt for the admired Victorian tradition. But the old person cannot budge from his own opinion. To do so would be equivalent to admitting that his whole professional career was a failure. What appears to be the obstinate conservatism of old people is often a determined attempt to preserve self-respect.

The psychological situation of the aged is not easy. It contains a great variety of serious threats. It involves progressive limitations and a shrinking of personal significance. The desire to be loved and valued does not decline with age, but the very limitations of the elderly make them irritating to younger people. The difference in tempo alone is responsible for much impatience. To wait for slow movements, slow speech, slow comprehension can be extremely frustrating. Such surface irritations obstruct the expression of affection and esteem. In view of these major problems and major threats

in old age, it is not surprising that neurotic reactions not infrequently occur. The most common pattern is hypochondriasis, an anxious concern over the bodily functions and their ailments. Another common pattern is chronic fatigue or neurasthenia. A certain somatic compliance doubtless helps to increase the frequency of these two syndromes. The other two most common forms of neurotic reaction are anxiety states and reactive depressions. It is not difficult to discern their relation to the psychological situation of old age.

Senile Psychoses.—When a chronic mental disorder occurs in an elderly person and is accompanied by signs of mental deterioration, it is called either senile psychosis or senile dementia. Both terms are in a way correct. These conditions are really a combination of senile deterioration with special reactions that still further increase the loss of contact with reality. Depressed states, agitated states, delirious and confused states, or paranoid reactions may add themselves to the general picture of impairment. The onset is gradual, sometimes almost imperceptible. The patient becomes a little more egocentric and conservative, inefficient and forgetful, sad, disturbed, or suspicious, until it seems to everyone that he can no longer take care of himself outside the hospital. Perhaps forgetfulness crosses the line into confusion: he goes for a walk and cannot find his way home. Perhaps querulous complaints about his food and digestion slip over into delusions that his daughter-in-law is trying to poison him. Sometimes a physical illness or some situational stress marks the boundary a little more sharply. Perhaps the family home has to be sold and the old person moved to new surroundings. Sickness or ailments of a lasting sort may suddenly restrict the range of available activities. In all such cases the person is called upon rather suddenly to make a whole series of readjustments, and he proves unequal to the strain. But deterioration has been in progress and the onset is never really sudden.

Senile patients are apt to be restless and sleepless. Often they wander in the night and at such times are likely to be particularly confused. Irritation is frequent, judgment is poor, attention is erratic, and the registration of impressions decidedly irregular. On top of this general picture of impairment go the depressed, agitated, or paranoid reactions. As the disorder advances, intellectual deficit increasingly dominates the picture. Speech becomes rambling and incoherent, and failing memory may be pieced out with fabrications. The patient may fail to recognize his relatives. In the course of time, episodes of confusion, occasionally with hallucinations, occur

with greater frequency. Social amenities and courtesy are preserved almost to the last, but the end point is a state of helplessness and vegetation in which the patient becomes oblivious to his surroundings. It is obvious that not much can be done for senile patients except to make them comfortable, keep them in physical health, provide occupations that are within their powers, and protect them from unnecessary difficulties.

At autopsy it is found that there are marked changes in nervous tissue, especially in the cerebral cortex. On the whole the frontal areas are most seriously altered. There is a general shrinkage of the brain tissue as a whole, a reduction in the number of nerve cells, and a thickening or change of some kind in the intercellular tissue. All the changes are diffuse; they are not concentrated in any one spot sufficiently to alter the cortical architecture. The changes are not peculiar to senile psychoses, being found with lesser severity in normal older people and with greater severity in Alzheimer's and Pick's diseases. They are congruent with Shock's theory of injury to nerve cells through impaired diffusion of oxygen and nutrient materials.[13]

Psychoses with Cerebral Arteriosclerosis.—When there is a considerable degree of arteriosclerosis, the changes in the brain are of a more devastating character. Hardening and thickening of the walls of the blood vessels, including not only the large arteries but also the small arterioles and capillaries, reduces the supply of blood to all tissues. The effect of this reduction is especially serious in the brain, where the tissues are peculiarly dependent on an adequate supply of oxygen and nutrient materials. The brains of arteriosclerotic patients at autopsy show a variety of severe focal lesions in which the cerebral structure is completely destroyed, although surrounding nervous tissue may be in a state of good preservation. Softened and disintegrated tissue is found at the points of lesion. The temporal and occipital areas seem to be particularly vulnerable. While the cause of these focal softenings is not definitely known, the best hypothesis seems to be that they occur as a result of restricted blood supply.[14]

There are usually various premonitory symptoms prior to the development of full psychosis. Physical and mental letdown may be noticed, along with headache and dizziness. In more than half the cases the onset of the acute psychosis is sudden, differing in this

[13] This account of neural changes follows Rothschild, D., in Kaplan's *Mental Disorders in Later Life, op. cit.*, pp. 237–246.
[14] *Ibid.*, pp. 257–266.

respect from senile psychoses. It takes the form of an attack of confusion with clouding of consciousness, incoherence, great restlessness, and complete loss of contact with the environment. The confused state may last for weeks or months. In about half the cases it subsides, leaving the patient with considerable senile impairment but in a much less confused condition. Later attacks are the rule, however, and cure is not to be expected.

The condition of the brain caused by cerebral arteriosclerosis is fairly similar to the condition found in general paresis. The mental changes are of a somewhat similar order. It is therefore interesting to notice certain differences in the content of the symptoms and the psychological processes which they imply. Occasionally there are delusions of grandeur and persecution in psychoses with cerebral arteriosclerosis, but these are far less characteristic and less extravagantly developed than is the case in general paresis. This difference seems to be attributable to the age of the patients or, more directly, to the general level of vitality at which they are living. An old person, already physically handicapped and living within shrunken horizons having no perspective toward the future, typically becomes confused, perhaps with a touch of depression or agitation, when his brain reaches a point of damage that is no longer consistent with integrated action. A person in middle life, still relatively vigorous, ambitious, with considerable strength of drive, reacts to brain damage with symptoms of a more compensatory kind. His thoughts may be delusions, but they are delusions that place him in satisfying and glorious situations or that use the mechanism of projection to free him from any sense of personal shortcoming. Thus even in the study of brain diseases it is impossible to overlook psychological factors, even though these are not responsible for initiating the disorder. The disease happens to the man, and the man puts his stamp on the standard symptoms that result from the disease.

SUGGESTIONS FOR FURTHER READING

The disorders described in this chapter are taken up in detail in standard textbooks of psychiatry, for example, D. K. Henderson & R. D. Gillespie's *A Textbook of Psychiatry* (New York, Oxford University Press, 4th ed., 1941), Chs. 7, 8, and 11, or E. A. Strecker & F. G. Ebaugh's *Practical Clinical Psychiatry* (Philadelphia, The Blakiston Co., 5th ed., 1940), Chs. 4 and 6. Excellent for its clinical descriptions is E. Kraepelin's *Manic-Depressive Insanity and Paranoia* (trans. by R. M. Barclay, Edinburgh, Livingstone, 1921).

In addition to C. W. Beers' *A Mind That Found Itself* (Garden City, N. Y., Doubleday, Doran & Co., 1931) which is used in the text to provide illustrations of depressed and manic states, there are two other interesting

inside accounts of manic-depressive psychosis: *Reluctantly Told* by J. Hillyer (New York, The Macmillan Co., 1927), and *A Mind Restored* by E. Krauch (New York, G. P. Putnam, 1937).

On the general problems of old age as well as its mental disorders, an excellent book is the one edited by O. J. Kaplan, *Mental Disorders in Later Life* (Stanford University, California, Stanford University Press, 1945), the joint work of seventeen authors.

CHAPTER 15

THE PSYCHOSES: SCHIZOPHRENIA

Schizophrenia is the most common form of psychosis. One person out of five admitted for the first time to a mental hospital is given this diagnosis. Starting early in life, often during adolescence and still more often in the decade of the twenties, it wrecks the person's whole adult career and prevents him from making any useful contribution to society. If treatment is not successful, the patient may become a public charge for forty or fifty years. Because the disorder has a chance to last so long, schizophrenics accumulate in mental hospitals and constitute something like fifty per cent of the inmates at any given time. The disorder must be considered highly costly, whether we reckon the cost in dollars spent or in the more important coin of human lives wasted.

The fundamental nature of schizophrenia has yet to be explained. There is even an element of uncertainty as to whether it has a fundamental nature. The different subvarieties exhibit a tremendous diversity of symptoms. Some workers have therefore challenged Kraepelin's historic step of classifying these divergent pictures under a single heading. The majority of workers, however, agree with Kraepelin that the different varieties of schizophrenia have enough in common to warrant giving them a common name, but the basic nature of the disorder is not thereby established. Most of the cases have obvious psychogenic features, the psychosis coming as the culmination of a history of unsuccessful social adjustments. On the other hand, certain of the phenomena are so bizarre and so extravagant that it has seemed impossible to explain them without resort to chemogenic and histogenic hypotheses. In the study of schizophrenia there is no room for rivalry and antagonism between the psychogenic and somatogenic points of view. The disorder can be understood only when constitution, physiology, the nervous system, mental changes, emotional changes, adjustment and defense, and the character of the social environment are all spread upon the canvas. Only workers who can grasp subtleties in all of these fields can solve the problems of schizophrenia.

The term *schizophrenia* was introduced by Bleuler in 1911. It now largely, though not wholly, supersedes Kraepelin's name *dementia praecox*. The older title reflected the belief that dementia, starting early and running a slow progressive course, was characteristic of all cases. As the disorder does not always start early, and as the presence of true dementia has been widely challenged, neither part of Kraepelin's title is in the least appropriate. Bleuler's term, however, is no better. It means a splitting of the personality, a metaphor which is anything but helpful in understanding the true state of affairs and which has the added disadvantage of suggesting hysterical dissociations and multiple selves. The reader will find it an advantage to forget the connotations of Bleuler's title and build up a new set of meanings to go with schizophrenia. The word has achieved independent life, and we must make the best of it.

Varieties of Schizophrenia

In widespread use is a classification of schizophrenia into four subgroups. Like most such groupings, these four are by no means mutually exclusive. There is much overlap, and sometimes the predominant symptoms change markedly in the course of the illness, crossing the line to another subgroup. Nevertheless the classification forms a convenient starting point for describing the disorder.

The Simple Form.—The simple form, sometimes called *schizophrenia simplex*, has as its positive symptoms a gradual loss of interest, a failure of early promise, and an increasing ineffectiveness in meeting social demands. Instead of expanding his social horizons and increasing his participations as he passes through adolescence and early adulthood, the patient drifts into a simple and rather solitary way of life. He is satisfied with an outwardly routine existence and shows no ambition for personal advancement in the world of his contemporaries. In some cases apathy and irresponsibility go a little further so that the patient becomes an idler and ne'er-do-well. No type of patient is more colorless and more unlike the popular idea of a lunatic. On the whole, schizophrenics of the simple type are quiet and contented. Their most violent manifestations are an occasional irritability and a grouchy refusal to accept pressure or suggestions from outside. After a while it may become apparent that thinking and attention are not particularly good, but memory is usually little impaired and any loss of mental capacity seems secondary to the general slumping of interest. The patient's affective

life is outwardly shallow and uneventful. He does not seem to want or to need strong feeling. A simple and restricted life appears to suit him.

In part, the diagnosis is established negatively, that is, by the absence of the more severe symptoms that characterize the other three subgroups. The more carefully the history is taken, the less great are the chances that the case will be classified under the simple form. This is because the patient may have experienced delusions and hallucinations and may have engaged in queer behavior when by himself without revealing these facts to anyone. There is certainly a difference, however, between typical cases of schizophrenia simplex and the more colorful cases that belong under the other headings. It has been suggested that the simple form of schizophrenia is also the basic or uncomplicated form. Everything is centered on a loss of interest in the environment, and this is certainly a common feature of the psychosis in all its forms.

The Paranoid Form.—Next to be mentioned is the paranoid form, with which we are already familiar through the example of L. Percy King. The outstanding feature is the rich development of delusions. King's case is atypical to the extent that his delusional system was better organized and more stable than is usually the case. Schizophrenic delusions are typically changeable, numerous, fantastic, and accompanied by hallucinations. The patient does not rest content with thinking that people are persecuting him; he hears them murmuring against him, sees them lurking at the windows, feels the electric ticklings they are directing at his skin, tastes the poison that they have slipped into his food. He does not stop with the mere belief that he is Christ or Napoleon or Hitler or George Washington; he hears voices announcing his fame and bringing him important messages of state. In the early stages of the illness it is generally possible to see a connection between the patient's misinterpretations of reality and his personal wishes, needs, and fears. As time goes on, however, the delusions tend to spread out in a disorganized fashion. Magical forces and mystical powers come into the picture, and strange influencing machines are supposed to exist which the patient may draw in great detail. The whole universe created in the patient's mind becomes increasingly bizarre.

There is a form of psychosis, *paranoia*, in which the symptoms are confined to the development of a delusional system. This psychosis is generally assigned independent status outside of schizophrenia. The clearest distinguishing feature is the absence of hallu-

cinations. Falsification of reality is restricted to misinterpreting events; what happens is correctly perceived, but peculiar inferences are drawn from it. Except for the delusional system, the patient is perfectly oriented and perfectly normal in his conduct. The personality does not become disorganized, and interest in the environment is substantially preserved. One might say that paranoia is a restricted psychosis, sufficiently circumscribed so that it does not invade and disintegrate the personality as a whole. We shall consider presently the nature and origins of paranoiac thinking. The disorder is mentioned here because of its similarity to the paranoid form of schizophrenia. Both show an extensive use of the mechanism of *projection*. In paranoid schizophrenia, however, there is a more far-reaching loss of interest, loss of contact with reality, and general disintegration of personality.

In studying the case of L. Percy King we became familiar with the psychological service performed by the mechanism of projection. The person spares himself intolerable anxiety by attributing certain of his tendencies not to himself but to other people. He transforms his wishes and fears into external facts for which he himself is not in the least responsible. When a patient claims that God has chosen him to lead mankind to its salvation, he is expressing an extremely grandiose wish but he is assuming no responsibility for it. When he claims that pursuers and unseen forces are preventing him from achieving great things, he is expressing both a grandiose wish and a fear of his incompetence to fulfill it, but he is again avoiding responsibility for this conflict. When he finds himself the victim of sexual advances, he is neatly disclaiming the presence of any such inclinations in himself. The delusional and hallucinatory aspects of paranoid schizophrenia are thus intelligible in terms of desire, anxiety, and defense. Further principles of explanation, however, are needed to understand the more strictly schizophrenic aspects of the disorder: the loss of interests, the growing confusion, the gradual deterioration of thought and conduct.

The Catatonic Form.—In the catatonic variety of schizophrenia the focus of the disorder is on motility. There are peculiar postures and gestures, curious grimaces, and stereotyped actions that are repeated endlessly. More dramatic are the phases, sometimes alternating, of catatonic stupor and catatonic excitement. The excited episodes are usually of short duration, but while they last they are often extremely violent with real danger of both homicide and suicide. Sometimes the frenzy is accompanied by delusions, hallucinations, and feelings of great power; at other times it looks more like

a wild, disorganized outbreak of energy. Much of the activity, however, has symbolic significance that can be related to the patient's personal problems and fantasies. The stupors are of longer duration, going on sometimes for weeks and months. The patient sits in one position and does not speak. His immobility may extend to the point that urine and feces are not passed until they move involuntarily and that saliva is not swallowed so that it accumulates and falls from the mouth. The patient has to be dressed and undressed, moved in bed, and fed through a tube. This state of exaggerated immobility may start suddenly and may disappear in an instant. Older theories which posited degenerative changes in the nervous system were discredited by these abrupt onsets and remissions.

Careful study of catatonic stuporous states has shown that they are less passive than they appear. It is usually more accurate to say that the patient is in a state of active immobility. If anyone attempts to change his position, there will be strong muscular resistance. The patient is not in a limp state, and he is also not in a state of mental stupor. He refuses to react, but his mind is alertly observant of what is going on. Often a patient can afterward report in great detail the things that happened and were said around him while he was in apparent stupor. He is in a state of acute negativism, so acute that it invades the whole motor system, but his vigilance is not suspended. It can be inferred that rumination and fantasy go forward during the stuporous periods. Sometimes the stupor ends in response to an hallucinated command, evidently the climax of a silent inner drama.

The Hebephrenic Form.—The hebephrenic form of schizophrenia is the least clearly defined of the four. To some extent it serves as a wastebasket category which is used for patients more severely disordered than in the simple form, yet without predominant delusional formations or disturbances of motility. There are certain more positive phenomena, however, the chief of which are silliness, inappropriate smiling and laughter, bizarre disorganized ideas, and an incoherent stream of talk studded with words made up by the patient (neologisms). There are scattered delusions and hallucinations which have little continuity and no organization. Deterioration takes a fairly rapid course so that before long the patient is found eating with the fingers, neglecting dress and toilet habits, smearing feces, and otherwise dropping the restraints of socialized living.

The disorganization and fleeting strange ideas are well illustrated

in the following piece of ward conversation.[1] The doctor addresses the patient, a Negro, with a standard question to which he receives a surprising answer.

"How old are you?"

"Why, I am centuries old, sir."

"How long have you been here?"

"I have been now on this property on and off for a long time. I cannot say the exact time because we are absorbed by the air at night, and they bring back people. They kill up everything; they can make you lie; they can talk through your throat."

"Who is this?"

"Why, the air."

"What is the name of this place?"

"This place is called a star."

"Who is the doctor in charge of your ward?"

"A body just like yours, sir. They can make you black and white. I say good morning, but he just comes through there. At first it was a colony. They said it was heaven. These buildings were not solid at the time, and I am positive this is the same place. They have others just like it. People die, and all the microbes talk over there, and prestigitis you know is sending you from here to another world. . . . I was sent by the government to the United States to Washington to some star, and they had a pretty nice country there. Now you have a body like a young man who says he is of the prestigitis."

"Who was this prestigitis?"

"Why, you are yourself. You can be a prestigitis. They make you say bad things; they can read you; they bring back Negroes from the dead."

If this conversation is compared with the letters of L. Percy King, the difference between hebephrenic and paranoid schizophrenia becomes clear. For all the strangeness in King's productions, he at least proceeds logically, with coherent sequence, and under the guidance of a theme. The hebephrenic, in contrast, jumps from image to image and merely returns now and then to a theme. In the hebephrenic disorder everything is jumbled. Even the feelings seem jumbled and pulled out of coherent relation to events. The patient laughs foolishly when describing his best friend's death or weeps when explaining how well he feels.

A combination of paranoid and hebephrenic characteristics appears in the following excerpt from an essay written by a patient. The attempt at system is typical of the paranoid form. The use of

[1] White, W. A., *Outlines of Psychiatry*, New York & Washington, Nervous and Mental Disease Publishing Co., 1932, p. 228.

language, however, is a nice example of what a French writer has called "word salad," a phenomenon that is particularly well developed in the hebephrenic form. The essay is entitled "Mother of Man" and begins with this paragraph.

