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AN INTRODUCTION TO ABNORMAL PSYCHOLOGY

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AN INTRODUCTION TO ABNORMAL PSYCHOLOGY

BY

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Revised Edition

NEW YORK

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To

My Parents

PREFACE TO REVISED EDITION

In very few departments of human interest have serious thought and enquiry been pushed with more vigor during the past twenty years than in the field of the abnormal or maladjusted personality. And this is well. A deeper and more widespread understanding of the human personality and its laws must not be forfeited to other interests if civilization is to grow more sound and enduring. Even the last seven years have witnessed very appreciable changes and innovations in thought and interpretation in the field of our present interest. A revision of the author's *Introduction to Abnormal Psychology*, therefore, has seemed imperative if the book is to continue to meet the needs of the beginning student in abnormal psychology.

But the present book is considerably more than a mere revision. Seven new chapters have been added and three omitted from the context of the original text; the number of illustrative cases has been doubled; a considerable number of experimental and clinical studies has been introduced; the interpretative approach has been materially altered and extended. The author hopes that the *revision* will more adequately fulfill the requirements of a basic text in abnormal psychology than the older text, which proved to be somewhat abbreviated for a full course.

In the use of illustrative cases, the writer has taken care to conceal personal identities without, however, having changed or omitted pertinent facts. Where the source of the case material has not been specifically indicated, it has been taken from the writer's own clinical practice. In most schools where abnormal psychology is taught actual clinical material is not available. The only feasible plan for meeting this deficiency in the subject matter of the course is by the inclusion of short case histories. And in order that the student may

easily incorporate these histories with the other material they have been demarcated from the remainder of the context as little as possible.

Thanks are cordially extended to authors and publishers from whom material has been borrowed. The writer wishes especially to express his appreciation to Dr. Chas. R. Lowe, Idaho State Hospital, South, for the privilege of using a considerable amount of case material from his files and to the Caxton Publishers for the use of a number of cases from the writer's forthcoming book *Auto-Correctivism*.

V. E. F.

Boise, Idaho
February, 1937

PREFACE TO FIRST EDITION

In this book I have placed considerable emphasis upon two points of view. The first of these is the assumption that mental abnormality is to be regarded as a purely relative matter, and that if one is to understand it he must first gain clear insight into those transition phenomena, those intermediate degrees, between the more normal and the more abnormal. To this end several somewhat general and introductory chapters have been devoted. The second point of view is that mental abnormalities can be most adequately understood and dealt with when viewed as disorders of the personality, of the individual as an integration, rather than as disorders of various mental processes or reactions. I have, in other words, followed the thesis—which, of course, is by no means a new one—that disordered thinking, for example, or grossly faulty perception assumes its full and true significance only when it is regarded as an indication of a *disordered personality*.

The book has been prepared as a text in a first course in abnormal psychology, and only such knowledge as usually results from a course in general psychology is presupposed. It is hoped, however, that the intelligent reader who has never had a formal course in psychology may find here something of interest and value.

I wish to acknowledge indebtedness and to extend thanks to various writers and publishers mentioned herein for their kind permission to use copyrighted material. I am also particularly indebted to my colleague, Professor Leland W. Crafts, for many criticisms and suggestions of value and for his painstaking care in reading most of the manuscript; to my friend, Dr. James Quinter Holsopple, Chief Clinical Psychologist, New Jersey State Department of Institutions and Agencies, for much valuable aid; to my brother, Professor Vardis Fisher of the Department of English of New York

University, for helpful suggestions in the presentation of materials; and to my wife for her patient assistance throughout the preparation of the book.

V. E. F.

New York City
September, 1929

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AN INTRODUCTION TO ABNORMAL PSYCHOLOGY

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CHAPTER I

ABNORMAL PSYCHOLOGY

INTRODUCTION

William James once said that some persons think about fifteen minutes out of every twenty-four hours, and that the rest never do think. Professor James was not being facetious; he meant quite literally what he said, and he unquestionably was very near the truth. The major part of the activity of most of us, even of our mental or implicit activity, is merely habitual, conventional, traditionally determined. Thinking is perhaps the hardest work we ever do, and the natural indolence of human nature, or some basic law which operates in such a manner as to effect an over-conservation of our energies, erects a barrier to true thinking activity which most of us rarely hurdle.