> This creation in which we live began with a Dominant Nature as an Identification Body of a completed evolutionary Strong Material creation in a Major Body Resistance Force. And is fulfilling the Nature Identification in a like Weaker Material Identification creation in which Two Major Bodies have already fulfilled ratio body balances, and embodying a Third Material Identification Embodiment of both; which is now in the evolutionary process of fulfillment but fulfills without the Two Parents' Identification Resistances, therefore shall draw the resistances and perpetuate the motion interchanging of the whole inter-relationship; thus completing this Creation in an interchanging Four in Three Bodies in One functioning self contained, self-controlled and self-restrained comprising the Dominant Moral Nature and consummating a ratio balanced Major Body of maximum resistance, in a separated second like Weaker Material Major Body Functioning Counter Resistance Force to the Strong Material Major Body Resistance Force, the beginning of this creation; and the Dual Force Resistances then as a Major Body and Major Body Functioning completes a Universe in material balance functioning the preservation of all things.

The reader may experience difficulty in grasping the patient's thought, but to the patient herself it was apparently full of significance. She had gone over her typescript with great care, correcting the punctuation and inserting words or phrases to clarify any possible obscurity in her meaning. Her paragraph is not without a theme. One can infer that she is writing about the creation of new life by the union of two bodies, though she is careful to keep her subject at a metaphysical plane. But the language gets completely out of hand. Words are strung together in incongruous chains, happily liberated from their usual task of conveying precise ideas. Whatever the patient had in mind, one cannot say that she achieved successful communication. To communicate with others, either through speech or writing, is a social act, and it is in the sphere of social acts that the schizophrenic disorder is most apparent.

Is Schizophrenia a Unity?—What common features are to be found which justify the placing of these diverse symptom pictures under a common heading? They are alike in showing a loss of contact with reality, but this is characteristic of all psychoses. The feature that best distinguishes schizophrenia from the other psy-

choses, and is at the same time common to the several subgroups just described, is a peculiar attitude toward reality, a *lack of interest in adjustment to reality.* The patient is not greatly concerned about reality. He has achieved some kind of internal balance by becoming unconcerned. In the other psychoses one does not get the impression that the patient has given up the attempt to apprehend reality and to adjust his conduct to its requirements. The attempt may fail and go wildly astray, but this seems consequent on the faulty state of the machinery rather than on a weakening of the desire to use it. With the schizophrenic the failure is in the sphere of interest. He is preoccupied with other matters more important to him than his human environment. When he writes, it is to see his own thoughts on paper rather than to communicate them to someone else. Even in such an inherently social act as speech he is but little concerned with listeners and may converse fluently when none are present. Social interaction has become a matter of no importance to him.

This characterization of schizophrenia needs a certain qualification in order to fit the paranoid cases. We saw in the case of L. Percy King that there was a prolonged struggle to maintain an adjustment to reality. His attempts at reality testing continued even in the face of extremely impressive hallucinations, and the final form of his delusional system showed a certain shaping to accommodate external facts. In King's case, then, and typically in strongly paranoid cases, the lowered interest in the environment is relative rather than absolute. The patient does not surrender the attempt to adjust, but the pressure of his needs and fantasies claims priority over external impressions so that the latter suffer distortion. He is interested in reality but still more interested in what is happening inside himself. Our formula should be that his *interest in adjusting to reality has become secondary to other interests.* This is probably a more correct way to characterize the central change in all forms of schizophrenia.

Schizophrenia as a Developmental Disorder

The childhood histories of schizophrenic patients are never free from difficulties of adjustment. Meeting the demands of reality, especially the demands of social reality, appears to have been always a source of trouble. Even when the onset of disorder was relatively sudden, detailed reconstruction of the history reveals a long series of preparatory events.

The Consequences of Defensive Withdrawal.—It can be assumed that every child has impulses of a social nature. Even if

he has little opportunity for contact with other children, he shows an interest in them that is rivaled only by his early interest in animals. An absence of interest in other children, and in people generally, can be taken as a sign that spontaneous tendencies have been in some way blocked or injured. Experience with people must have been found painful or even dangerous, so that avoiding it became a measure to preserve comfort and safety. If taking an interest in others is found to bring unpleasant consequences, the surest method of avoidance is to suppress the interest.

This mechanism of defense is not different in principle from the defenses that are prominent in neurosis. The repression of aggressive feelings, the repression of sexual feelings, the repression of the interests that make for companionship are all easily understood as protective avoidances. But the repression of interest in other people has a more widespread and devastating effect on the development of personality. In an earlier chapter we studied the importance of memberships and social roles in development. We observed the close relation between self-esteem and the esteem that one's competence is capable of eliciting from others. If other people as a whole become a stimulus to protective avoidance, this whole realm of developmental influences is forthwith blocked off. This does not mean that the individual stops growing. It does not mean that he stops wishing for social activities, memberships, and esteem. He goes on growing, but he is cut off from the educative effects of social participation. The phrase is often used that he retires from reality into a world of fantasy. This is correct if we do not hastily infer that the world into which he retires is the bizarre and fantastic realm that interests the fully developed schizophrenic. Every child constantly retires into fantasy, and his fantasies have to do with the realities he hopes are going to exist tomorrow and the next day. There is nothing queer about them. Queerness invades them only very gradually. If a person goes on for years having fantasies about tomorrow and the next day which are not *corrected by experience,* they will eventually become queer. The distinguishing feature of the preschizophrenic personality is that the fantasy life, at first perfectly normal, grows in a state of social isolation and is not corrected by the reactions and judgments of others. It remains isolated in this fashion because the person, for the sake of protection, avoids the company of others.

Membership in groups has the effect of teaching a person the roles he can play. Finding himself successful in a few, he is able to discard others. But if he does not participate in groups, this process of

pruning fails to occur; many fantasied roles therefore continue to be felt as possible. Again, one's self-estimate is based upon a constant comparison between one's competence and the competence displayed by others. But if one hides one's competence and does not expose it to social comparison, there can be no outside help in establishing a level of self-esteem, which therefore fluctuates wildly up and down in imagination. Furthermore, the avoidance of participation makes participation progressively more difficult. The person falls farther and farther behind his fellows in the matter of social skills. At adolescence, when various new social skills are required, he is likely to drop fatally out of step and still further restrict his future development.

The peculiar feature of the preschizophrenic personality is thus not the presence of fantasy but rather the failure of fantasy to receive realistic correction. It is not because he indulges in a lush fantasy life that a person develops into a social isolate; it is rather because he is a social isolate that he develops a lush fantasy life. When being with others is a source of discomfort and uneasiness, the correction of fantasy by real experience is blocked. Daydreams deal with heroic personal achievements—with home runs and unassisted double plays. Reality is more likely to deal with routine putouts, sacrifice hits, and even errors. Nevertheless a commonplace performance, unworthy of a place in fantasy, will be experienced by the average person as rewarding if it is done in association with others and forwards the purposes of a group. This is not the case for a person who cannot take pleasure in the company of others. His performance must correspond to his fantasy, otherwise it carries no reward.

The point is made by Masserman that the blunting and distortion of affect so often noted in schizophrenics is a kind of secondary defense.[2] It is impossible to make oneself immune to what is going on in the environment. Impressions constantly reach the person and stimulate his interest while at the same time awakening some measure of anxiety. This threat may be met by suppressing the interest, in which case an outside observer is likely to feel that the person has reacted with emotional shallowness. Another mode of defense is to change the aroused affect into one of a different and less painful nature. The silly laughter of hebephrenic patients when describing tragic events is probably a protective device of this kind. Thus the constant struggle to maintain a protective isolation ends by ruining the patient's whole emotional experience.

[2] Masserman, J. H., *Principles of Dynamic Psychiatry*, Philadelphia, W. B. Saunders Co., 1946, p. 68.

Trends in the Childhood History of Schizophrenics.—In the last section we maintained that the basic developmental disorder found in schizophrenic histories is a protective avoidance of contact with surroundings, especially human surroundings. Such avoidance is highly crippling to the development of a well-rounded personality, producing effects that show themselves with gross exaggeration in the symptoms of schizophrenia. We must now inquire into the circumstances under which this protective avoidance begins, and we must trace its course a little more concretely.

It is generally reported that even as a small child the patient seemed timid, shut in, and solitary. Schizophrenic patients, according to Hinsie, "are largely recruited from the children who cling to the mother's apron strings." [8] The youngster recoils from rough and competitive play. He stays on the fringes of noisy group activities and prefers occupations that can be pursued alone. A pattern becomes noticeable in his choice of companions and friends: they are likely to be either older or younger rather than of his own age. These relationships are easier because they are essentially non-competitive. To older companions he can relinquish the initiative without shame; with younger ones he can take it without challenge. Very often there is early success with schoolwork and a continuing interest in studies. Thus far the pattern of development is not morbid. It merely betrays a certain anxiety in those relationships that make competitive demands and that call for rough-and-ready participation. Interest is not impaired, but it flows into channels that circumvent this obstacle. The pattern is not ideal but it is perfectly workable and may lead to a productive and contented, though somewhat specialized, way of life.

A more definite turn in the direction of schizophrenia is indicated by a general retraction of interests. Outside observers may sense that the youngster's interests are becoming less intense and less numerous. The individual himself may feel that he is growing more passive in his attitude and that outside events are losing their meaning for him. He ceases to make new friends, even older or younger friends, and his interest in schoolwork declines into dreamy inattentiveness. This change for the worse is likely to occur at puberty. So long as interest is maintained in some form of constructive activity—art or writing, for example—there may be a chance that the person will find his way back, along the lines of his specialty, to social acceptance and participation. But if interests

[8] Hinsie, L. E., *The Treatment of Schizophrenia*, Baltimore, Williams & Wilkins 1930, p. 45.

are retracted to the point of listlessness and apathy, so that fantasy reigns without further correction by real experience, then the condition must be regarded as ominous.

In a study of incipient cases of schizophrenia, mostly in their late 'teens, Hinsie found that ideas of reference tend to creep gradually into the picture without at first assuming the status of delusions.[4] The incipient patient is keenly aware of outside stimulation even though he does not overtly respond to it. For a long time he recognizes that the source of his difficulties is in himself. Nevertheless he cannot help feeling that the world is a little hostile, or at least inconsiderate, and that other people take a derogatory attitude toward him. Highly aware of his own fantasies, he wonders what other people would think if they knew what was going on in his head. It is a short step to occasional fleeting delusions. The patient half believes that people are actually saying derogatory things and behaving in a hostile fashion. In this borderland of half belief he may remain for some time, only gradually slipping over to the point where insight is lost.

No one family pattern stands out in the childhood history of schizophrenics. Maternal overprotection occurs in a certain number of cases and can be seen to have influenced the history by steadily discouraging the development of social contacts with other children. In other cases the trouble seems to begin in the relationship with the parents. A situation may exist, for example, in which an initially close attachment to a widowed parent is broken by the latter's remarriage, the child suddenly finding himself hopelessly unable to compete with the new spouse for the parent's affection. Perhaps the parents are unloving and frustrating, so that the child learns from the start to have little faith in human relationships. It may be assumed that any factors in the family situation that serve to discredit or block the child's relationships with people have a deleterious effect on his development. No single pattern stands out in its capacity to produce this effect.

Breaking with Reality.—The onset of schizophrenia is gradual, but when the history is carefully worked out it is usually possible to detect certain precipitating events. Strecker and Ebaugh illustrate this with two cases in which the sexual phenomena of puberty precipitated serious symptoms in youngsters already somewhat inclined in a schizophrenic direction.[5] A girl of fourteen became rather sud-

[4] *Ibid.*, Ch. 2.
[5] Strecker, E. A. & Ebaugh, F. G., *Practical Clinical Psychiatry*, Philadelphia, Blakiston Co., 5th ed., 1940, pp. 423–424.

denly withdrawn, preoccupied, and full of ideas of reference. She believed that the teachers were against her and that the other girls were constantly talking about her. It turned out that she was horrified by her first menstrual period, believing that it signified a serious abnormality and that she might bleed to death. A boy of seventeen dropped from the head of the class to total school failure and was reported increasingly silly, peculiar, and disinterested. He proved to be excessively worried about masturbation, which he believed caused insanity, and he felt sure that his schoolmates were chatting disdainfully about his evil and dangerous habit. Both of these young patients were cured by correct sexual information, together with encouragement along lines of increased social and athletic participation. One can but wonder how many persons beset by similar unreal problems have simply continued the downward pathway into severe schizophrenia.

The following case illustrates the way in which events can progressively deepen a schizophrenic reaction. A boy in high school was considered by his friends to be sensitive, solitary, and a little eccentric. They knew that he was an orphan and lived with an elderly, somewhat peculiar foster mother. The boy was good in his studies, especially in history and literature. His English teacher, who constantly read his literary productions, noted distinct talent but many eccentricities of content. Although the boy spent a good deal of time alone, he had several friends among the students who were preparing for college. At graduation he was separated from his chums, he himself being unable to go to college. Occasionally he visited them, but it was clear that he resented his inferior position and the interruption of his own education. His friends now began to suspect that he was building up fictions about himself. He showed them an application blank that he had received from an art school. They believed that he had prepared it on his own typewriter. He also discoursed at length on his distinguished French ancestry, a theme which he was able to fill out convincingly from his knowledge of history. He repeatedly mentioned that his real mother, a countess, was now living in the city, and that he was in frequent communication with her. The friends began to feel that he was a liar, and they laid plans to expose him. One day they confronted him with numerous fatal inconsistencies in his stories and accused him of fabrication. He thereupon admitted that his stories were not true, but explained that he had been forced to disguise himself in this way in order to elude a hostile power known as the Third Element. He now claimed that he and his mother, the countess,

had collaborated in preparing a set of disguising fictions to keep the Third Element off their trail. He told his accusers that the situation was growing increasingly serious. Most of his friends had turned against him, and only three remained on his side.

It is clear that this boy's development had taken a somewhat schizophrenic direction before he graduated from high school. That event, with separation from his circle of friends, gave his adjustment a downward jolt and sharply increased his symptoms. Already a great daydreamer, he now began to lose track of the line between fantasy and fact, speaking of his fantasies of noble lineage as if they were true. The motive behind these fabrications was pathetically clear: if he could not go to college, he would at least have some form of distinction to keep him on a footing with his friends, and while he was at it he provided himself with a mother. Unfortunately his attempts at compensation only irritated his friends, and their unsympathetic action constituted a second, more direct, and more personal rejection. This event threw him into deeper psychosis. His delusions about hostile friends and a hostile Third Element reflected the real feeling of hostility that he sensed in his accusers. Unfortunately the delusions now began to assume a generalized form which made him more and more inaccessible to friendly advances from others.

In general it can be said that sharp downward steps on the path to schizophrenia occur in connection with events that lower the patient's already feeble self-esteem or challenge in some way his adequacy. Anything that makes him feel more different from others, or less competent than he already thinks himself to be, has a devastating effect upon his contact with reality. The sexual changes of puberty, and such major challenges as engagement, marriage, childbirth, or heavy vocational responsibilities, often serve as precipitating events. Breaking with reality is not accomplished all in a moment, but successive stages of the break may be brought on by unfavorable events.

Schizophrenic Episodes with Spontaneous Recovery.—From a certain number of schizophrenic psychoses there is spontaneous recovery. In general, untreated cases and even many treated cases progress in an unfavorable direction, becoming if anything less well-adjusted to their surroundings. A small proportion, however, recover with little or no treatment. That this can happen at all, even though it is not the rule, is a matter of no small psychological interest.

Strecker has reported on a series of cases making spontaneous recovery.[6] The patients had all been through clear-cut schizophrenic psychoses, had recovered, and had remained in excellent health for at least five years. The outstanding characteristic of this series was that the onset had usually been abrupt and stormy, provoked by severe situations of stress. Moreover, in those cases where the childhood history was one of extreme seclusion, it appeared that the home situation was unusually inimical to normal development so that withdrawal was a more or less adjustive reaction to hopeless conditions. Both findings suggest that the likelihood of spontaneous recovery is greatest when the psychotic reaction contains a strong element of struggle against external circumstances. Signs of battling the environment make the prognosis better than it would be if the response consisted of a steadily increasing withdrawn apathy.

French and Kasanin have published a detailed analysis of two cases of recovery from schizophrenia.[7] They make two points: (1) that an acute psychosis can sometimes be regarded as a temporary episode that marks the transition from an old to a new adjustment, and (2) that in his delusions the patient may foreshadow the means he is going to employ in achieving the new adjustment. In the first patient, a woman of twenty-four, the critical breakdown occurred soon after she left home to make an independent life for herself and soon after she accepted for the first time sexual attentions from a man. Both steps were radical ones, especially the second, which was sharply at variance with the severe moral standards of her parents. Apparently these steps were at first too much for her. A typical schizophrenic psychosis developed with many strange and incoherent delusions. The theme of most of these delusions was punishment and suffering for what she had done. She felt that she was dead and that she was being transformed into a snake which was loathsome to everyone. In this delusion she probably expressed in a symbolic way her inability to take the steps toward sexual expression. Another set of delusions made no sense at first, but afterwards appeared to foretell the mechanism of her recovery. She was being kidnapped and transported to Italy, this being the land of her ancestral home, and in addition she had become a Catholic, this being her ancestral faith but not the faith of her parents. As time went on her delusion of having become a Catholic increasingly took

[6] Cf. Strecker & Ebaugh, *op. cit.*, pp. 428–435.

[7] French, T. M. & Kasanin, J., "A Psychodynamic Study of the Recovery of Two Schizophrenic Cases," *Psychoanalytic Quarterly*, 1941, Vol. 10, pp. 1–22. Reprinted in Tomkins, S. S. (ed.), *Contemporary Psychopathology*, Cambridge, Harvard University Press, 1943, Ch. 27.

the form of a desire to confess her sins and receive absolution. This desire eventually brought her back into contact with the hospital staff and especially with the psychiatrist, who could function in a role not unlike that of a priest. It would seem an unwarrantable piece of interpretation to say out of hand that the patient's delusion about Italy and the church meant that she wanted to resume her growth, but needed the guidance and support of someone whose attitude would be kindly and forgiving. Yet this was precisely the means by which the patient recovered. At first leaning heavily on the psychiatrist for advice at every step, then with steadily increasing independence, she gradually achieved the new learning that brought her to vocational and sexual adulthood. Follow-up over several years showed distinctly superior adjustment in marriage.

The second patient reported by French and Kasanin, a nineteen-year-old boy, was blocked in much the same developmental problem. He was unable to accept masturbation as his sole sexual outlet, yet girls he regarded as far too pure and remote to be fitting objects for a physical interest. During his schizophrenic episode he performed acts and developed delusions that expressed his desire to give up and renounce the whole attempt at new adjustment. He also busied himself, however, with metaphysical theories and finally reached a formula which appeared to give him the key to the universe. His formula dealt with the achievement of perfect unity, and it included the proposition that one means of achieving this perfect unity was through the sexual union of man and woman. Apparently the solution of his problem in the abstract was a necessary and constructive step toward solving it in reality. He had to conceive of sexual union as part of the harmonious working of the universe before he could accept it as personal behavior. The solution proposed in his psychotic philosophizing was the one adopted by him in his subsequent good adjustment.

These transient schizophrenias can be described as retreats from reality. When viewed in the light of their later outcome, however, they can better be characterized as tactical retreats having the function of a delaying action until the patient can gather himself together for a fresh attack on the problem of new adjustment.

Dynamics of the Different Forms of Schizophrenia.—Thus far we have made no attempt to account for the different forms of schizophrenia. Admittedly they might be due to differences of predisposition and temperament, but the hypothesis is at least worth exploring that they result in part from the use of different defensive

and adjustive techniques to solve basically similar problems. Some interesting suggestions along this line have been made by A. T. Boisen, himself a recovered schizophrenic and a man who later specialized in the training of clergymen for duties in mental hospitals.[8]

The difficulties experienced by the schizophrenic, which Boisen considers best summarized in the phrase "an intolerable loss of self-respect," can be met in several ways. One way consists of surrendering further claims to self-respect and becoming an apathetic drifter. This solution, if such it be called, is the one that results in the simple type of schizophrenia. His personality no longer organized by an interest in achieving self-respect in the eyes of his fellow men, the patient simply follows the inclination of the moment, whether it be to dream, to loaf, or to drift around. The hebephrenic type is simply an advanced form of apathetic drifting. It represents an extreme degree of indifference to the opinions of others; the patient cares so little about the appearance and sound of his behavior that he talks nonsense, makes foolish gestures, and performs crazy acts. The mechanism at work in the paranoid form of schizophrenia is somewhat different. The patient does not accept the low state of his self-respect; he finds a way to deny it. By using projection, by blaming the outside world for everything that seems to be wrong with him, the patient tries to conceal his sense of shortcoming from himself and others. His reaction is the opposite of apathetic drifting. He fights to save his self-respect. This description fits very well such typically paranoid cases as L. Percy King and the boy who had to conceal himself from the hostile Third Element. The catatonic form of schizophrenia represents still a third pattern of reaction. Here the central part is played by panic. The patient is terrified by the collapse of his self-respect and the rapid disintegration of his thoughts. The state of catatonic excitement directly reflects this panic and may also represent a violent and deluded attempt to set everything right. The state of catatonic stupor, on the other hand, accompanies a desperate attempt to reorganize thought and reach a mental solution of the problem. We noticed previously that the stuporous catatonic was in a state of active resistance and mental vigilance. From the outside it was impossible to say more than that he seemed to resist being disturbed and to be alertly registering what went on around him. Now comes the report from the inside,

[8] Boisen, A. T., *The Exploration of the Inner World*, Chicago, Willett, Clark & Co., 1936. A summary will be found in Klein, D. B., *Mental Hygiene*, New York, Henry Holt & Co., 1944, pp. 161–170.

for Boisen spent many of his psychotic hours in catatonic stupor, that mental activity is going on with the fierce concentration that comes from a sense of danger. In the catatonic form, therefore, there is also a considerable struggle to preserve and reorganize the self. The catatonic patient is working, not drifting.

Thought Processes in Schizophrenia

It is extraordinarily difficult to follow the thought processes of a schizophrenic patient. With other types of patient the observer can usually establish empathy and follow the course of thought even though it appears somewhat strange. It is not difficult, for instance, to comprehend the deluded paretic who offers us a pleasant week end at his country estate, or to understand a manic patient when he lays vast plans for humanitarian reform. These patients are crazy, but somehow the schizophrenics seem crazier. Their thinking falls to pieces, it defies logic, it contains weird constructions like prestigitis, the Third Element, and the Strong Material Major Body Resistance Force. Nevertheless it is not always impossible to understand what is going on in schizophrenic thought. The peculiarities of thought are entirely congruent with the rest of the patient's peculiarities. The central feature is the lack of interest in social surroundings. Schizophrenic thinking is more or less divorced from social communication.

The Development of Paranoid Thinking.—The study of schizophrenic thought is most easily begun at the point where it is least abnormal. We shall therefore begin by considering delusions. A delusion is essentially a misinterpretation of experience. It does not, like an hallucination, entail a distorted registering of experience or a false perception of what is going on. An hallucinated patient hears voices in the ventilating system that loudly discuss his faults and denounce his sins. A merely deluded patient proceeds with more respect for reality. He correctly perceives a number of people talking, and although he does not overhear them he infers that they are discussing his faults and denouncing his sins. In delusions the disorder is localized at the point where inference or the interpretation of experience begins. Otherwise the contact with reality is correctly maintained.

In a paper on delusional thinking Cameron develops the thesis that one is dealing mainly with a disorder of communication.[9]

[9] Cameron, N., "The Development of Paranoic Thinking," *Psychological Review*, 1943, Vol. 50, pp. 219–233.

Children learn to react to themselves by noticing how others react to them. Their criticism of their own behavior contains a distillation of the criticisms they have received from others. Gradually the child learns to see himself in different perspectives. He learns to judge his conduct as his mother judges it, as his brother judges it, as his teacher judges it, as his chum and as his rival judge it. He becomes able to shift his perspectives and thus to take different attitudes toward his behavior. Cameron describes the capacity to do this as "skill in role-taking, *i.e.*, in taking the attitudes of others and thus having their perspectives in one's own behavior." Skill in role-taking is an acquired skill, and there are great individual differences in the extent to which it is acquired. The factors that enter into these differences are undoubtedly complex, but one of the most important is the extent of social experience. The habit of sharing, expressing, evoking reactions from others, perceiving their perspectives and shifting one's own requires long and varied practice. It is precisely this practice that is not obtained by the person whose attitude toward others is one of protective avoidance. He does not sufficiently learn to correct the perspective of his own thought. Like everyone else he draws inferences from what he observes, but unlike others he remains an amateur in realizing how these inferences might appear to someone else.

Now suppose that a person whose lack of social experience has caused him to retain a rigidity of perspective and a one-track outlook becomes involved in emotional difficulties. More specifically, suppose that he suffers a bad downward jolt in self-esteem. The effect of this is to sensitize him to any impressions that have to do with his standing in relation to others. Cameron illustrates the matter of special sensitivity by mentioning the woman who goes out for the first time with a new hat. She is set to respond to any hint of surprise or criticism. A man smiling over a joke he has just recollected, a woman frowning to remember her shopping list, are perceived as reacting unfavorably to her new hat. Thus she selects fragments of behavior of other people and weaves them together into a fictitious audience reaction. The problem is the same, though much more serious, for the person whose self-esteem has been blasted. Everything that happens seems related to this consuming problem. He selects fragments of the behavior of others and interprets them into a consistent picture of judgments about himself. These judgments are fictitious because they do not correspond to what others are thinking. They correspond only to what the person is thinking about himself.

The critical point in the development of delusions, however, is not the motivation nor the selective misinterpretation. It is rather the *failure of correction.* Weak in habits of role-taking, accustomed to puzzle and brood alone, the person becomes trapped in his own single perspective and shares his misgivings with no one. The result is cumulative misinterpretations; "the lone individual lacks the usual checking over with other persons which might modify and correct them." Before long he has built up what Cameron calls a "pseudo-community." He ascribes imaginary attitudes and functions to the real people in his environment. They are detectives, they are gangsters, they are pursuers who mean harm. The more he organizes this pseudo-community, the more it becomes necessary for him to take action in it. Eventually he does something in the way of protective or aggressive behavior. He takes action in the real social field, and is judged by the other persons in that field to be insane.

Even the formation of delusions, therefore, is a direct consequence of social isolation. Protective avoidance of the company of others prevents the development of well-rounded thought processes, just as it prevents the development of a well-rounded personality in general. The effect of failure to communicate and correct one's thinking becomes still more apparent in the severer symptoms of schizophrenia.

Communication and the Structure of Thought.—The first serious attempt to understand the content of schizophrenic thinking was reported by C. G. Jung in 1906. Studying schizophrenic productions and associations in much the same way that Freud had studied the associations of neurotic patients, Jung reached the conclusion that emotional conflicts played the decisive part. The patient was completely absorbed in his "complexes" and had no energy left over for adjustment to reality. "The separation of the schizophrenic patient from reality," Jung wrote, "the loss of interest in objective happenings, is not difficult to explain when we consider that he persistently stands under the ban of an invincible complex. He whose whole interest is chained by a complex must be like one dead to all surroundings. He dreams with open eyes and psychologically no longer adapts himself to his surroundings." [10]

The similarity between dreaming and schizophrenic thinking is more than superficial. It is literally correct to say that dreams are hallucinations. They appear to the dreamer as events in which he is

[10] Jung, C. G., *The Psychology of Dementia Praecox*, trans. by A. A. Brill, New York & Washington, Nervous & Mental Disease Publishing Co., 1936, p. 89.

actually participating. They are also badly jumbled, often completely incoherent and ridiculous, when judged according to the standards of waking thought. The parallel can be pushed further. There is sometimes a displacement of affect in dreams so that the person, like a hebephrenic patient, finds himself laughing foolishly at a sad situation. Sometimes neologisms like prestigitis are created in dreams. Dreaming is a form of activity that goes on when sensory avenues are closed or only barely open, and when motor outlets are largely in abeyance. It can be described as thinking that takes place under conditions of great isolation from the restraints of reality. Dreams are not devised in the interests of communication. This becomes apparent when one tries to write down one's dreams or tell them to somebody. All kinds of explanations and interpolations are necessary to put the dream into communicable form. The constraints of language, logic, and reality did not operate strongly on the dream when it was being composed. They become important only at the point where communication begins.

From his studies of children's thinking Piaget reached the conclusion that the logical structure of thought and the precise relation of language symbols to reality result from conversation and social interchange. Thought becomes logical in the interests of sharing. Others challenge what we say, and we have to say it better in order to be understood. Piaget showed that younger children cannot readily explain things to each other.[11] The explainer fails to enter the perspective of the listener. He speaks more to himself than to the other child. He does not even bother to explain things in the right order, although he knows well enough what that order ought to be. Children outgrow these faults of thought and language chiefly because they are challenged to make themselves better understood. Logical thought is produced in a social matrix. The chief motive behind thinking in a realistic and logical fashion is to be able to communicate effectively with other people. Thus the very structure of thought is to some extent the product of social interaction.

It may be that the seclusive child, who avoids social interaction as much as possible, lags considerably behind his fellows in habits of structuring his thought. In any event, if he turns in the direction of psychosis he loses further interest in maintaining thought at a logical and communicable level. His thought processes are like dreams to the extent that they are no longer devised for communica-

[11] Piaget, J., *The Language and Thought of the Child*, New York, Harcourt, Brace & Co., 1926, Ch. 3.

tion. It is easy for the observer to be misled by the fact that schizophrenic thought is so often communicated. In paranoid cases there is still a certain urge to communicate, and it is in just such cases that the structure of thought is least impaired, however strange the conclusions. For most schizophrenic patients, on the other hand, the urge to communicate is lost. If they talk or write, it is to themselves, and if they answer questions, it is because that is the easiest way to meet the social situation of being questioned. It makes no difference to them whether or not the other person understands.

The Problem of Intellectual Deterioration.—The opinion has generally prevailed that the schizophrenic disorder is centered in feeling and interest rather than in thinking. The peculiarities of thought are results rather than causes of the emotional orientation. Nevertheless it has been claimed by many observers that intellectual deterioration accompanies schizophrenia and becomes increasingly marked in the course of time. Kraepelin's whole notion of dementia praecox was based on the supposition that dementia or intellectual deterioration regularly occurred. The question is an important one. If deterioration can be demonstrated, it constitutes indirect but rather strong evidence for underlying cerebral impairment. Paresis, senile disorders, and cases of brain damage show definite evidence of mental deterioration. A similar trend in the performance of schizophrenics would suggest an analogous underlying condition. Do schizophrenics show intellectual deterioration, or is their deterioration confined to the spheres of feeling and interest?

The problem has proved a baffling one despite much research directed toward solving it. Schizophrenic patients certainly get worse in the sense of becoming more withdrawn and having more peculiar ideas. They certainly get worse in the sense of making an erratic showing on tests of intellectual ability. The thing that is difficult to demonstrate is the relation between these two facts. Do the poorer test performances simply result from the increased withdrawal and strange ideas? Schizophrenics fill their test performances with their fantasies. Given the Rorschach ink blots, they pay no attention to the more obvious outlines; instead they find highly peculiar objects in obscure details, or they project an interpretation so wildly that no one else can see how it was possibly related to the ink blot. Asked to classify blocks of different sizes and shapes, they divide them into the good soldiers and the forces of evil, paying no attention to such criteria as size, color, or form. Quite likely they will refuse to take the tests at all. The testing of schizo-

phrenics requires long patience and infinite skill. Even then the results are sometimes none too clear.

Perhaps the most satisfactory report is the one by Kendig and Richmond, who used the Stanford-Binet test of intelligence with 500 schizophrenic patients and several other groups serving for purposes of comparison.[12] On the whole the patients tested were below normal. Close inspection of their performances, however, revealed that the weakness was regularly in tasks demanding sustained attention and sustained effort. Apart from this weakness there were no particular mental functions that showed impairment, and there was no evidence for general deterioration. The patients were retested after a considerable interval of time and showed no loss in the second performance. Sustained effort and attention are precisely the aspects of intellectual activity that would fail through lack of interest. These results therefore point to the deterioration of interest as the core of the disorder.

The Stanford-Binet test is not, however, the only suitable means of gauging intellectual performance. Goldstein has advanced the claim, based principally on sorting tests, that certain schizophrenics, like brain-injured patients, show a distinct impairment of the abstract attitude.[13] This restricts their capacity for conceptual thinking and throws them back on a more concrete type of mental performance. Goldstein analyzes the concreteness of these schizophrenics in some detail. He is led to believe that the similarity between his findings with brain-injured patients and with certain schizophrenics "points to the probability that a somatic factor is also involved in the latter."[14] It is certainly true that extreme concreteness sometimes characterizes the behavior of schizophrenics. This is attested in a detailed case report by Hanfmann.[15] Hanfmann's patient was unable, for instance, to see that a proverb had a general meaning. "Don't cry over spilt milk" seemed wise to her only in the sense that one could always go to the store and buy more milk. Furthermore, she refused to show what course she would pursue in looking for a ball lost in a circular field, on the ground that she had not lost a ball in a field. But there is doubt

[12] Kendig, I. & Richmond, W., *Psychological Studies in Dementia Praecox*, Ann Arbor, Edwards Bros., 1940.

[13] Bolles, M. & Goldstein, K., "A Study of the Impairment of 'Abstract Behavior' in Schizophrenic Patients," *Psychiatric Quarterly*, 1938, Vol. 12, pp. 42–65.

[14] Goldstein, K., "The Significance of Psychological Research in Schizophrenia," *Journal of Nervous and Mental Disease*, 1943, Vol. 97, pp. 492–507. Reprinted in Tomkins, *op. cit.*, Ch. 22.

[15] Hanfmann, E., "Analysis of the Thinking Disorder in a Case of Schizophrenia," *Archives of Neurology and Psychiatry*, 1939, Vol. 41, pp. 568–579. Reprinted in Tomkins, *op. cit.*, Ch. 23.

about the generality of this phenomenon in schizophrenics. Cameron claims that even fairly disorganized schizophrenics are capable of abstract or categorical performances.[16] The factual controversy is not easily settled because it is hard to agree on just what is meant by abstract behavior. In any event there is as yet no way to be certain whether loss of the abstract attitude should here be interpreted as a sign of cerebral impairment.

In another experiment Cameron has undertaken a direct comparison between the performance of schizophrenics and that of senile patients in whom cerebral deterioration could be legitimately inferred.[17] The comparison was made by means of two tests: a sentence completion test that involved supplying a causal relationship, and a block sorting test. Both the deteriorated seniles and the schizophrenics made poor over-all performances, but the reasons for their failures were not the same. The senile patients were able to stick to the assigned task, performing monotonously and persistently in ways that were too simple and too restricted to reach the correct results. Their tendency to rapid forgetting prevented an effective organization in time. In contrast, the schizophrenics could not stay within the boundaries of the task. They borrowed impressions from all over the room and freely threw in their own personal preoccupations. Whereas a senile subject might get stuck in a wrong solution and go on endlessly sorting blocks by colors, a schizophrenic would mix things up by trying to include the examiner's yellow pencil with the yellow blocks, or his arms with the red blocks because they contained red blood. The schizophrenic tendency toward loose clustering was not at all characteristic of the senile patients. It therefore could not be taken as evidence for cerebral deterioration.

The bulk of the evidence suggests that schizophrenic disorganization of thought is not of the same nature as intellectual deterioration. It is probably better conceived as secondary to the emotional changes that characterize the disorder. But the experimental evidence is not yet altogether conclusive. New and better methods of observation may sometime put the whole problem in a clearer light.

Somatogenic Aspects of the Disorder

Thus far we have emphasized the psychogenic aspects of schizophrenia. We have conceived it as a developmental disorder having

[16] Cameron, N., "Schizophrenic Thinking in a Problem-Solving Situation," *Journal of Mental Science*, 1939, Vol. 85, pp. 1012–1035.

[17] Cameron, N., "Deterioration and Regression in Schizophrenic Thinking," *Journal of Abnormal and Social Psychology*, 1939, Vol. 34, pp. 265–270. Reprinted in Tomkins, *op. cit.*, Ch. 24.

its roots in childhood. It has been described as the culminating point of a history marked by increasing protective avoidance of human contacts. The lack of interest in human contacts has a profoundly disturbing effect on development. It isolates the individual from the educative influence of social correction. Thus he fails to establish a stable level of self-esteem and a stable pattern of social roles. He fails to develop skill in role-taking and in shifting to different perspectives. He does not sufficiently expose his thinking to the social interaction that gives it structure and precision. His feelings and thoughts grow within himself and are not sufficiently shaped by interaction with others. The social environment is always the obstacle in his life. Thus the ground is prepared for responding to stress by further curtailing his interest in the world around him.

What is the initial cause of this type of development? Environmental conditions undoubtedly play a part. In various ways the environment, inside or outside the home, can be decidedly inimical to social development. But it is doubtful whether circumstance alone can sufficiently explain the schizophrenic disorder. On the other hand it does not seem likely that gross cerebral pathology is implicated. Injured tissues, tumors, large-scale devastations of any kind produce effects of a quite different sort, as we saw in a previous chapter. On the face of it the disorder does not take a course or have a character that is consistent with gross cerebral injury. The schizophrenic disorder is fully consistent, however, with such hypotheses as a generalized weakness, an oversensitive disposition, or possibly even a subtle chemical deviation. It is hard to avoid the suspicion that there must be something more than an unfavorable environment. This something more, this somatogenic contribution, could plausibly take the form of an innate temperamental peculiarity or of a physiological deviation that had an insidious but cumulative effect. We must now consider what weight of evidence can be adduced for hypotheses of this kind.

Evidence for Genogenesis.—In spite of the many difficulties that arise when hospital records are used as the basis for statistical investigations, there is beginning to be general agreement that schizophrenia appears with abnormal frequency in certain family trees. The most vehement proponent of genogenesis is Kallmann, who studied the blood kin of all schizophrenics admitted to a Berlin mental hospital between 1893 and 1902, the records being followed to 1929.[18] The original group of patients numbered over a thousand.