And it is unfortunate that we think with such reluctance, for adequate adjustability to life with its varied and manifold problems is becoming increasingly a matter for thought on the part of each and every individual. Purely traditional and conventional guides to behavior are no longer reliable. Modern society is too full of cross currents of views and opinions, values and goals, for anyone to rely with safety on any dictum of the past unless one would live in relative isolation from the many movements and trends of present-day life. In an earlier day, physical strength and endurance went far toward endowing the individual with adjustability to his environment. Today, however, such capacities lag far behind emotional balance and a pregnant use of the intellect

in enabling the individual to adjust himself to an ever-changing horizon.

In no study may the student approach more closely to those deeply rooted factors in the constitution of the human organism which underlie civilization and its changes than in the field of abnormal psychology. But in approaching this field of phenomena it will be well if he anticipates in advance not only a heavy demand upon his intellectual capacities but also upon his feelings and upon that peculiarly human capacity, empathy, the ability to gain a feeling or affective identity with another person's state of mind. In the study of personality disorders and mental abnormalities one often is reminded of a second remark by James to the effect that the two most remote stars are near together as compared to two human minds. But the study of no other subject matter so measurably reduces the distance between minds, or so markedly contributes to the establishment of a true *rapport* with one's fellows, as does the study of abnormal thoughts, feelings and actions.

Furthermore, the student of abnormal psychology should realize that although the phenomena which he will study often may seem strange, perhaps bizarre, they are none the less remote from no person's life. With 420,000 persons in mental hospitals in the United States, with the incidence of insanity directly affecting 4% of the population, and with an estimated 10% of the population definitely neurotic, to say nothing of the emotionally unstable, the criminal class, hoboes, and prostitutes, no one may hope to escape coming directly or indirectly into contact with problems of mental abnormality. And likewise the student should be cognizant of the fact that the neurotically biased and the emotionally unstable all too often are the last to admit of personality disorders in themselves, and that in proportion to their numbers perhaps no group of persons has so much to do with the initiation and direction of movements in society as they.

And, finally, the student is cautioned against permitting

his curiosity about the more atypical and unusual to steal his judgment and sympathy. The more strangely the other person behaves, the more earnest and sympathetic the interest which his behavior warrants in the serious student of the mentally abnormal. We are not too far removed yet from the time when the more grossly maladjusted class of persons was regarded as essentially constituting a distinct species and as a fitting source of amusement for the idly curious. But we must divorce ourselves from such a point of view completely; we must cease to see the maladjusted individual merely as our inferior; we must not suppose for a moment that there is any fact or entity of any fundamental significance about his personality make-up or psychophysical constitution which is not shared by us. For it is only when we draw the individual of abnormal or disordered personality within the group of all persons and establish for all alike certain basic common denominators in the realm of human motives and personality that we are making a scientific approach to an understanding of our abnormal individual.

In the present book, we shall endeavor to establish certain common denominators of personality. Following this our principal task will be to understand how and why these common features of personality, motivation, mental life, become transformed or translated in such manners as to give rise in certain individuals to abnormal or maladjustive attitudes, thoughts, feelings, and actions. Hence we shall approach the problems of abnormal psychology by first studying briefly the normal personality and some of its natural variations.

CHAPTER II

THE NORMAL PERSONALITY

Mental Normality an Approximation. Much confusion in psychology has resulted from the careless use of the terms normal, subnormal, supernormal, abnormal, and their derivatives. The student should have in mind a fairly definite meaning for each of these terms. In a later chapter we shall take up in more detail some of the criteria of normality and abnormality. For the present it is necessary only to understand in general what we mean when we speak of an individual as normal, and secondly to know the three respects in which a person may deviate from the normal.

Except for identical twins, all persons are inherently different. Even though two individuals are exactly alike in one respect, in so far as we are able to measure them with accuracy, they will be found to differ in some other respect. And although a given individual possesses a certain trait or capacity to a degree which is exactly the mathematical average for the group, he will be found to deviate from the average in some other trait or capacity. Hence, conceivably, no individual is literally normal in the sense that he possesses all mental traits and capacities to exactly an average degree. Thus, to speak of a person's being normal should never be taken to mean that he represents the mathematical average (or the median either) of the group in any one or in all respects.