[18] Kallmann, F. J., *The Genetics of Schizophrenia*, New York, Augustine, 1938. A condensed summary is given by Garrison, M., "The Genetics of Schizophrenia," *Journal of Abnormal and Social Psychology*, 1947, Vol. 42, pp. 122–124.

Kallmann's most important findings are the following. Schizophrenia occurs in approximately 0.85 per cent of the general population. If one parent is schizophrenic, however, the same disorder develops in 16.4 per cent of the children, and if both parents are schizophrenic it occurs in 68.1 per cent of their offspring. The same tendency can be shown by considering the siblings of patients. Schizophrenia was found in 85.8 per cent of cases where the sibling was an identical twin of the patient, in 14.7 per cent of fraternal twins, in 14.3 per cent of full siblings, and in 7.0 per cent of half-siblings. The incidence is greater for closer relatives of patients than it is for more distant relatives. The figures obtained by Kallmann are in general higher than those found by other investigators, but the trends are all in the same direction.[19]

These figures probably exaggerate the importance of the genogenic factor. A schizophrenic parent is probably not the best mentor in social adjustment, and the atmosphere of a home in which there is psychosis is probably not ideal for normal development. Nevertheless there can be little doubt that an hereditary trend prevails in schizophrenia. The findings mean that a schizophrenic psychosis is at least far more likely to develop in individuals who carry a certain inherited predisposition. Naturally a mere statistical finding does not have anything to say about the character of that predisposition. It simply establishes a high probability that there is such a thing.

Evidence for Histogenesis.—As already mentioned, the course and character of schizophrenia is hardly consistent with gross histopathology, that is, with large changes in cerebral tissue such as come from infection or degeneration. From time to time an investigator has reported the discovery of structural defects in schizophrenic brains at autopsy. These results are well-nigh worthless because of the fact that so many of the patients have lived with their disorder for decades, passing through all kinds of other sicknesses and even senile changes, before their brains became available for examination at autopsy. Whenever it has been possible to compare normal and schizophrenic brains, holding constant such factors as age, general health, and the nature of the terminal illness, it has proved impossible to tell the two kinds of brain apart.[20] In a thorough review

[19] Landis, C. & Page, J. D., *Modern Society and Mental Disease*, New York, Farrar & Rinehart, 1938, pp. 81–85; Malzburg, B., *Social and Biological Aspects of Mental Disease*, Utica, State Hospitals Press, 1940.

[20] Dunlap, C., "The Pathology of the Brain in Schizophrenia," *Research Publications of the Association for Research in Nervous and Mental Disease*, 1928, Vol. 5, pp. 371–381.

of the evidence up to 1934, Conn drew the conclusion that the whole quest for gross histopathology had yielded negative results.[21]

In an attempt to summarize these findings in a single sentence, one is apt to make the mistake of concluding that there is nothing wrong with the schizophrenic brain. No such sweeping generalization is really justified. Research is always limited by its techniques; we know only that schizophrenic and normal brains do not differ when examined by currently available microscopic techniques. Perhaps the techniques of tomorrow will tell a different story. As things stand, however, the failure to find characteristic tissue changes in the brain throws the burden of explanation back upon psychogenic, genogenic, and chemogenic factors.

Evidence for Chemogenesis.—Kraepelin advanced a chemogenic theory of schizophrenia. He believed that the root of the difficulty lay in disordered secretions of the sex glands. This produced a chemical state in the body (autointoxication) that in some way depressed the proper functioning of the nervous system. When the importance of the endocrine glands was first appreciated, it looked as if Kraepelin's view might receive support. Endocrine research, however, has proved tremendously complicated. Carmichael, in a review in 1938, considered that a close relationship between the endocrines and mental disorders had not been satisfactorily demonstrated.[22] A similar fate seems to have met the search for consistent biochemical changes. It is an appealing hypothesis that schizophrenics suffer from some specific kind of physiological or chemical insufficiency. A review of the extensive literature by McFarland and Goldstein shows that the evidence does not as yet justify such an hypothesis.[23] There are only a few consistent physiological differences between schizophrenics and normal people. These do not form a pattern which suggests any specific focus of disorder. In fact, they become intelligible only when seen as a sort of physiologic withdrawal, a *bodily* failure to respond to outside stimulation that runs parallel to the *emotional* failure to respond.[24] Schizophrenics show a reduced response to thyroid medication, to

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[21] Conn, J., "An Examination of the Clinico-pathological Evidence for the Concept of Dementia Praecox as a Specific Disease Entity," *American Journal of Psychiatry*, 1934, Vol. 90, pp. 1039–1082.

[22] Carmichael, H., "The Role of Endocrines in Mental Disorders," *Journal of Abnormal and Social Psychology*, 1938, Vol. 33, pp. 205–216.

[23] McFarland, R. C. & Goldstein, H., "The Biochemistry of Dementia Praecox," *American Journal of Psychiatry*, 1938, Vol. 95, pp. 509–552.

[24] Angyal, A., Freeman, H. & Hoskins, R. G., "Physiologic Aspects of Schizophrenic Withdrawal," *Archives of Neurology and Psychiatry*, 1940, Vol. 44, pp. 345–351. Reprinted in Tomkins, *op. cit.*, Ch. 18.

autonomic stress, and to various other forms of stimulation that normally set physiological readjustments in motion.

Studies of Bodily Constitution.—There is one line of research that seems to have yielded more positive results. In his studies of physique and mental disease, Kretschmer reported a very marked association between schizophrenia and the slender fragile build which he called *asthenic* and which Sheldon later called *ectomorphic*.[25] It will be remembered that Sheldon established a high correlation between the ectomorphic build and the temperamental traits of cerebrotonia, a person so endowed being tense, overvigilant, sensitive, inhibited in action, uncomfortable and awkward in social situations. Details of the correlation between schizophrenia and body type are still to be worked out, but Kretschmer's finding seems to be at least roughly correct, and Sheldon's work, together with Kretschmer's own penetrating clinical observations, makes it highly intelligible. Schizophrenic patients tend to be recruited from the ranks of people who are temperamentally shy and sensitive, who even as young children hang by preference on the outskirts of social situations, and who find social adjustment the most difficult of the tasks of life. Physique and temperament are presumably inherited. The genogenic factor in schizophrenia may prove to be reducible to constitution and temperamental make-up.

Sheldon describes strongly cerebrotonic children as restrained in action but "intent, nervous, inquisitive, and jumpy."[26] Reactions are relatively fast, so much so as to constitute a social handicap. "The individual tends to become flustered and tangled up in his own reactions." His attention is so sharp and alert that he is easily confused in a social situation, like "a man trying to attend to several conversations simultaneously." He is oversensitive to pain, to loud sounds, to any form of strong stimulation, including the rough and tumble of the playground. As a result he finds it more comfortable to be alone or at most with one or two familiar companions. "Strained, distressed, and uncomfortable in the face of any social relationship," he "retreats from company as from physical pain." Sheldon maintains that the cerebrotonic individual behaves in these ways because of his constitutional endowment. He is born oversensitive and fast-reacting, thus poorly fitted for social adjustment.

Studies of temperament and constitution are still in a tentative stage. It is always difficult to untangle the innate from the acquired.

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[25] Kretschmer, E., *Physique and Character*, trans. by W. J. H. Sprott, London, Kegan Paul, 1925, Ch. 2.

[26] Sheldon, W. H. & Stevens, S. S., *The Varieties of Temperament*, New York, Harper & Bros., 1942, pp. 69–94.

An uncompromising advocate of psychogenesis might urge that the pattern of traits which makes up cerebrotonia is a result of early social intimidation with a subsequent protective avoidance of social contacts. The temperamental hypothesis, however, has the advantage of making several types of data fit together: the inheritability of a disposition to schizophrenia, the tendency of schizophrenics toward the asthenic or ectomorphic physique, and the fact that the core of the disorder seems to lie in the problem of social participation. The interaction between temperament and environment is not hard to conceive. In an environment that is inimical to warm and rewarding human relationships, a temperament such as the one described by Sheldon will easily lead to habitual protective avoidance of human society. When environment and temperament combine in such a fashion there is a double push toward social isolation. Each requires some of the other in order to produce this result. Otherwise the forces that make for social participation cannot be blocked effectively.

Psychotherapy for Schizophrenia

Until fairly recent years schizophrenic patients did not receive anything resembling psychotherapy. For the most part they were committed to mental hospitals which, already overcrowded and chronically understaffed, attempted nothing more than to keep them in good physical health and comfort. Gradually, as some superintendent invented a way to manage things better or as some hospital miraculously pulled itself into a financial position that was more than hand-to-mouth, serious attempts were made to provide an environment that would have a beneficial effect on schizophrenic patients. The introduction of self-service cafeterias was a step in this direction, offering the patients an opportunity, whether they took it or not, to make social contacts of their own choosing. Occupational therapy often proved of value with schizophrenics. In the reassuring setting of work with inanimate objects they can sometimes make a new beginning with social relationships. Exercise, games, dances, and other recreations now have a place among the facilities offered by any mental hospital that is abreast of the times. Myerson and his co-workers have instituted an intensive program called "total push therapy," which aims to utilize every resource for promoting physical health and interesting, varied occupations.[27] The result is

[27] Myerson, A., "Theory and Principles of the 'Total Push' Method in the Treatment of Chronic Schizophrenia," *American Journal of Psychiatry*, 1939, Vol. 95, pp. 1197–1208.

an increased rate of discharge from the hospital, fewer disturbed episodes, fewer signs of progressive deterioration, and a pleasanter adjustment on the part of those patients who remain not well enough for discharge. Going a step further, Sullivan recommends that attendants for schizophrenics be selected with a view to providing a maximally gentle, sympathetic, and understanding social milieu. He suggests that more or less schizoid individuals are ideal for this purpose, possessing the delicate insight that is necessary to elicit whatever social inclinations may still be stirring in the patient.[28]

In these and other ways the modern mental hospital tries to provide an environment that will exert at least a mild psychotherapeutic influence on its schizophrenic inhabitants. In addition there are therapeutic interviews conducted in whatever fashion and toward whatever goals seem best suited to the particular case. Standard psychoanalysis has been tried with dubious success and has been modified in various ways to meet the special problems of schizophrenia. Though psychoanalysis is currently of less practical importance than other methods of treating schizophrenia, the experiments with its use afford valuable insights into the nature of the disorder.

Experiments with Psychoanalysis.—In very early stages of the disorder it is sometimes possible to apply psychoanalytic technique without radical change from the standard procedure. Hinsie reports a successful experiment along this line.[29] His patients were carefully selected according to the following criteria: they were all in the adolescent period, freely communicative, willing to undergo treatment; they all had sought help voluntarily, and they showed insight into the fact that something was wrong with them. Hinsie's patients were, of course, very unusual; more accurately, they were caught at a very unusual stage before they were really psychotic. They were at the borderline of half believing, half not believing their incipient delusions. There is every reason to suppose, however, that they would have become psychotic if left untreated. With patients in this incipient stage, Hinsie found it unnecessary to make substantial changes in standard psychoanalytic technique. The thorough alteration of personality that can be achieved by this method proved beneficial for these cases.

With patients who have passed through the borderland into psychosis, the situation is considerably different. Alexander contrasts

[28] Sullivan, H. S., *Proceedings of the Second Colloquium on Personality Investigation*, Baltimore, The Johns Hopkins Press, 1932, pp. 46–47.
[29] Hinsie, L. E., *The Treatment of Schizophrenia*, *op. cit.*, Chs. 3–8.

them with neurotic patients as follows: "The neurotic must learn to accept repressed *psychological* facts, while the psychotic must learn to accept rejected *external* facts." [80] This difference is vitally important when it comes to establishing the initial therapeutic relationship. The physician can be the ally of the patient whose task it is to accept repressed psychological facts. He cannot occupy this role at once with the psychotic patient because he himself is among the rejected external facts. The schizophrenic patient is often remarkably aware of his inner life. It is of no great value to have him learn more about it. In fact it may even do harm, deepening his preoccupation and increasing his disturbance. The therapeutic task is rather to help him discover that reality can be bearable and even rewarding. This fact must first be discovered in his relation to the therapist. Alexander therefore recommends two distinct changes in psychoanalytic technique. At the beginning of treatment there must be a long period during which the relationship between doctor and patient is welded into one of friendship and confidence. Then as the treatment progresses the doctor must take a more active role in encouraging the patient to establish contacts with things and people in his environment. Even so, success is not to be expected with more than a small proportion of cases.

The Problem of Creating a Therapeutic Relationship.—The crux of the matter is to create a stable and workable therapeutic relationship. An important battle is won when the patient can achieve a relationship with even one member of his social environment, the physician. This topic is discussed in a paper by Fromm-Reichmann.[81] She points out that the patient has entered his withdrawn state as a means of protecting himself from the frustrations of reality with its constant reminders of his inadequacy. Suspicious and distrustful of everyone, he is particularly upset by a person "who approaches him with the intention of intruding into his isolated world and personal life." Yet it is her belief that "every schizophrenic has some dim notion of the unreality and loneliness of his substitute delusionary world." A part of him still longs for contact and understanding, and once he has managed to accept the therapist his dependence becomes unbelievably strong. He is so sensitive that almost anything that happens appears to him as a rejection. "One patient," says Fromm-Reichmann, "responded twice with catatonic stupor when

[80] Alexander, F., *The Medical Value of Psychoanalysis*, New York, W. W. Norton & Co., 1932, p. 151.

[81] Fromm-Reichmann, F., "Transference Problems in Schizophrenics." *Psychoanalytic Quarterly*, 1939, Vol. 8, pp. 412–427. Reprinted in Tomkins, *op. cit.*, Ch. 28.

I had to change the hour of my appointment with her; both times it was immediately dispelled when I came to see her and explained the reasons for the change." Another patient became furiously angry when the therapist, having granted him several special privileges, announced that she would have to consult the superintendent before giving him permission to visit his relatives. He could not tolerate having another person admitted to the one fragile relationship he had been able to make.

For our purposes the most important feature of Fromm-Reichmann's paper is her convincing demonstration that "the schizophrenic is capable of developing strong relationships of love and hatred towards his analyst." Once a relationship is established, it is of vast importance to the patient and it is charged with strong emotions. Nothing could show more clearly the nature of the schizophrenic disorder. The affective shallowness, the emotional blunting and distortion, the lack of interest in human relationships are all superimposed on an original capacity for strong and vital feelings. The patient has been many times injured, and he has learned the art of protective avoidance. He practices this art to a degree that eventually devastates his development. But the flame of feeling is not necessarily extinguished. Fromm-Reichmann believes that much better psychotherapeutic results can be obtained with schizophrenics if the physician's behavior is carefully adapted to this fact.

Application of the Principle of Flexibility.—With schizophrenics even more than with neurotics the principle of flexibility needs to be applied. Not only the techniques but even the goals of therapy may have to be radically changed. The following case of a potential schizophrenic illustrates some of the questions that have to be considered.[32]

The patient was a young man of nineteen, a brilliant university student. Although capable of unusually good work, he found himself deserting school for weeks at a time because of anxiety and depression. He also reported that any close association with girls caused him anxiety. In the first interview he poured forth his story, showing excellent insight into the nature of most of his conflicts. He was aware, for instance, of his resentment and fear of his harsh father and of his affection for his mother, who had always protected him. In the second interview he reported a dream that he had withheld on the first day. The dream was complexly disguised, but from the patient's associations it appeared clearly to deal with the

[32] Alexander, F. & French, T. M., et al., *Psychoanalytic Therapy*, New York, The Ronald Press Co., 1946, pp. 320–324.

Oedipus situation. The young man sought an early third appointment at which he arrived greatly disturbed. He had stayed away both from school and his job because his men teachers and employer were hostile to him; he had concealed himself in his room lest they follow and spy upon him.

This sudden delusional reaction was precipitated by the discussion of the dream. Apparently the patient could not tolerate any working over of the emotions bound up in the family triangle. The mere attempt to do so released such strong feelings of guilt and fear as to draw the projective mechanism into play and produce a psychotic reaction. To become fully aware of the strength of his love for his mother meant to invoke the danger of male retaliation. It was fortunate that his therapist was a woman; he would probably not have dared to return to a male analyst. The therapist now judged that it would be dangerous to continue the treatment along lines of free associative investigation. She changed her goal from that of liquidating the conflicts so that the patient might enjoy a well-rounded life to that of producing maximum stability in his existing rather limited adjustment. The first step was to bring him back to that level of adjustment. Having given up his job he no longer had the means to pay for his treatment, and he seemed to expect that the therapist would see him without charge, thus helping protect him from his employer as his mother protected him from his father. The therapist felt it necessary to block this transference reaction and restore their relation to an adult basis. She therefore refused to overlook the fee. This sounds unkind and mercenary, but it had the desired therapeutic effect. The patient resumed his job and his schoolwork and was well pleased with himself for having done so.

The rest of the treatment contained little talk about the patient's deeper emotions. Everything was purposely concentrated on his intellectual work. The therapist genuinely admired his intellectual gifts, and his confidence was much strengthened by her approval. His anxiety about girls was solved by losing interest in them. His work became brilliantly successful; in the realm of his specialty he built up a nucleus of self-confidence that allowed him to compete with other men. Thus with the help of flexibly adapted psychotherapy he resumed his development along the one channel that was currently possible for him. Perhaps later this young man will be able to branch out and establish a more varied and rounded life. To have stuck to such a goal, however, at the time he was treated would probably have landed him in a severe psychosis.

Shock Methods of Treatment

The last ten years have witnessed an entirely new development in the treatment of the major psychoses. To give a person a severe shock would hardly seem on the face of it a sensible way to cure a mental disorder, yet just such a method was discovered to yield surprisingly good results. Experimentation with shock began more or less by accident, but the early results were so hopeful that the technique spread rapidly from hospital to hospital and from land to land. Shock treatment soon seemed destined to do for some of the psychoses what psychotherapy had done for the neuroses. At last the hospital psychiatrist could do something more effective than keeping his patients comfortable and waiting for nature to take its upward or downward course. While the initial enthusiasm was soon tempered by finding the limitations of shock therapy, the results seem sufficiently good to justify its continued use.

Insulin Shock.—The value of insulin shock was stumbled upon by Manfred Sakel while attempting to treat morphine addicts. Insulin was administered to create a mild lowering of the blood-sugar level, but in certain patients a standard dose was occasionally found to have a stronger effect, throwing the patient into shock or coma. Sakel noticed that this sometimes created an apparent improvement in the confused mental state of his addicts, so he tried the same experiment with schizophrenics. The results were startlingly successful.

As finally developed, insulin shock treatment is initiated by intramuscular injections of insulin. For the first hour or so the patient shows the symptoms of hypoglycemia, consisting of weakness, excessive perspiration, hunger, and deepening drowsiness. Presently he becomes unconscious and passes into shock, usually with twitchings, tremor, loud breathing, and snorting sounds. Deep coma with complete unresponsiveness is reached only after three or four hours and is allowed to continue for a period not greater than an hour, usually less. Awakening is accomplished by administering glucose which produces a rapid rise in blood sugar. The depth and type of shock and the time of awakening can be controlled and adapted to the individual patient. Insulin shock treatments are given frequently, usually daily, and the course may continue up to two or three months.

The clearing of the patient's mental state is generally first observed in the periods of hypoglycemia preceding and following the coma. At first the improvement is fleeting, but with repeated treatments it

extends further into the post-shock period. The state of improved lucidity and accessibility allows the psychiatrist to establish rapport and initiate psychotherapy. Sakel was insistent that the temporary gains achieved by insulin shock needed to be consolidated by appropriate psychotherapy, but he cautioned against too hasty a use of the newly won rapport. If the patients were too quickly reminded of their symptoms and difficulties they might be thrown back again into the depths of psychosis. The insistence on concomitant psychotherapy has not been so clear in some of the later work with insulin shock. Perhaps this accounts for the less dramatic results. In any event the relation between shock and psychotherapy needs clearer understanding than it has yet received.

It is hard to detect any uniformity in either the physiological or the psychological changes that accompany insulin shock. At the autonomic level there are rapid shiftings of tone between the parasympathetic and sympathetic divisions, generally correlated with emotional changes. Some patients are predominantly calm and drowsy during the hypoglycemic periods before and after coma. Others manifest fear, excitement, and occasionally convulsions. It seems to be characteristic of the hypoglycemic periods that responsiveness is more impaired than comprehension. The patients say nothing in response to questions, but afterwards can recall the questions clearly. There is a certain amount of amnesia, however, for the experiences occurring during these periods, and sometimes the amnesia extends backward to include the more recent psychotic behavior. This more extensive amnesia is as a rule only temporary.

Results with Schizophrenia.—*Despite the severity of its effects,* insulin shock treatment can be safely applied to the majority of schizophrenic patients. Only a small group having heart weakness or certain other disorders are unable to tolerate the physical stress that is involved. There is great variation among reports of its success in alleviating the psychosis. Sakel's original claim of obtaining 70 per cent full remissions and an additional 18 per cent partial remissions has not been matched in subsequent investigations. Malzburg studied more than a thousand cases of schizophrenia treated with insulin shock and found only 13 per cent fully recovered, with 54 per cent, however, rated as improved. These figures compared favorably with a matched group of untreated cases in which 3.5 per cent were fully recovered and 19 per cent rated as improved.[88]

[88] Malzburg, B., "Outcome of Insulin Treatment of One Thousand Patients with Dementia Praecox," *Psychiatric Quarterly*, 1938, Vol. 12, pp. 528–553.

Current favorable reports, which are numerous, approximate Malzburg's figures rather than Sakel's. There are a certain number of reports, however, which claim that insulin treatment is of no value. They offer statistics showing that insulin-treated and untreated patients have the same rate of recovery. Perhaps these discrepancies can be reconciled if we take account of the difficulties that beset the use of statistics in a problem of this kind. Salzman points out that there is considerable variation, depending upon how soon after shock treatment the patient's degree of recovery is estimated.[84] The estimate is highest immediately after treatment and declines with the course of time. Furthermore, Salzman assembles figures which tell a disappointing tale on the subject of readmissions. Shock-treated patients are considerably more likely to return later to the hospital than patients who were dismissed as cured without shock treatment. Salzman's own study, for instance, shows that of forty-four schizophrenics cured by shock, seventeen were back in the hospital within a year, while of forty-five cured without resorting to shock, only six had returned at the end of twelve months.

The upshot of the matter seems to be that insulin shock produces a temporary improvement in a goodly number of schizophrenic patients but offers little guarantee that the improvement will be maintained. This is precisely what one might expect in a disorder that contains such a large developmental or psychogenic element. The habits of a lifetime are not undone by insulin shocks. In the course of time they reassert themselves, protective avoidance sets in again, and if things go moderately badly the patient once more reacts with psychosis. This does not mean that insulin treatment is of no value. It shortens the period of acute illness and hospitalization and thus confers an over-all benefit upon the many patients who do not relapse. The temporary gain may for the first time create a situation that can be consolidated by psychotherapy. It may suffice to start the patient on a new attempt at social adjustment which in favorable circumstances will proceed without major frustration. But the effects of insulin shock treatment are certainly not as dramatic as they seemed when first discovered.

The mechanism whereby insulin shock produces its marked temporary benefit is still a matter for speculation. With schizophrenia, insulin shock is more effective than other types of shock. The physiological accompaniments of insulin shock, however, are still too diverse and obscure to suggest the nature of the curative mechanism. The problem is an interesting one for future research.

[84] Salzman, L., "An Evaluation of Shock Therapy," *American Journal of Psychiatry*, 1947, Vol. 103, pp. 669–679.

Metrazol Shock.—It was merely on a hunch that Meduna undertook to treat schizophrenia by creating convulsions. He settled on metrazol as the most suitable drug for this purpose. The convulsion that results from injection of metrazol is not unlike a grand mal epileptic seizure; in fact, electroencephalograms taken during the metrazol convulsion show the same peculiarities as those obtained from grand mal patients. In contrast to treatment by insulin shock, which requires constant nursing care all day, metrazol convulsive therapy occupies only about half an hour. Within a few seconds after injection the patient becomes restless, confused, and fearful, then goes directly into convulsion with loss of consciousness. The convulsion lasts only a minute or so, being followed by a comatose state that shades into sleep. Treatments are given two or three times a week over periods of from four to fifteen weeks.

Metrazol treatment is more unpleasant for the patient than insulin shock. Many patients build up an anxious resistance and can with difficulty be persuaded to complete the course. The aura before the convulsive attack constitutes the most fearsome element. After the seizure there is a state of clouded consciousness and retarded mental and motor activity. Mental tests given at this time show great impairment, and normal efficiency is not regained for several hours. Amnesia for the treatment and the events preceding it is more or less the rule, but the loss of memory soon disappears.

Early figures on metrazol convulsive therapy seemed to indicate that it was a strong competitor with insulin in the treatment of schizophrenia. Before long, however, it was shown to be considerably less effective for schizophrenia but a great deal more so for disorders of the depressed and manic types. In most hospitals it is no longer generally used with schizophrenics. It is used with manic-depressives and involutional depressives wherever it has not been displaced by the newer technique next to be described.

Electroshock.—Electroshock treatment was introduced by Cerletti and Bini in 1938. The technique consists of attaching electrodes to the head and passing controllable electric currents through the brain. The immediate result is the same as with metrazol, a convulsion resembling a grand mal seizure. The convulsion is less violent, however, and the treatment is less unpleasant for the patient, who passes immediately into unconsciousness without preliminary aura. Electroshock has proved beneficial to the same types of disorder as metrazol. With schizophrenia the results are generally disappointing. Its greatest utility seems to be with the affective disorders.

Particular importance is attached by some workers to the patient's behavior as he emerges from the convulsion. Millet and Mosse describe five types of reaction.[39] Some patients awaken in a *combative* state, struggling violently with the attendants perhaps for ten or fifteen minutes and giving expression to a torrent of aggressive feelings. Some awaken in an *erotic* mood, reaching out to the attendants with loving gestures. Another reaction is the *euphoric:* "the patient smiles happily or mumbles an enthusiastic 'Gee Whiz!' " and acts as though "all problems were now solved and the world looks rosy." On the other hand the patient may emerge from shock in a decidedly *placid* state, lying quiet and relaxed, looking around "with wondering eyes," and after some time getting up "as if from a refreshing nap." Finally there is the *startled* reaction, which seems to be related to the fact that sphincter control has been lost so that the patient awakens soiled. It is almost as if he expected to be punished for this infantile lapse. These reactions are highly constant for any given individual. Millet and Mosse remark: "We came to feel that these immediate reactions accorded well with the disturbances of the unconscious mental life which formed the psychopathological pattern in each case."

Among the more remote and lasting effects is a restoration of normal mood. Manic patients are returned to a calm and balanced mood, and depressed patients raised to a cheerful outlook. These dramatic changes are more likely to be enduring when they can be gradually stabilized by psychotherapy. After electroshock, however, the patient is often in a favorable state of mind for psychotherapy. His self-confidence is higher, initiative and hopefulness have returned, and with his new feeling of security he may be able to perceive and abandon those tendencies in his personality that have blocked his development and precipitated his illness. It is important for the therapist to avoid haste at this stage. The improvement effected by shock is not of magical proportions, and the new-found confidence and insight can easily be overstrained.

Results with Depressed and Manic Psychoses.—The results of electroshock treatment with the affective disorders run somewhat better than the results of insulin shock with schizophrenia. Again there is great diversity in the reported figures, but complete remission seems to be obtained in from 40 to 80 per cent of patients in depressed states, somewhat less for patients in manic states. The involutional depressions show the highest rate of improvement.

[39] Millet, J. A. P. & Mosse, E. P., "On Certain Psychological Aspects of Electroshock Therapy," *Psychosomatic Medicine*, 1944, Vol. 6, pp. 226–236.

These have, of course, a fairly high rate of spontaneous remission, a fact which is true of affective disorders as a whole, but electroshock treatment greatly hastens the remission and spares the patient many weeks of hospitalization. Apparently somewhat the same situation prevails in regard to readmission that we found to be true for insulin treatment. Shock-treated patients in the manic-depressive category are more likely to reappear in the hospital, and to reappear sooner, than patients who regained their health without shock.[86]

One disquieting feature of metrazol and electroshock therapy is the possibility that they may sometimes produce permanent brain damage and mental impairment. Experiments with animals have revealed a certain amount of cerebral injury. Certain patients, moreover, react with symptoms very similar to those that result from prefrontal lobotomy. Mental impairment is rarely sufficient to show in tests of intelligence, but certain procedures, such as the Rorschach ink blots, reveal changes that are not unlike those of brain injury. The possibility that judgment and foresight may be impaired needs careful exploration. It may be that injury and impairment occur only under certain circumstances which can be avoided in the future. If such effects prove at all common, however, the status of electroshock will become analogous to that of prefrontal lobotomy. The latter method is an operation of last resort, indicated only when the patient's condition is extremely bad and shows little hope of improvement by any other technique. Electroshock is at present not conceived in this light, being administered very freely in cases of affective disorder.

It is obviously a matter of tremendous practical importance to find out whether electroshock produces permanent harm in any substantial number of cases. The urgency of this problem serves to emphasize the need for more accurate methods of measuring and appraising behavior. How are we to know whether or not there is mental impairment? Careful clinical observations are helpful, but it is not usually possible to carry them out on a sufficiently large scale. Psychological tests are valuable, but they are extremely crude when it comes to appraising the more organized aspects of behavior. What is needed is a vast improvement in our techniques for measuring and appraising all levels of behavior, including such vital and complicated processes as persistence, initiative, foresight, and emotional control. Research along these lines is difficult, but it holds great promise for the solving of many vital problems.

[86] Salzman, *op. cit.*, pp. 670–672.

SUGGESTIONS FOR FURTHER READING

For a rapid clinical survey of schizophrenia, any good textbook on psychiatry can be consulted; E. A. Strecker and F. G. Ebaugh's *Practical Clinical Psychiatry* (Philadelphia, Blakiston Co., 5th ed., 1940), Ch. 7, and D. K. Henderson and R. D. Gillespie's *A Textbook of Psychiatry* (London, Humphrey Milford, 5th ed., 1940), Ch. 9, can again be recommended. A condensed but very satisfactory survey is given by J. H. Masserman in *Principles of Dynamic Psychiatry* (Philadelphia, W. B. Saunders Co., 1946), pp. 67–80.

In his *Contemporary Psychopathology* (Cambridge, Harvard University Press, 1943), Chs. 18–30, S. S. Tomkins has assembled a series of representative and provocative recent papers on schizophrenia. For more detailed consideration of the problems of schizophrenic thinking see E. Hanfmann and J. Kasanin, *Conceptual Thinking in Schizophrenia* (New York & Washington, Nervous & Mental Disease Publishing Co., 1942); also J. Kasanin (ed.), *Language and Thought in Schizophrenia*, Berkeley, University of California Press, 1946. The problem of schizophrenia in children is considered by C. Bradley in *Schizophrenia in Childhood* (New York, The Macmillan Co., 1941). An interesting viewpoint on this psychosis is taken by G. Devereux in his paper "A Sociological Theory of Schizophrenia," *Psychoanalytic Review*, 1939, Vol. 26, pp. 315–342. Still another valuable approach is R. G. Hoskins' *The Biology of Schizophrenia* (New York, W. W. Norton & Co., 1946).

CHAPTER 16

THE PROBLEM FOR SOCIETY

The problem of disordered personal reactions is one that cannot be solved without reference to the society in which they occur. The act of going to a psychiatrist and receiving advice on a personal problem sounds like a private transaction between two individuals. But in reality such an act is deeply embedded in the whole cultural and social structure. The mere fact that the troubled individual thinks of laying his problems before a psychiatrist reflects his membership in a culture. In some cultures personal problems are laid only before a priest, in some they are considered a matter for private moral striving, in still others they are regarded as too disgraceful to be aired before anyone outside the immediate family. Within our own contemporary culture there are still many subcultures in which a serious mental disorder must be hushed up and the afflicted person sent as far away as possible for treatment. The family need not apologize if it has a weakness for pneumonia or cancer or heart disease, but if it is "tainted with insanity" or has a member who is "mentally not just right" it is forever in a state of disgrace. There are still many subcultures, moreover, that take an attitude of contempt toward the less severe disorders—the maladjustments and neuroses. A person is condemned as a weakling or laughed at as a fool if he cannot "snap out of it" and "stop thinking about himself." Thus our hypothetical individual who believes that something is wrong either with his mind or with his emotions, and who thereupon openly seeks the advice of a psychiatrist, is acting very much as a member of a particular subculture, one that has accepted mental and emotional disorders as medical problems to be handled in a scientific fashion.

Will he find a psychiatrist to consult? The existing social structure has a great deal to do with the answer. The training of a psychiatrist is a long and expensive process, depending not only on the selection of talented people who will be good at the job but also on a complex organization of medical schools, hospitals, and clinics to provide the opportunities for training. Medical schools, hospitals, and clinics are losing propositions in a financial sense, so that con-

stant support from the community or state is necessary for their continued existence. Today in the United States the number of psychiatrists is completely inadequate to meet the existing demand for their services. Our troubled seeker after help will be lucky if he finds a psychiatrist, extremely lucky if he gets enough appointments within a reasonable time to meet his needs.

In order to continue our study of his social embeddedness, let us suppose that our sufferer finds a psychiatrist who begins to explore his problems with him. Again we are thrust back upon the social organism of which he is a part. In the family circle a not impossible series of circumstances might be that he has to support aged parents, that his wife has painful arthritis which makes her irritable with him and the children, that he cannot secure a maid and therefore has to take over part of the housework, that sexual relations have had to be discontinued, that one of the children in consequence of encephalitis is a constant behavior problem. Our patient simply hasn't enough money to deal with all these difficulties, nor can he necessarily find the facilities even if he could pay for them. There may be no comfortable home for the old people, no maids or helpers available in the community, no special classes or schools for the brain-injured child. If the psychiatrist explores the reason for the man's low income, he is at once involved with the whole social order, with inflation and depression, with labor supply in particular industries, perhaps with unfair employment practices and discriminations of one kind or another. It may be that the patient still further reveals himself as a member of his culture when he relates his early ambition for economic and social success and his feeling of shame that he has never been able to move his family to a socially more pretentious neighborhood. In the end the psychiatrist may decide that the patient's condition is sufficiently serious to warrant hospitalization, with at least temporary removal from his surrounding sea of troubles. Then it appears that, because the legislature at its last sitting refused to vote the appropriation for a much needed enlargement, there are no beds available at the state hospital and none can be promised for several months.

This tale has been told to illustrate a single point, a point that is at once obvious and easily forgotten. The problem of treating and caring for people whose personal reactions are disordered, still more the problem of preventing their reactions from becoming disordered in the first place, can be solved only by social effort and social organization. In the preceding chapters of this book we have discussed the diverse problems of abnormal psychology as if they were

simply problems in scientific understanding. We have tried to find out how disordered behavior comes about and how it can be treated. It is now time to give up this artificially narrowed focus and let the picture expand to its full dimensions. In this chapter we shall first take up the magnitude of the problem that is offered society by abnormal and maladjusted people. Then we shall consider what has to be done in order to deal adequately with the problem. The question of what has to be done brings up the further question of who is to do it. This can be answered only by examining the several professions which minister to abnormal people and weighing both their scope and their training. But inasmuch as the problem cannot be solved by professional workers alone, we shall also consider the contributions that can be made by anyone who cares to make his behavior as a parent and a citizen count in this direction.

Size of the Problem

Patients in Mental Hospitals.—The number of patients in mental hospitals is an object of interest to the United States Bureau of the Census. The following statement and figures are based on census reports.

> On January 1st, 1935, there were approximately 450,000 patients resident in the mental hospitals of the United States. During that year an additional 140,000 were admitted, so that a total of about 590,000 were resident in mental hospitals at some time during 1935. To express these figures in terms of the general population means that at any given time during the year 1 out of every 200 adults in the general population was a resident in a mental hospital, while 1 out of every 150 was under care at some time during the year. In New York State and Massachusetts, where hospital facilities are more adequate than in other states, 1 out of every 150 adults in the general population was a resident patient at any given time during 1936, and almost 1 out of every 100 adults was under care at some time during 1936. These figures represent minimum estimates, since they are based only upon the hospitalized insane. Not included in these figures are those mentally ill patients who are in general hospitals, homes for the aged, and so on.[1]

The significance of these figures becomes even more vivid when stated in the following way: more than 300 people, on an average, are admitted to mental hospitals in the United States every day of

[1] Landis, C. & Page, J. D., *Modern Society and Mental Disease*. New York, Farrar & Rinehart, 1938, p. 19.

the year; and at least 1 person out of 20 may be expected to become a patient in a mental hospital at some time during his life. The last statement is indeed so gloomy that it should not stand without a reminder that patients leave mental hospitals as well as enter them. Census figures for 1938 show that slightly more than half the patients admitted were later discharged either fully recovered or at least in a considerably improved condition.[2] As methods of treatment improve, this proportion may be expected to rise.

Of the patients who are in mental hospitals, at least 90 per cent are suffering from some form of psychosis. The total number of psychotic individuals in the United States is, however, much greater than the number in hospitals. According to the most conservative estimate there is at least an equal number of such persons outside the mental hospitals, patients who are harmless and manageable enough so that they can be cared for in general hospitals, homes for the aged, or by their relatives in their own homes. In all probability this conservative estimate is much too low. A study of admission and discharge rates of mental hospitals, which shows among other things that thousands of patients wait many months before admission, leads to the belief that as many as two and a half million psychotic persons are living in the community.[3] The frequency of psychosis in the United States, then, lies somewhere between one and three million. There is no reason to suppose that the incidence of such disorders is greater here than in most other countries.[4]

The expense of running the mental hospitals is by no means a small item in the budget of the nation. Landis and Page point out that for 1935 "the invested capital designated for the care of mental disease in the United States exceeded $500,000,000, while the annual expenditure exceeded $100,000,000." [5] With the great current expansion of veterans' hospitals, these prewar figures are being rapidly multiplied. Society has made a tremendous investment for the care of psychotic patients. Yet the investment is by no means sufficient to meet the need either in sheer space, in equipment, or in staff. It is not an exaggeration to say that present mental hospital staffs should be doubled in order to apply effectively the knowledge and skill that is now available. If substantial research is to add to this knowledge and skill, there should be still further additions to the staffs.