The normal individual is one who does not vary from the average tendency of the group in any fundamental trait or capacity to the extent that his under- or over-possession of this trait or capacity prevents his making adequate social-economic adjustments. For always, in the final analysis, the basic measure of normality is the individual's degree of adjustability to the society in which he lives, assuming that this society is essentially typical of the particular period of

civilization to which it belongs. In short, a normal person is one who lives at least a moderately independent and industrious life and who at the same time gets along with his fellow men sufficiently well to keep himself out of mental hospitals, jails, and feebleminded institutions. Ordinarily, such a person will be found to belong in that range of distribution which includes at least 60% of the total group in so far as intelligence, emotional maturity, emotional stability, and sensory acuity are concerned.

An individual may deviate from the limitations of normality in either of three directions. He may possess a given basic capacity to a decidedly lesser degree than the normal person. He then would be termed *subnormal*. He may possess a capacity to a distinctly greater degree than the normal person. In that case he might be termed *supernormal*. For the most part, the terms *subnormal* and *supernormal* are used only in reference to intelligence capacity. Finally, it may be impossible to compare an individual to others with respect to a given trait; he may be neither above nor below, strictly speaking, but *away from*. For instance, supposing an individual is morbidly afraid of dirt, any kind of soil or earth. The great majority of persons are wholly unafraid of dirt; there is no quantitative variation at all. Hence, the person who fears dirt cannot be compared quantitatively with others in this respect; he is simply divergent from others in an atypical direction. Such a person is termed *abnormal*.

The Basic Aspects of the Normal Personality. We may define the human personality as the human individual as seen from a psychological point of view. And all of the psychophysical functions enter directly or indirectly into the personality organization. Certain functions and capacities, however, are of particular importance.

The student already is familiar with the *sensory-motor* equipment of the individual. Upon the integrations and coördinations which exist within this total equipment depends much of the particular personality-pattern of any given person. If the auditory sense is definitely defective, the individual al-

most certainly will react in a hesitating and uncertain manner to sound stimuli; if the vision is poor, the individual appears insensible to many of the less obvious aspects of his visual environment. Or, on the other hand, if an individual early possesses unusual visual acuity, certain basic values and interests may be developed about this capacity. A certain child, even before he was able to walk, displayed an extreme fondness for tiny objects such as small pins, bits of thread, particles of dirt, chalk, etc. At the age of seven he still shows a strong interest in small things and makes pets of crickets and minnows. When he reaches maturity, he may reasonably be inclined to take up watch-making, histology, or some other occupation which is in line with this marked direction of his attention and interest, and which accords full recognition to visually less obvious facts.

The degree of integration and coördination which exists or which is attainable within the individual's sensory-motor systems likewise may influence to a considerable extent the interests and attitudes which the person develops. The child who early suffers from strabismus (cross-eyedness) is fortunate indeed if he does not develop a sense of inferiority and an attitude of shyness around others. His final personality-pattern will reflect in many different ways and situations the influence of his early lack of coördination of his eyes. Or, again, the child who is above average in his ability to acquire fine sensory-motor coördinations and who has a short sensory-motor reaction time may excel in physical sports early in life and because of this fact build some of his most basic interests and attitudes around these particular abilities and their corresponding activities. His friends observe that when he is with a group that is discussing tennis, he is alert and interested, highly motivated; but when he is with a group that is discussing politics or art or literature, he appears bored, is silent and reflective.

A second function or capacity which is vitally important to personality and its development is *intelligence.* An individual's general intelligence capacity may lie anywhere on a straight line

which connects two theoretical points, one of which represents a complete absence of intelligence capacity and the other of which represents unlimited capacity. In actuality, intelligence among human beings ranges from rather profound idiocy which, to all intents and purposes, constitutes no intelligence, to the super-intelligence of our scientific and philosophic geniuses.

Intelligence and its variations will be discussed in some detail in a later chapter. Suffice it now to say that intelligence has to do chiefly with the individual's learning or acquisition of adjustive habits of reacting, and with the degree of discrimination and sagacity which characterizes his behavior in new and difficult situations. It is important for the student to know that the degree or level of intelligence is not a prime factor in the development of personality disorders. It is quite true, of course, that if intelligence were fully developed or "unfolded" at the time of birth it would undoubtedly affect very materially the incidence of personality disorders in adult life. No one can say, however, whether the incidence would be lessened or increased. We can only point out that some of the most brilliant minds find their way to mental hospitals, whereas idiots and imbeciles are not prone to develop personality disorders; and add that intelligence, or lack of it, is never a truly dynamic or causative factor in the genesis of personality disorders. Intelligence, always, is nothing more or less than an instrument in the services of the individual's motives or desires.