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[2] Klein, D. B., *Mental Hygiene*, New York, Henry Holt & Co., 1944, pp. 98–99.
[3] Dayton, N. A., *Mental Disorders, Statistical Summary of Admissions, Discharges, and Deaths*, Boston, Commonwealth of Massachusetts, 1939.
[4] Landis & Page, *op. cit.*, Ch. 10.
[5] *Ibid.*, p. 26.

Estimated Frequency of Less Severe Disorders.—For estimating the frequency of psychosis we had a definite nucleus of precise figures, the patients in mental hospitals, although considerable guesswork was necessary concerning psychotics elsewhere than in mental hospitals. For all other disorders the element of guesswork is much greater. Lennox reports that the incidence of epilepsy is fairly close to 650,000.[6] Cobb gives approximately the same figure for patients suffering from brain injury and other neurological disorders not classified as psychosis.[7] Since the latter estimate was made, the incidence of brain injuries has been temporarily much increased by the war. Altogether, the categories of epilepsy, brain injury, and other neurological defects add well over a million to the total of disordered persons.

It is clear that there can be no reliable figures about delinquent and psychopathic personalities. As a group these people neither seek medical help nor fall into the clutches of the police regularly enough to be counted. The only relevant figure concerns chronic alcoholics, who have recently been estimated at 1,600,000.[8] This category overlaps slightly with patients in mental hospitals, some of whom owe their admission to alcohol. In the category of neurosis a more accurate count might be expected, but in point of fact the statistical situation is very unsatisfactory. Many neurotics consult physicians privately, many consult non-medical sources of advice, many consult no one. Whatever statistical net one spreads is therefore doomed to lose part of its catch. Cobb cites two studies, however, in which neurosis is defined essentially as "a personality disorder severe enough to cause the patient to seek medical help or to be advised to seek help." [9] Though made in different localities, the two studies agree closely and permit the estimate of 2,500,000 neurotic individuals for the country as a whole. Again the figure is probably too small to represent the truth, but it is shockingly large in terms of impaired efficiency and chronic suffering.

Thus with figures that are probably much too small, and with no means whatever of including delinquents and psychopaths, we reach a total of 5,400,000 disordered people in categories other than psychosis. Adding this to the most conservative guess for psychotics we lift the over-all total to 6,400,000. Probably it is misrepre-

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[6] Lennox, W. G., in Hunt, J. McV. (ed.), *Personality and the Behavior Disorders*, New York, The Ronald Press Co., 1944, Vol. 2, p. 939.

[7] Cobb, S., *Borderlands of Psychiatry*, Cambridge, Harvard University Press, 1942, p. xii.

[8] Haggard, H. & Jellinek, E. M., *Alcohol Explored*, New York, Doubleday, Doran & Co., 1942, pp. 16–27.

[9] Cobb, *op. cit.*, p. xiii.

senting the social problem if we do not add 2,500,000 mental defectives, of whom 100,000 live in public institutions.[10] At a minimum, then, there are nine million persons in the United States with relatively serious disorders and handicaps. Obviously the student of abnormal psychology is not spending his time on a trifling social problem.

Neuropsychiatric Disability in Relation to Military Service.—The drafting of the young adult male population for military service provided another means of examining the prevalence of personality disorders. Selective service procedure permitted rejection for military service not only on account of physical deficiencies but also on account of conditions described as *neuropsychiatric defect.* This is a very broad category which includes psychoses, neuroses, mental deficiency, a considerable proportion of delinquent and disorganized personalities, and probably a certain number of minor maladjustments. In this country the Selective Service Act went into effect in October, 1940, and by the first of May, 1944, thirteen million draft registrants between the ages of eighteen and thirty-seven had come up for examination. Four million were rejected, and of this number more than 35 per cent—1,429,000 men—were rejected on account of neuropsychiatric defect. The rejections can be broken down into three subgroups. The first, *mental deficiency,* contains 563,300 men, or 13.9 per cent of the total number of rejectees. The figure is high because the category for a while included illiteracy, and at all times was defined according to the Army's rather high minimum intelligence standard. The next subdivision, *neurologic defect,* accounts for 208,600 men, or 5.1 per cent of rejectees. The third category, called *mental disease,* includes 657,100, or 16.2 per cent of the total.[11] Stating the results another way, eleven men out of every hundred were found unfit for military service on neuropsychiatric grounds. Excluding the category of mental deficiency, somewhat over six out of every hundred men between eighteen and thirty-seven were rejected on account of problems which lie in the field of abnormal psychology. These percentages are slightly higher than the ones that we obtained from estimates of the frequency of disorders, and the suspicion is therefore justified that those figures were too small.

In spite of the pains taken to screen out the psychologically unfit

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[10] Sherman, M., *Intelligence and Its Deviations,* New York, The Ronald Press Co., 1945, p. 126.

[11] Rowntree, L. G., "National Program for Physical Fitness," *Journal of the American Medical Association,* 1944, Vol. 125, pp. 821–826.

men before induction, there were a considerable number of neuropsychiatric casualties under the stress of military service. From January, 1942, through June, 1945, there were approximately one million admissions to Army hospitals for neuropsychiatric disorders. The diagnoses were as follows: psychosis, 7 per cent; neurosis, 64 per cent; psychopathic personality, mental deficiency, and other categories, 29 per cent. Only a small proportion of these would have been hospitalized in civilian life. In many cases admission to a military hospital means merely that the man has become temporarily unfit to perform his duties. Thus it would be a bad exaggeration to say that there were a million breakdowns in the service, but it is nevertheless plain that personal maladjustment was an important cause of withdrawal from duty. During the same period of three and a half years, 457,000 men were separated from the service on account of neuropsychiatric disorders. About half of these discharges were labeled neurosis, 10 per cent psychosis, 10 per cent epilepsy and other neurological disorders, and 30 per cent in the unanalyzed category that includes psychopathic personality, mental deficiency, etc.[12]

From the point of view of winning wars, from the point of view of building a stable peacetime society, from the point of view of personal effectiveness and happiness—from whatever point of view we take, the problem of mental and emotional disorders is a grave one for our society.

Means of Dealing with the Problem

A comprehensive program for dealing with the problem of disordered personal reactions covers a great deal of ground. Here we shall undertake to point out only the high spots in such a program.

In view of the finding that manic-depressive psychosis, schizophrenia, epilepsy, some types of feeble-mindedness, and certain neurological disorders have a definite genogenic element, it is sometimes proposed that they be prevented by a program of sterilization. The advocates of such a plan argue that the transmission of "tainted" germ plasm should be blocked for the good of the race. The argument is logically sound, but it breaks down factually in view of our present ignorance about "tainted" germ plasm and its transmission. The evidence is summarized by Klein, who bases his discussion chiefly on a very careful investigation sponsored by the American

[12] All the figures in this paragraph are from Appel, J. W., "Incidence of Neuropsychiatric Disorders in the United States Army in World War II," *American Journal of Psychiatry*, 1946, Vol. 102, pp. 433–436.

Neurological Association.[13] The genogenic factor is never more than a contributing or predisposing cause. The number of people coming from supposedly "tainted" stock who themselves develop disorders is greater than chance but still not very great. Thus a wholesale program of eugenical sterilization would prevent the birth of a great many people who would never become disordered and who for all we know might be capable of highly superior contributions. "Many valuable members of society, worth more to it than the cost of maintenance of all state institutions put together, would have been lost if sterilization laws had been enacted on a compulsory basis a few centuries ago." [14] Serious abnormalities are known to have existed in the family lines of Beethoven, Goethe, Isaac Newton, and Michelangelo. Newton himself became psychotic after his fiftieth year. It is an interesting thought that eugenical sterilization, wisely applied to Newton's ancestors, would have prevented society from being burdened by his psychosis. It can be safely concluded that in the present state of our knowledge the proposal to employ sterilization for the prevention of mental abnormality is decidedly premature.

General Medical Measures.—Some of the problems of mental disorder are essentially problems in public health and sanitation. The most important success thus far achieved along this line is the reduction of general paresis through public health measures designed to stamp out syphilis. Certain other countries have been more successful than the United States in this respect. The elimination of general paresis is theoretically possible. Prophylactic measures exist which greatly reduce syphilitic infection. But these measures cannot be used without the cooperation of the person exposed to infection, who must realize exactly the dangers that are involved. Thus the campaign against syphilis currently resolves itself into an educational problem rather than a medical one. Another sphere for public health measures is the control of epidemic encephalitis, a problem that has not yet been solved. Even the nutritionist comes into the sphere of mental hygiene. The demonstrated relation between pellagra and vitamin deficiency lays at least one group of mental symptoms at the door of faulty diet.

The various medical specialities contribute in several ways to the treatment and prevention of serious abnormality. Neurology and neurosurgery are constantly occupied with troubles which have an important mental aspect. The timely surgical removal of a brain

[13] Klein, D. B., *Mental Hygiene*, New York, Henry Holt & Co., 1944, pp. 102–110; Myerson, A., Ayer, J. B., Putnam, T. J., Keeler, C. E. & Alexander, L., *Eugenical Sterilization*, New York, The Macmillan Co., 1936.

[14] Myerson et al., *op. cit.*, p. 172.

tumor prevents what is almost certain to become a mental disorder. Improved skill in obstetrics means a smaller incidence of brain injuries associated with birth. Correction of endocrine disorders likewise presses the attack on such partially mental disturbances as myxedema and exophthalmic goiter. Frequently a serious physical disease which leaves the person in a weak and discouraged condition serves to precipitate an otherwise latent mental disorder. Thus the maintenance of general bodily well-being has a favorable effect on mental health.

These examples will serve to illustrate the overlap that is characteristically found among the different branches of medicine. The task of alleviating and preventing disordered personal behavior cannot be assigned to a compartment of human effort. Some disorders are wholly, others partly, problems for the healer of bodily ills. The great majority, however, require the special ministrations that belong to psychiatry.

Mental Hospitals and Other Special Institutions.—For the mentally retarded, special training schools, removed from the ordinary stream of life, offer the best possibility for happiness and usefulness. In such an environment, handicapped children can be protected from constant competition with the normally endowed and trained in whatever ways and at whatever rates their abilities permit. Certain other forms of disorder are believed to be most easily cared for in separate isolated institutions: for example, colonies for epileptics and farm schools for chronic delinquents and psychopaths. Most institutions of this kind must be maintained at public expense. Adequate provision is all too often blocked by political and economic obstacles. Even in states with good public institutions it is typical to find long waiting lists for admission to schools for the feeble-minded. Sometimes two or three years go by before a prospective patient can be accommodated.

The most important institution, however, is the mental hospital. For most forms of incurable mental disorder, the hospital is capable of providing reasonable comfort and contentment. For the disorders that offer hope of improvement, it is capable of offering, in addition, the best facilities in the way of treatment. When funds are sufficient, a mental hospital is capable of becoming a major force not only in serving its patients but also as a place for professional education and for the advancement of knowledge through research. Future professional workers can learn their trade under the guidance of the hospital's senior staff, simultaneously practising their skills and serving the needs of the institution. Research workers

have at their disposal not only the abundant free time of patients, who are often glad enough to take tests and participate in experiments, but also the detailed histories and the facilities for follow-up that form an essential part of modern hospital organization. A first-rate mental hospital is almost like a small university in its special field of mental disorders. It receives and trains students, gives courses and seminars, maintains its library, invites visiting scholars to lecture, supports research projects, yet at the same time cares for its patients with faithful attention. It is a great economy to have care, treatment, research, and teaching all going on in the same institution. There is active cross-fertilization of ideas, a maximum of stimulating discussion, yet no loss of touch with the practical goal of service to unfortunate members of the community. The leading mental hospitals have played an outstanding role in the advancement of knowledge and in the training of professional workers.

Only a few mental hospitals, however, have been sufficiently well endowed by their communities or states to play this distinguished role. For one thing, their location is often a disadvantage. Conceived originally as asylums or retreats from the frustrating busy world, they were often built on sightly hilltops or beside beautiful lakes far from all other centers of medical activity. The effect of this physical separation has been to isolate a good part of psychiatry from its natural relation with the rest of medicine. The future trend should be in the opposite direction. "The old separation," writes a British authority, "between the mental hospital and the general hospital, between ills of the mind and those of the body, must be done away with." [18] Otherwise the rest of the medical profession, like the public at large, is likely to go on thinking of psychiatry as a specialized business of taking care of mental patients. Problems of maladjustment, of neurosis, of delinquency and psychopathic personality, of psychosomatic medicine can never be seen in their proper perspective until the mental hospital and the general hospital are joined in close daily contact.

Particularly important for the future is the increased development of outpatient services. The first offering of such a service by a mental hospital occurred as recently as 1912, and the need for outpatient clinics is still far from being met. Neuroses and other less crippling disorders are best treated in an outpatient clinic. One of the complaints of medical students as regards their training in psychiatry is that they do not have the chance to see psychiatric out-

[18] Rees, J. R., *The Shaping of Psychiatry by War*, New York, W. W. Norton & Co., 1945, p. 120.

patients, the very sort of maladjusted persons they will meet most frequently in their later practice of medicine. For patients, too, such clinics will be the answer to a great need. The United States Public Health Service is at present trying to establish demonstration mental hygiene clinics at different points throughout the country. These represent a vital medical service that should be widely available. Currently it is almost impossible to find either trained staff or community support for such projects, although there is no doubt that patients would flock to the doors.

Child Guidance Clinics.—A little more on the preventive side are the child guidance clinics, ministering to the needs of children and young people before their complaints evolve into more serious disorders. The child guidance clinic has its point of historic origin in the psychological clinic opened by Witmer at the University of Pennsylvania in 1896. Witmer was particularly interested in school problems, which he endeavored to solve by careful testing and observation of the child's mental performance. The movement was obscured for a while, especially when the first wave of indiscriminate enthusiasm for intelligence testing swept the country, but it reappeared during the twenties when the National Committee for Mental Hygiene—originally the handiwork of Clifford M. Beers—began to put financial support behind child guidance facilities. In the meantime, however, a second influence had begun to operate, and it soon flowed into the same channels. This was the work set in motion by William Healy when in 1909 he launched in Chicago a five-year study of juvenile offenders. Before long this study evolved into what was essentially a child guidance clinic attached to a juvenile court and specializing in young delinquents. The first demonstration clinics set up by the National Committee were strongly affected by both lines of work, the guidance of school children and the guidance of juvenile delinquents. They were also affected by the influential voice of Adolf Meyer, who for years had maintained that psychiatry should work for prevention as well as cure.[18]

The staff of a child guidance clinic ordinarily consists of a psychiatrist, a clinical psychologist, and one or more psychiatric social workers. Patients are referred by the various social agencies in the community, by schools, sometimes by juvenile courts, by churches, and eventually by the parents themselves as the service comes to be known and accepted. Generally speaking, the psychiatrist examines

[18] For a fuller account of the history of child guidance clinics see Witmer, H. L., *Psychiatric Clinics for Children*, New York, Commonwealth Fund, 1940, Chs. 1–3.

the child physically and mentally, and carries out or at least directs the treatment. The clinical psychologist assists in the diagnosis by various testing procedures and appraises the child's capacities. The social worker secures the parents' version of the history, examines the home and neighborhood, and carries out such measures as advising the parents and changing the child's activities. A child guidance clinic is equipped for psychotherapy, but very often its functions consist of changing the child's environment, getting him to new schools or camps, possibly removing him to a foster home. Another part of its function is to influence the parents so that the home environment will become psychologically more propitious. One can see from this brief description that a child guidance clinic must be closely integrated with its community. It acts in constant cooperation with other social agencies, schools, courts, and recreational facilities. Half of its influence is lost if this cooperation cannot be maintained. Many communities have undertaken to establish child guidance services on a part-time basis. A visiting staff, however, cannot do the job with half the effectiveness of a resident staff.

It is not possible to give an accurate count of existing child guidance clinics. In 1936 the National Committee for Mental Hygiene reported 617 community clinics that accepted children as patients.[17] Many of these were organized primarily for adults, and only 235 had the typical child guidance clinic staff of psychiatrist, psychologist, and social workers. If one imagines these 235 clinics spread throughout the country at the rate of five to each state (though that is not the actual distribution) it will be apparent how completely inadequate they are to offer the service that should be available everywhere. Our society is just beginning to meet this challenge.

Psychological Services in Schools.—Even more preventive in their orientation, and even more a dream of the future as far as organization is concerned, are psychological services in schools. Some school systems have made a small beginning by appointing a psychologist whose duty is chiefly to test the pupils' mental capacity and appraise their progress in school subjects. This is a valuable beginning because it leads to the early detection of mental retardation and of special difficulties with certain school subjects. For retarded pupils it is advantageous to arrange special classes under a teacher who has been trained for that particular type of work. When a child is found to be blocked in a certain subject, he can often be trained to surmount this obstacle. Perhaps he got started

[17] "Directory of Psychiatric Clinics in the United States," *Mental Hygiene*, 1936. Vol. 20, pp. 72–129.

with wrong basic habits which have to be changed. Great skill has been developed in recent years in the remedial teaching of reading. Often the removal of an apparent educational handicap has a profoundly beneficial effect on a child's emotional adjustment.

Sometimes, however, an educational handicap is itself the result of emotional maladjustment. It is possible for a properly trained psychologist to go considerably further in his preventive activities. When children first come into school they are still very much in process of being moulded by their environment. If the psychologist can be in a position to study each child as early as possible during the first year, not waiting for difficulties to arise but trying to anticipate them and prevent them from arising, he can avert many of the psychological mishaps that might later take months and years to correct. In schools where this plan has been tried for several years there is a reduced frequency of even such seemingly educational disturbances as difficulty with reading. It is possible, moreover, for difficulties having their origin in the family circle to be favorably influenced at this time. How their child is doing at school is one of the topics through which parents can be most easily coaxed to reconsider their own relationships with the child. It is one of the virtues of the nursery-school movement that most of its teachers are trained to be keenly observant of their pupils' emotional life. Often the nursery-school teacher is able to perform the kind of preventive service just sketched. This points a way in which the prevention of emotional and even mental disorders can be fused with the more traditional tasks of education.

Professions Dealing with Abnormal People.—The effectiveness of institutions depends on the skill and training of their staffs. A mental hospital, a training school, a child guidance clinic, a school psychological service can be relatively ineffective, even though handsomely endowed by the state or community, if it cannot command the services of workers who by training and aptitude are equal to the task at hand. Great as is the need for expanded facilities of every kind, an even greater need is for larger numbers of properly trained workers. The impact of World War II produced a very substantial increase in Federal appropriations for mental health. Both the Veterans Administration and the United States Public Health Service, which administer the bulk of these funds, at once found that the chief obstacle to their plans lay in a shortage of trained personnel. Both services therefore have devoted part of their funds and energies to the support of training programs.

The three professions chiefly concerned with abnormal people are psychiatry, psychiatric social work, and clinical psychology. At present in the United States there are about four thousand psychiatrists, slightly over a thousand psychiatric social workers, and well under a thousand qualified clinical psychologists. It is only necessary to imagine this number of workers spread out through some 600 mental hospitals, 60 institutions for the mentally deficient, 235 child guidance clinics, and a certain number of school systems to perceive the acuteness of the shortage. Besides their service to patients, these people are responsible for the training of all future members of their professions and for a good part of the research that is so sorely needed to add to their knowledge and skill. It is no wonder that people cannot find competent psychological services even when they know they need them. This situation provides an ideal market for the incompetent, the untrained, the people who think that it is easy to give psychological advice, and the sheer charlatans. In an investigation of where people take their troubles Steiner found that they take them to all kinds of strange and disreputable places.[18]

There are several professions besides psychiatry, psychiatric social work, and clinical psychology that minister to the needs of abnormal people. One might mention *psychiatric nursing*, a specialized branch of the nursing profession, which has a lot more to do with patients' recoveries than is usually entered in the case record or printed in the professional journals. Then there is *occupational therapy*, which plays an indispensable part in making the life of a hospital or institution an interesting and constructive experience. Members of the *ministry* have recently been showing an increased interest in the problems of abnormal psychology and are undertaking to train themselves for the giving of better guidance. Several other professions, such as *law, teaching, vocational counseling*, and *group work*, make vital contributions though not specializing on the problems of the abnormal. In the following sections, however, we shall concentrate on the three professional groups which bear the major responsibility for dealing with abnormal people.

The Psychiatrist

A psychiatrist is first of all a physician. He has gone through medical school, taken whatever training in psychiatry is offered during the four-year course, received his M.D. degree, and spe-

[18] Steiner, Lee R., *Where Do People Take Their Troubles?*, Boston, Houghton Mifflin Co., 1945.

cialized in psychiatry in his subsequent internships. It is incorrect to call anyone a psychiatrist who is not the holder of the M.D. degree. Psychiatry is a medical specialty.

Scope of Psychiatry.—Because of his complete medical training, the psychiatrist is competent to examine patients both physically and mentally. As a specialist he does not undertake to deal personally with other than the simpler physical ills, but he is qualified to recognize them and estimate their weight in the total picture of the patient's condition. This is important in dealing with practically all forms of disorder. Psychotic conditions may be greatly complicated by intercurrent physical disorders. With new patients a correct diagnosis is not always possible unless one can assess the evidence for diffuse infections, endocrine disorders, dietary deficiencies, cerebral damage, and many other somatic disturbances. Even in treating the neuroses it may be necessary to decide whether the patient has produced a new hysterical symptom or whether a true organic disorder has developed. Particularly when dealing with psychosomatic disorders it is essential to be able to observe the subtle interaction between bodily and emotional states.

To the psychiatrist falls the task of taking the patient's history and of making a behavioral examination. Perhaps this does not even sound easy, but it is much less easy than it sounds. Expertness in interviewing is indispensable. Patients are only moderately adept at giving an accurate history of their lives, still less at reporting their feelings, and it is the task of the skillful interviewer to make this material flow forth. While he is conversing with the patient, the psychiatrist must also be silently conducting his behavioral examination, noting appearance, mannerisms, character of speech, mood, evidences of memory defect and general impairment, degree of insight into own condition, underlying attitudes toward self and interviewer.[19] If the patient is confused or stuporous, the doctor's task is obviously difficult. It is an illuminating experience for the student of interviewing to record one of his attempts and play it back to himself several times. The chances are that he will hear himself blocking the patient's confidences, cutting off what afterwards look like the most important leads, hurting the patient's feelings, and unwittingly generating an interpersonal situation that is quite different from the one intended. Skillful interviewing can be accomplished only after long practice.

[19] Cf. Preu, P. W., *Outline of Psychiatric Case Study*, 2nd ed., New York, Paul B. Hoeber, 1943.

The psychiatrist is responsible for making the diagnosis and deciding what shall be done about the patient. If what is to be done belongs in the category of therapy, he probably does it himself or at least closely supervises its execution. Prefrontal lobotomy calls for the neurosurgeon, and some forms of treatment draw in other specialists, but the psychiatrist is responsible for the shock therapies and for all forms of psychotherapy. He must determine, in other words, the therapeutic program and decide at what point the patient is well enough to be trusted to his own resources. His duties in this respect are entirely analogous to those of any other medical specialist. Once a patient has come into his hands, he is responsible for the diagnosis, care, and treatment. It is of course not usually the case that any one psychiatrist is trained to use all the techniques of psychotherapy described in our earlier chapters. There is specialization within specialization; one man may use only standard psychoanalysis, another may work only with children. But this circumstance does not substantially change the picture for psychiatry as a whole.

Criticisms of Psychiatric Education.—For some time psychiatry has tended to occupy the position of stepchild in medicine. This is nowhere better revealed than in a recently reported survey in which graduates from medical school were asked to state what was wrong with their courses in psychiatry.[20] The vast majority of the respondents had graduated since 1940. Most of them were not psychiatrists; they were looking back on their psychiatric teaching as upon any other feature of their general preparation to be doctors.

The outstanding grievance was the overemphasis on psychosis. The erstwhile students were disappointed that they had seen so few of the neuroses and minor maladjustments which appeared so frequently in their actual medical practice. Next to this, and related to it, was the grievance that they learned so little about treatment. They complained also that the organization of the courses did not allow them to follow patients long enough to perceive the effects of time and treatment. In short, they objected that they had been taught too much mental hospital psychiatry and not enough outpatient and office psychiatry such as would have been really helpful in their own practice. At one school "students never interviewed or saw therapy." At another, "emphasis was never on what the general practitioner would see or could do." Still another respondent observed that "psychiatry was not pictured as intimately tied up

[20] Porter, W. C. & Davidson, H. A., "Alumni Appraisal of Psychiatric Education," *American Journal of Psychiatry*, 1947. Vol. 103, pp. 440–445.

with all medicine and indeed with all behavior; instead, it was offered as something foreign, with which we need not have any contact." A fourth physician lamented that "when we got through with medical school, none of us had any idea of what in the world to do with a common, garden variety of neurosis." One respondent thought the matter could be "summed up in a single phrase: seventy per cent of the patients in a practitioner's office present emotional disorders, but only one per cent of medical-school time is devoted to training the student in this seventy per cent of his work."

Respondents also complained about doctrinal differences. "Our approach was exclusively Freudian," said one, while another reported that his school "totally ignored Freud," and a third that "we were warned against psychoanalysis." Another individual described on the part of his professors "an intense longing for an organic explanation of everything—psychodynamics were ignored." The unenviable position of psychiatry as a stepchild was revealed in comments such as the following. "In our school psychiatry was too easy. It was a cinch course. It was quietly ridiculed by the highly influential professors of surgery and medicine." "Other departments show hostility to psychiatry." "Medicosurgical teachers should have told us about personality factors when they talked of peptic ulcer or hypertension. Instead, they jeered at any mention of emotional factors."

These criticisms might be set down to the whims of former students were it not for the fact that they are completely substantiated by an investigation sponsored by the National Committee for Mental Hygiene from 1931 to 1940.[21] Opinions collected from deans of medical schools, professors of medicine, and professors of pediatrics stressed the same points as those revealed by the former students. Often they reflected most clearly the reported attitude of contempt toward psychiatry. This investigation showed a certain progress, however, toward a less doctrinaire, more balanced and more practical teaching of psychiatry between 1932 and 1940.[22]

Proposals for Improvement of Training.—The foregoing criticisms point the way to the improvement of psychiatric teaching in medical schools. A well-planned program, allotted a fair share of time, organized for outpatient as well as hospital practice, integrated with the rest of the studies, and enjoying the respect of teachers in other departments, is in action in some medical schools and should

[21] Ebaugh, F. G. & Rymer, C. A., *Psychiatry in Medical Education*, New York, Commonwealth Fund, 1942, esp. Ch. 4.
[22] *Ibid.*, Ch. 12.

be possible in all. Psychiatry has reached the stage where it need no longer be controversial, obscure, and isolated. Nevertheless it is hard to outgrow the stepchild role, and psychiatrists are still somewhat on the defensive as regards their scientific status with the rest of medicine. Feeling on the one hand that their specialty is bound to grow and to reach further into the other branches of medical practice, on the other hand they tread with a certain caution when it comes to expressing ideas and espousing theories that do not sound like traditional medicine. They find it easier to gain the respect of their colleagues for shock treatment and prefrontal lobotomy than for psychotherapy and the notion of developmental disorders.

In spite of their feeling that their position is not quite secure in medicine, some psychiatrists have advanced the bold proposal that the traditional four-year medical course be modified from the start for the training of future psychiatrists. Even the requirements for admission might be administered in a somewhat different fashion. This is an important point because present admission policies are largely based on the conception that medical schools produce doctors of the body. Much weight is placed on the showing made by the candidate in his premedical courses: physics, biology, and especially chemistry. It is certainly not to be taken for granted that excellence in these studies portends skill in dealing with the emotional problems of psychiatric patients. Many observers believe that the opposite is the case: that the top student in chemistry is quite unlikely to be a top psychiatrist. Research is under way which aims to develop procedures for selecting future psychiatrists. In order to use these procedures, once they are validated, it would be necessary to change the existing admission policies of medical schools.

Besides a change in regard to admissions, it is suggested that the whole course be altered in order to accommodate more fully the growing body of psychiatric knowledge. This means dropping out some of the traditional subject-matter of medical training. Proponents of change do not wish to weaken the future psychiatrist's competence as a diagnostician of the body as well as the mind, but they point out that substantial blocks of traditional subject-matter actually play no part in psychiatric practice. Changes of this kind have in view the vital question of saving time. Considering the present need, it is unfortunate for future psychiatrists to waste time on subjects that will be of no use to them. At present a medical student, even if he knows from the start that he wants to specialize in psychiatry, cannot devote much time to his future specialty. His real training comes later during his internships and residencies. His postgraduate train-

ing must be very extensive if he is to master the difficult art of psychotherapy. By the time his hair is beginning to be tinged with gray he is capable of mature and independent practice. Unfortunately the life expectancy of psychiatrists is not greater than the average. Adding up the all-too-few years of their maximal usefulness to society, one looks back with extreme regret to any time that may have been wasted in their professional training.

The Psychiatrist and Psychotherapy.—The training of psychiatrists to perform psychotherapy is still not as well organized as might be the case. Beginning as an observer during interviews and ward rounds, the candidate gradually slips over into conducting interviews and handling simple cases himself. He reports his activities to his superiors and is advised on what to do next. The scope of his therapeutic work gradually increases. Staff conferences and seminars provide a means of exchanging experiences with fellow-students and teachers. All this is extremely valuable; it has often turned out great psychiatrists. But there is a certain inherent difficulty in giving the kind of direct supervision that makes for efficiency in training. The surgical intern practices his skill directly under the eye of his superior who can anticipate some of his mistakes, point out others as soon as they happen, and immediately intervene to rectify their consequences for the patient. This superb teaching situation cannot be matched in psychotherapy. The teacher cannot sit in the room criticizing the intern when he says the wrong thing to the patient. The best he can do is to listen silently and criticize afterwards. This may be sufficient, but there is a certain inevitable truth in the statement that psychiatrists are more self-taught than taught. The systematic recording of interviews seems to offer a means of getting around this educational difficulty. Objections to recording are sometimes raised, but the advantages would appear to be very great.

The most systematic training procedure has been developed by the psychoanalysts. Many people are confused as to the distinction between a psychiatrist and a psychoanalyst. The confusion arises from the fact that psychoanalysis grew up somewhat apart from medical schools. Its professional organization in this country still consists of local psychoanalytic societies most of which are bound together in the American Psychoanalytic Association. These societies established their own training standards and offered training in psychoanalysis as a postgraduate specialty quite apart from, or but slightly linked to, medical schools. Most of the applicants were physi-

cians, but some workers were admitted from other professions. It is now the policy of the American Psychoanalytic Association to accept candidates for training only if they are already physicians. According to this policy a psychoanalyst is defined as a psychiatrist who has received additional special training in using the standard psychoanalytic technique or its briefer variations. This is simple enough, but one further fact confuses the picture. The policy has been in force only since 1938, and it is binding only on societies which are members of the national association. There are thus a certain number of workers who have been trained for psychoanalysis without having previously studied medicine. These workers have to be designated psychoanalysts but not psychiatrists. No less a person than Anna Freud belongs in this category, and her father, although a physician himself, took the stand that people who showed unusual gifts for psychoanalytic work should be trained, notwithstanding a lack of previous medical education. The majority of American psychoanalysts have dissented from this weighty precedent; it is increasingly true that psychoanalysts in this country are also psychiatrists.

There are three steps in the training program for psychoanalysts. The first is the candidate's own psychoanalysis, sometimes called a "didactic analysis." This is designed partly to familiarize the candidate with analytic technique and with the outcroppings and workings of unconscious tendencies as exemplified in himself. But the "didactic analysis" has a further purpose, that of familiarizing the candidate with the ways in which his judgment is likely to be distorted when he begins to work with patients. Through learning about himself he learns not to overvalue in others those problems which are also his own. If he does not realize how much of his own development has hinged upon overcoming dependence, for instance, or expressing aggression, he will tend to interpret each patient as a problem in dependence or aggression, overlooking the troubles that may have arisen in connection with autonomy and sex. Again, through learning about himself he learns not to make another common mistake, that of attributing to patients certain undesirable traits that he himself has repressed. If he does not realize that he has overcome by repression a strong tendency toward autonomy, for instance, he may err by constantly attributing autonomous strivings to patients in whom this is really a secondary problem.[28] Thus the candidate's "didactic analysis" bears a direct relation to his skill as a future practitioner.

The second step in the training program, overlapping with the

[28] These values of the didactic analysis are given by Hendrick, I., *Facts and Theories of Psychoanalysis*. New York, Alfred A. Knopf, 2nd ed., 1939, p. 321.

first, consists of a group of courses and seminars on the theory of psychoanalysis. The third step is the "supervised" or "controlled" analysis: the candidate himself conducts several therapeutic analyses, reporting each week to a supervising analyst on the course of his work. In this way his mistakes are to some extent pointed out to him and he learns to perfect his technique.

The Psychiatric Social Worker

A psychiatric social worker is a social worker who meets two additional criteria: "first, specialized training involving field work in a psychiatric or mental hygiene clinic or a mental hospital; second, experience in an agency combining psychiatric and social work." [24] She is a social worker who by special training is equipped to operate in a team with psychiatrists.

Scope of Psychiatric Social Work.—Psychiatric social work came into existence as a result of the frustration of psychiatrists at seeing so much of their work go wrong. Patients were cured in the clinic only to relapse again as soon as they went home. Other patients told tales about their families which could not be verified without an actual visit to the home. Occasionally a psychiatrist, baffled by this situation, tried to investigate the home and neighborhood in person, but the experiment generally showed that he lacked both experience and aptitude for the work. Thus it was found expedient to begin training social workers so that they might serve as extensions, so to speak, of the psychiatrist. Early in the work with a case they secure a social history from the relatives; later they visit the patient in his home to see that recommendations are being carried out and that the patient is not being overwhelmed by circumstances. The psychiatrist functions in the team as an expert on individual behavior; the social worker is the expert on social problems. She tries to help patients with the family entanglements, neighborhood entanglements, job entanglements, and all other social entanglements that are detrimental to their mental health.

Training for psychiatric social work is a two-year course, graduation from college being generally required for admission. The academic side of the training consists of courses in psychiatry and psychology, child development, community organization, and social statistics. Great emphasis is placed upon supervised field training, which occupies at least half of the two-year program. The students

[24] French, L. M., *Psychiatric Social Work*, New York, Commonwealth Fund, 1940, p. 76.

are placed at clinics or hospitals where they participate increasingly in the work that is going on, thus learning their trade at first hand under careful supervision. Thus equipped, the worker is prepared to serve as the social arm of a mental hospital, outpatient clinic, or child guidance clinic. She may also become involved in the psychological services offered by school systems. Sometimes a psychiatric social worker is appointed as a visiting teacher to keep a watchful eye upon adjustment problems inside and outside the classroom.

Role of the Social Worker in Psychotherapy.—Once the position of the social worker as an adjunct in the practice of psychiatry was recognized, it became apparent that she would inevitably be drawn into therapeutic activities of her own. Maladjustments occur in a social setting. More than one person is usually involved, and sometimes one wonders whether the person who happens to come for treatment is really the sickest member of the circle. Perhaps the husband enters the hospital in an acutely alcoholic condition, but then the wife turns out to be nervous and jumpy or sad and depressed, the mother-in-law is slightly delusional, and before long it is revealed that the actual patient is only one member of a disordered social orbit. The psychiatric social worker cannot enter that orbit without finding herself at least in semi-therapeutic relation with some of its members. Whatever her desires in the matter, she begins to practice psychotherapy.

It was among psychiatric social workers that the concepts of "relationship therapy" and "attitude therapy" were first worked out. Beginning about 1930, workers began to pay increasing attention to the personal interaction that occurred between themselves and their clients. They made the discovery, since embodied in Rogers' exposition of non-directive counseling, that by letting the client take the lead, and merely encouraging the expression of feelings, they could secure a very desirable change of attitude. Thus instead of limiting themselves to solving the social and neighborhood problems that contributed to the patient's illness, they began to influence the attitudes of those in his immediate environment. The success of this venture was at length recognized explicitly in child guidance clinics which began to practice the simultaneous treatment of mother and child. Thus the psychiatric social worker became a member of a therapeutic team, not just an adjunct of the psychiatrist's therapeutic endeavors.

The relationship between psychiatrist and social worker has always been clearly defined. It is not a relationship of equal status.

This is appropriate in view of the great difference in amount of graduate training: two years for the social worker, seven or more for the psychiatrist. It also seems to have been favored by the fact that most psychiatrists are men, while most social workers are women. The social worker never assumes independent responsibility for diagnosis or therapy. She does not open a private office; rather, she always functions as a member of a team in which the psychiatrist is captain. Sometimes she is assigned to undertake a specific therapeutic task with a patient, or she finds herself embarked irresistibly in a therapeutic relationship with a relative of the patient. In either case it is understood that she will report her activities fully to the psychiatrist, and that if unexpected complications arise she will turn her case over to him. As a therapist, therefore, her position is clearly and definitely subordinate. In consequence, the relations between psychiatric social work and the medical profession have always been harmonious.

The Clinical Psychologist

The third member of the clinical team is the psychologist. In the last decade the profession of clinical psychology has been undergoing a rapid evolution. In order to understand the present position of this specialty, and to gain insight into a certain amount of controversy that surrounds it, we need to see it in the framework of recent history.