Motives are the dynamic factors in personality; and it is within their peculiarities and relationships that the truly causative factors of personality disorders, that is, of abnormal mental conditions of a functional nature, exist.

Definition of Motives. *A motive is an inclination or impulsion to action plus some degree of orientation or direction.* We may clarify this definition by taking the universally known motive, hunger, as an example. The hungry person is a restless person. He is inclined to activity; it is difficult for him to sit down and relax or keep his attention or thoughts on facts other than things of an edible nature. This in-

clination to activity, this restlessness, is the dynamic or motivating factor.

But as we said, a motive possesses also a directive factor to some degree or other. In the case where a given motive has become organized with specific perceptual, memory, and thought processes and the individual is familiar with the present situation, the motive induces a definite and coördinated pattern of activity. Thus, if the hungry person is in his own home, he proceeds by the nearest route to the pantry or ice box and secures food. When we say, however, that a motive possesses a directive feature, we do not have in mind the directive influence of intellective factors which have become organized with the motive. Rather, it is a directive factor which is inherent in the motive itself that is implied in our definition. But in order to comprehend this inherent factor it is often necessary to take note of what the motivated person does not do rather than of what he does. Hence in the case of the hungry person we easily observe an indifference (heightened thresholds) to obviously non-edible facts; a given fact which otherwise would immediately interest him has little or no potency for gaining his attention while he is hungry. We see, then, that his hunger tends to keep him from reacting, both implicitly and overtly, to non-edible facts, and to render him prepotent in regard to edible facts. It is this ruling out by the motive of obviously irrelevant activities and the inclusion only of apparently or probably relevant activities that constitutes the inherently directive or orientating feature of a motive.

A motive is not an inherently allocated quantum of energy which can be utilized only in a certain type of activity or for the attainment only of a certain type of end. In other words, the total amount of mental (or psychophysical) energy which the individual has at his disposal is not parceled out beforehand to different types of activity. In a strict sense, a motive is non-existent until it is aroused or active, and until it is aroused, the energy of the individual is at the disposal of whatever motive is excited first or most strongly. If we

take an individual who is relatively quiescent at the moment and succeed in arousing fear in him strongly, he may expend all of his available energy in his efforts to escape. At another time he may expend his energy to the point of exhaustion in his attempts to secure food, or to overcome an adversary, or to obtain a sexual partner.

A motive, to be sure, is itself activity.[1] But it is a peculiar, internal, and incompleted activity. Its most outstanding and significant characteristic lies in the fact that it constitutes a demand, inclination, or impulsion for further activity, usually of a more elaborate and overt type, culminating in an act which is of a consummatory nature. The hungry man tends to continue active till he has swallowed food, the frightened man till he has secured safety, the angry man till he has overcome his adversary, the sympathetically aroused man till he has succeeded in consoling or aiding the object of his sympathy, the suggestibly aroused man till he has carried out his suggestions, the egoistically excited man till he has achieved his goal, etc., etc. Hence the student of psychology may well think of a motive's constituting an inclination to activity, an incentive to reach some goal or make possible some final or consummatory act.

All feelings, emotions, desires, tendencies, proclivities, inclinations, propensities, drives, impulses, urges, strivings are motives. Except for the terms "feelings" and "emotions," all of these terms have essentially the same psychological meaning. Some authorities prefer one term, some another. In the present book they will be used more or less interchangeably, and with regard to the emphasis desired at the moment.