Scope of Clinical Psychology.—In the early years of the present century it began to be apparent that the rapidly growing science of psychology could make a helpful contribution to the study of abnormal people. The psychologist, trained in experimental methods and in measurement, was in a particularly good position to assist in the appraisal of capacity. The advent of intelligence tests and their widespread use in schools soon produced a group of workers who were skilled in mental measurement. Hospitals and clinics soon realized the value of this skill and began to employ psychologists as regular members of the staff. Extensive training did not at first seem necessary in order to perform the duties in a satisfactory manner. At the beginning of World War II it was still the common practice to require only the bachelor's degree plus a year of supervised experience at a hospital. With that amount of training the worker was qualified as an expert in mental measurement.

These workers were referred to as psychologists. This was confusing because it drew no distinction between the highly trained

experimental psychologist with a Ph.D. degree and the hospital psychologist with a bachelor's degree. The more precise term *psychometrist* was presently introduced; it remains the appropriate designation for a worker whose training is restricted to the use and interpretation of tests. But a certain number of fully trained psychologists holding the Ph.D. degree found their interests leading them into work with abnormal people. Eventually the title of *clinical psychologist* crystallized as the most appropriate way of distinguishing this profession on the one hand from the but slightly trained *psychometrist* and on the other from the academic *psychologist,* equally well trained but along somewhat different lines.

Meanwhile the scope of psychological work with abnormal people was undergoing a tremendous expansion. The whole concept of testing burst its earlier bounds. With the introduction of projective methods the business of interpreting test results sprang from a more or less routine matter to a refined psychological art. The clinical psychologist became responsible for appraising not only the patient's intelligence but his capacities and personality as a whole. Furthermore, the clinical psychologist began to be found increasingly useful in research. Matters came to a head, however, during World War II, when the number of available psychiatrists was utterly insufficient to meet the needs of the armed forces. Under the pressure of emergency, psychologists were called upon to perform all kinds of duties hitherto claimed exclusively by psychiatrists. They took histories, made behavioral examinations, and even engaged in psychotherapy. They were not really trained for these activities, but the experience showed that the kind of training that goes to make a psychologist is distinctly relevant to psychiatric problems and can be readily adapted to service with abnormal people.

The clinical psychologist emerged from World War II as a person with threefold duties: the *diagnosis* of personality by interviews and tests, the *treatment* of psychological disorders, and *research* on personality and its problems. We shall discuss these threefold activities after considering the question of training.

Criticisms of Psychological Training.—The outstanding objection to the former training of clinical psychologists was its isolation from the realities of human nature. Academic psychology has not until recently been interested in human nature. Its problems have been more technical and more physiological. One might cram everything into a nutshell by saying that for many decades the psychologist set himself the task of correlating mental states and behavior with their underlying physiological processes. Progress to-

ward this goal could be made only by concentrating on restricted aspects of behavior. As a result, the professional psychologist was better informed on experimental method and on the details of animal and human behavior than on the more inclusive human problems that most outsiders assumed to be his province. The psychologist conceived himself to be a laboratory scientist, and his training was appropriate to that goal. When a person thus trained moved over into clinical work, he was likely to cut a poor figure. What he knew about people, even what he knew about personality in general, was the product of his own interest and observation rather than his training.

The criticisms that were heaped upon the psychologist who turned clinical were for the most part well justified. With his four or five years of graduate training and his Ph.D. degree, he was likely to be less valuable in clinical work than the psychiatric social worker, whose mere two years of training were strictly relevant to the task at hand. This situation was so widely recognized that immediately after the war steps were everywhere taken to improve the training of clinical psychologists. Those graduate students in psychology who wished to become clinical psychologists were offered a distinctly different type of training. In their four-year course leading to the Ph.D. degree was incorporated at least a year of supervised clinical experience. The content of their courses was shifted in the direction of personality. That their duties would include research was recognized by retaining fundamental scientific training in the program and by continuing to require a research thesis for the Ph.D. degree. But the rest of the training was oriented toward producing a person whose competence would lie in understanding and helping with the problems of personality.

The success of this type of training remains to be seen. The need for clinical psychologists is currently very great. The temptation has been resisted to meet this need by turning out half-trained people in a hurry. The training of clinical psychologists has been firmly established as a four-year program equivalent in difficulty and thoroughness to any other graduate program leading to the Ph.D. degree.

Psychological Testing.—At its worst, psychological testing can be conceived as giving a test and reporting a score. Fortunately this conception is rapidly vanishing. Even when a psychologist gives a single brief test of intelligence he can treat it as a behavioral examination, a sampling of the whole person in action. A trained observer will not miss such signs as hesitation, anxiety, overeager-

ness, apologies, excuses, boasting, and disruption by failure. He will notice the precise pattern of tasks on which the subject succeeds and fails, and he will have an eye to the psychological meaning behind this pattern. Does the patient show impairment of the abstract attitude, for example? This cannot be judged simply from test scores or from the mere fact of success or failure on a given task. It has to be inferred from the way the patient goes at the task and from close observation of the precise point of failure. The psychologist observes test performances just as keenly as the psychiatrist observes behavior when he is interviewing a patient.

For the most part, however, psychological testing has advanced far beyond the giving of single tests. The clinical psychologist typically administers a battery of tests so planned as to yield a full and well-rounded appraisal of the individual client. The method is well exemplified in a paper by Shakow, Rodnick, and Lebeaux in which a test battery is described, and the results obtained with a schizophrenic patient are reported in detail.[25] The tests include a standard intelligence test, the Rorschach ink blot test, the Thematic Apperception test, an association test, and several performances in which the person can be placed under stress. The writers emphasize the desirability of testing a patient's performances at different levels, by different examiners, and under conditions of stress as well as relaxed conditions. Several of the tests, for example, measure cognitive ability, and two of these are presented in such a way as to reveal the amount and character of cognitive impairment under stress. It is also shown that content as well as performance is useful for analysis. The content of the associations and Thematic Apperception stories is an invaluable aid in sizing up the patient's emotional attitudes, defenses, and problems of chief concern. The interpretation of the results obtained by such a battery of tests is a highly skilled operation. When properly done it yields a fairly complete and fairly unified psychological portrait.

A portrait of this kind is very useful in the work of diagnosis. A patient is examined by the psychiatrist, his history and social circumstances are worked up by the psychiatric social worker, his physiological, biochemical, and endocrine status is reported from medical examination and laboratory studies. The portrait contributed by the clinical psychologist is often of crucial importance for integrating these diverse findings. "On the one hand, its more controlled and

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[25] Shakow, D., Rodnick, E. H. & Lebeaux, T., "A Psychological Study of a Schizophrenic: Exemplification of a Method," *Journal of Abnormal and Social Psychology*, 1945, Vol. 40, pp. 154–174.

objective nature makes it adaptable for correlation with physiological and biochemical material and, on the other, its behavioral and higher-level functional nature makes it directly comparable with the psychiatric and social data." [26] The psychological findings are often of special value in estimating capacities and suggesting favorable lines of adaptation in the community. Obviously such data are of great value not only for the understanding of the single case but also for research on personality in general.

Role of the Psychologist in Psychotherapy.—The role of the clinical psychologist as a therapist is at present a matter of controversy. During the war emergency, psychologists often functioned in a therapeutic capacity, and their efforts were not without success. At the close of war the need for therapeutic services continued to be greatly in excess of the supply of trained workers. It was impossible to increase rapidly the supply of psychiatrists. Their training is so long and the facilities so expensive that a rapid expansion was out of the question. Clinical psychologists therefore found themselves being drawn irresistibly into therapeutic activities.

Many clinical psychologists did not welcome this turn of events. Having chosen their profession for the sake of the testing art and for research, they were not at all eager to restrict these activities in order to take on a therapeutic load. To others, however, the diagnosis of patients by tests seemed to lead over quite naturally into treatment. Their growing skill in understanding troubled people gave them an urge to do something about the trouble. This urge could no longer be resisted when patients were asking for help and it was clear that no one else had time to meet their need. The disparity between supply and demand created a situation in which therapy by clinical psychologists became inevitable. Even those who believed the profession should confine itself to testing and research admitted that psychologists would have to be trained for a certain amount of therapeutic service.

Although the situation was more or less inevitable, it raised disquieting questions in regard to professional organization. Many psychiatrists reacted strongly against what they feared might become an invasion of their province by non-medical workers. It was one thing, they felt, to welcome the services of the psychiatric social worker who was not entitled to call herself a doctor and whose subordinate status was not open to question; quite another thing to admit the clinical psychologist who, by virtue of his Ph.D. degree, had

[26] *Ibid.*, p. 154.

a legitimate claim to be called "Doctor" and might use this to masquerade as a fully trained psychiatrist. The psychiatrist is fully qualified to practice medicine. The social worker is not in the least qualified to practice medicine and participates in therapy only as the closely supervised assistant of the doctor. What position would the clinical psychologist come to occupy? Having had enough trouble to establish their own position of scientific repute in the medical profession, most psychiatrists wanted to be the last to suggest admitting non-medical workers to the healing art, especially if there could be any doubt about their subordinate status.

This is the kind of controversy that can degenerate into a struggle for professional prestige, thus obscuring the real issues. In this case the real issues have to do with the interest of the public, not the interests of the two professions. It is clearly in the public interest that skilled psychotherapeutic services should become more widely available as soon as possible. The training of clinical psychologists is at present an indispensable way of meeting that need. It is not in the public interest, however, that psychological testing and research should be substantially weakened or that the profession of clinical psychology should be too sharply dislocated in the direction of therapy. The emergence of a new profession of psychotherapists, standing in any sense apart from medicine, would only create confusion in the public mind. It is for these reasons that progressive clinical psychologists place so much emphasis on the threefold nature of their profession. They have so many other important contributions to make that it does not detract from their status to accept a secondary role in therapy.

The Task of Research.—In addition to diagnostic testing and help with therapy, the clinical psychologist has the duty of conducting research. In the long run this may well turn out to be the sphere of his most important contribution. No one doubts that he is far better trained in research than is the psychiatrist or social worker. It has been clear throughout this book that one of the greatest obstacles to effective work with abnormal people is our ignorance about them. Every hospital and every clinic teems with unsolved problems and offers unparalleled opportunities for solving them. All that is necessary is to find methods and to have time and ingenuity to work them out.

Any number of problems could be mentioned to illustrate the vast need for research. We shall mention but one: the results of treatment. A science of treatment cannot be built on vague statements of results. To know the results of treatment it is necessary to

follow the patient closely, to appraise his progress at various points, to find out about circumstances in his life that may have made him better or worse quite apart from therapy. Many a hospital record closes with the bare information that two years after dismissal the patient was well. Should this be counted as a therapeutic success or as the result of intervening circumstances? How certain is it that the patient is really well? Even when statistics have been collected they are of little use because there exist such poor standards for assigning patients to the various categories of improvement. This is the type of problem which clinical psychologists, with their research training and their special skill at appraisal through tests, can put on a much better basis. The newer therapies such as shock treatment and prefrontal lobotomy only add to the challenge. It is up to the clinical psychologists to invent ways of assessing the effects of these therapies: the immediate changes, the long-range benefits, the possible deleterious effects. That a problem so basic should have such inadequate answers gives eloquent testimony to the need for concerted research effort.

The Citizen's Contribution

Up to this point we have considered chiefly the work that can be accomplished by trained experts: the psychiatrist, the neurologist, the physiologist, the public health official, the psychiatric social worker, and the clinical psychologist. Many readers of this book, however, will not be planning a professional career in which knowledge of abnormal psychology is generally deemed essential. Their relation to public health, mental hospitals, psychiatry, and child guidance will be no closer than that of an intelligent citizen and voter. They will properly ask themselves what part the citizen and voter can play in alleviating the burden of disordered personal reactions. They will want to know whether abnormal psychology, in addition to its special professional uses, adds anything to the leaven of thought by which the world is changed for the better. The subject is, to be sure, a relatively specialized field of knowledge. In one respect, nevertheless, the knowledge and insight that can be most readily gained by studying it reaches out beyond the bounds of a specialty and becomes significant for anyone who wants to play an enlightened part in human betterment. For the task of preventing disordered personal reactions is not simply one of spreading certain facilities; doctors, social workers and psychologists can by no means do the whole of the work. The task of prevention penetrates deeply

into public and private life. It includes improvements in the spirit and method of child training, and it includes reconsideration of the ideals for which our society stands.

Improvement in the Spirit and Method of Child Training.— Anyone who has had experience in interviewing troubled people knows how quickly the tale of difficulty leads back to childhood. Anyone who has read the records in hospitals and guidance clinics knows how prominent a part the early childhood history plays in the final understanding of the case. In all cases of psychogenic abnormality it is apparent that the trouble is often of long standing, and that its origins lie in the child's first social relationships, those with his parents and siblings. Repeatedly one finds that the parents have done things which in retrospect look stupid and insensitive. They have acted according to rules of thumb, they have been blind to the child's individuality, they have been overprotective or dominant, rejective or indifferent, unfair or overlenient, all of which has crippled in one way or another the psychological development of their offspring. Particularly in the psychoanalysis of the severe neuroses, the effect of the parents becomes startlingly apparent. Perhaps for months at a time the patient relives in his transference reactions the bitter contest of his loves and hates toward one of his parents, arriving only through prolonged suffering at freedom from his bondage to the past.

Some of this cannot be avoided. Occasionally a voice is raised in defense of parents, asking how they can be expected to achieve perfection in an imperfect world. Exhausted by the exacting demands of their young, beset by problems of income and taxes and housekeeping, how can they manage to act like even-tempered, insightful nursery-school teachers from dawn to dark? One notices a great difference between the parents of very young children and parents whose children have grown up. The former are intent on doing everything just right and are worried about possible mistakes. The latter are simply glad that everyone has come through alive. It is not an easy business to bring up children, and one should not expect miracles.

Allowing for all this, however, it remains true that parents have it in their power to contribute greatly toward mental health. There is no single prescription to guide them toward this accomplishment. We have seen, however, that interest plays an important part. When parents are interested in their children and can take them in a spirit that combines affection with a humorous sense of perspective, many excellencies follow as a matter of course. Interest guarantees

that they will at least not ride roughshod over the child's strivings and preoccupations. Then there is the matter of motivation and reward. When parents realize that children cannot be expected to make sacrifices without reward, and that parental approval and respect rank high among rewards, they will avoid many mistakes in the process of socializing their young. Circumstances rarely permit us to collect the case histories of people who are unusually well adjusted. Thus we have little record of parental attitudes which favor healthy development and safeguard children from future mental breakdown. Cases of crucially detrimental parental attitudes are enshrined in hospital and clinic records. Cases of crucially constructive parental attitudes do not get into records. It is not hard to infer their nature, however, and it is within the reach of most parents to achieve them.

Improvement in the Ideals and Organization of Society.—One of the obstacles that prevent parents from guiding their children to a healthful development is the social order in which they are compelled to operate. Individual parents are usually wiser and better than the society in which they live. They have outgrown, let us say, any personal inclination to keep up with the Joneses, but they cannot resist the pressure when somebody ridicules their children for not keeping up with the Joneses' children. Perhaps they do not want their children to be prudes, but they cannot resist the prudish atmosphere of the neighborhood. Again, they may hope that their children will not be snobs, but they cannot prevent them from absorbing this social poison if it is in the air. Thus even the best parents are the victims of the culture and social organization in which they live.

Our society has evolved in such a way as to present many startling contradictions. Its standards of socially desirable behavior are both conflicting and confusing. We believe in being gentle, considerate, kindly, and forgiving, but we also believe in competitive success. A child who listens to the voice of the culture will hardly know whether to share his toys with other children or to hoard them and prevent their value from being depreciated. He will scarcely be able to decide whether to turn the other cheek on the playground or to hit first before the other fellow gets his guard up. A certain number of soldiers went to pieces during the war because they could not stand expressing the amount of aggression that came in the line of duty. So well had they absorbed the cultural prohibitions on aggression that they could not readjust when society suddenly placed exactly the opposite demands upon them. Some of our ideals necessarily

entail disappointment for all but a few. The glittering life of the advertising pages and the screen is within the reach of but a tiny number of people; all the rest are given a good chance to feel inferior because they cannot attain it. We sing the praises of individual freedom, but actually the great majority is seriously hemmed in by circumstance. The cooperative and kindly ideals of Christianity, the individualism of the frontier, the materialistic values of competitive business, the aggression that is inherent in nationalism, the equality of the Declaration of Independence, the class and caste distinctions that go with great differences in wealth, all mix with the utmost confusion in our stew of values. Diversity of ideals in a free society is to be admired, but flat contradictions make the adjustive task of the child hopelessly difficult. There is a lot of straightening out to be done.

Adjustment is a process of learning, and learning cannot take place advantageously when the cognitive field is not clear. Many intelligent adults would be hard put to it to state the kind of world in which they want their children to grow up. This being the case, it is very hard for them to present a clear cognitive field to their children. Victims of the confused ideals which pervade our culture, they cannot put before their children a series of consistent guides or signposts pointing toward social adjustment. Anything which clarifies the nature and purposes of our society is likely to have a beneficial effect on psychological health. Anything which serves to alleviate the multitudinous frustrations that grow out of our social order will have an effect in the same direction.

It is clear that the task of preventing abnormal behavior is one in which every citizen can participate. To the extent that such behavior arises out of the process of socialization, everyone can be of some help in its prevention. As parent and as teacher, everyone can learn to guide more wisely the steps by which children adapt themselves to the requirements of living together. As voter and citizen, everyone can throw his influence in favor of a social and moral order more intelligently fashioned to encourage the best possibilities in human nature.

SUGGESTIONS FOR FURTHER READING

The problem for society is approached from the statistical point of view in the small useful book by C. Landis and J. D. Page, *Modern Society and Mental Disease* (New York, Farrar & Rinehart, 1938). The history and present status of mental hospitals in America are described by A. Deutsch, *The Mentally Ill in America* (New York, Doubleday, Doran & Co., 1937).

A survey of the child guidance movement comes from G. S. Stevenson and G. Smith, *Child Guidance Clinics: a Quarter Century of Development* (New York, Commonwealth Fund, 1934).

The book by F. G. Ebaugh and C. A. Rymer, *Psychiatry in Medical Education* (New York, Commonwealth Fund, 1942), gives a detailed account of psychiatric curricula in medical schools. The future of psychiatry continues to be a subject for active discussion. Broad vistas are sketched in the little book by J. R. Rees, *The Shaping of Psychiatry by War* (New York, W. W. Norton & Co., 1945). Psychiatric education has again been reconsidered in a special "Psychiatric Education Number" of *Bulletin of the Menninger Clinic*, 1945, Vol. 9, pp. 29–70.

The profession of psychiatric social work is fully described in Lois M. French's book, *Psychiatric Social Work* (New York, Commonwealth Fund, 1940). The clinical psychologist has moved into a position of importance too recently for a book to have been written about him. The scope of his activities is modestly set forth in T. W. Richards' *Modern Clinical Psychology* (New York, McGraw-Hill Book Co., 1946), but his role is still undergoing definition. A recent report to the American Psychological Association by D. Shakow and others bears the title "Recommended Graduate Training Program in Clinical Psychology" and is printed in *The American Psychologist*, 1947, Vol. 2, pp. 539–558.

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