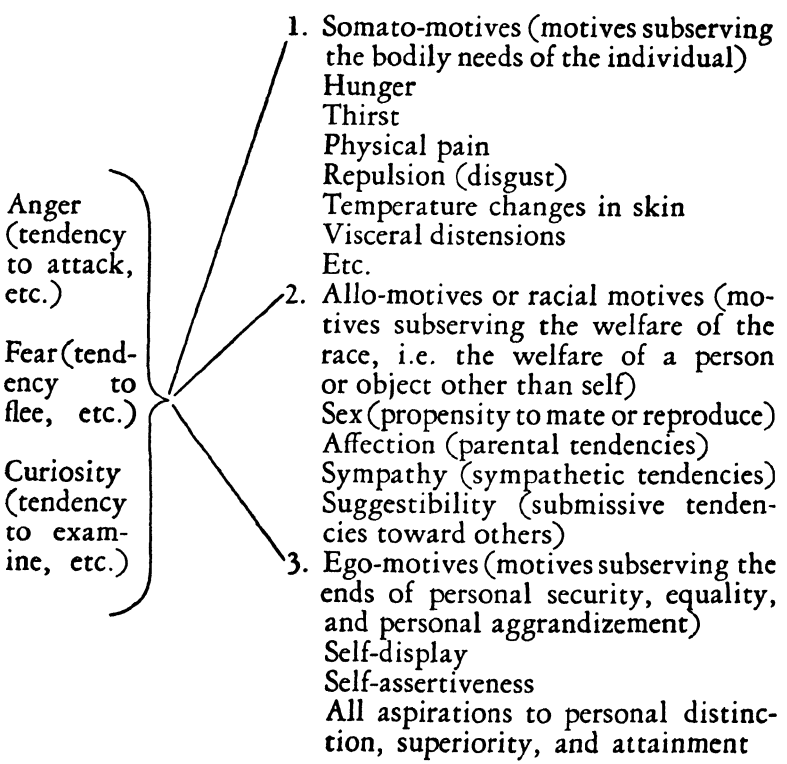
Feelings and emotions are of the nature of motives in that they incline the individual to some more or less definite type of activity, as in anger and fear; or they incline him to maintain a given activity, as in the case of a feeling of relaxation; or they incline him strongly against any positive or overt activity, as in the case of despondency or grief. Perhaps, as certain authorities contend, our feelings and emotions are

[1] See, for instance, Woodworth, R S., *Psychology*, Revised Edition, Chap. VI.

simply the experiential or conscious aspects of our different propensities or drives.

A Classification of Motives. But if one is to understand the different motives of the human individual, one must go beyond a mere description, however minute and detailed, of the individual's activity. It is in the act which consummates the motive, that concludes the sequence of activity, that the true significance of the motive is to be found. And this act must be seen to possess a psychobiological entity or organization. In other words, in the consummatory act we must discern an accomplishment which in the vast majority of cases is of value to the individual or to the race or to both.

When we classify the principal motives from the standpoint of their psychobiological significance, we have three major classes, and only three. These are:



All of us are familiar with the somato-motives. Although immediately in the service of the individual's own well-being, in a full sense they are equally in the service of the race. Without first giving care to oneself, one could not reproduce himself and contribute to the care of others. These motives enter only indirectly into the genesis of personality disorders, and even then to no great extent; we shall therefore dispense with any further discussion of them.

It is primarily upon the development, direction, and organization of the racial and ego-motives that mental health or mental ill health depends. And in order that the student shall have clearly in mind the basic significance respectively of these different motives, it is advisable that we discuss each one briefly in turn.

No motive in human nature has occasioned more confusion in thought, has been more variously interpreted, or has been dealt with more diversely by individuals and human societies than the motive of *sex*. Even within the limitations of psychological thought and interpretation, one finds the most divergent opinions regarding the role which sex plays in the life of the individual. The Freudian school of psychology contends that sexual energy, the *libido*, is the originator or initiator of all impulses to action—excluding the somato-motives—and that only through a certain mental transmutation process called *sublimation* does the individual ever achieve any interests or meanings in life except those of a sexual nature. The Adlerian school, on the other hand, contends with equal vehemence that sex is always subordinated to egoistic aspirations, and that it exists as a prominent feature in the life of an individual only if the individual is somehow making use of it in his efforts to gain his ego goals. And other schools essentially ignore sex, at least as a factor in the genesis of personality disorders.

Sex is a racial motive. From the standpoint of the individual, sex is an unselfish or selfless inclination. If the student is to see clearly the basic significance of sex, he must divorce himself completely from a hedonistic point of view, disre-

gard entirely the pleasure element for the moment, and attempt to comprehend fully the primary and fundamental biological significance of sexual activity. In the case of the normal individual, the pleasure factor may be safely taken *as an exact index of the strength of the inclination of the individual to participate in the perpetuation of the germ plasm, the immortality of the race.*

When an individual engages in sexual activity he is expending energy which in no sense enhances him as an individuality. Rather, he is doing the reverse. He is expending energy which might have been used for the furtherance of his own security or personal distinction. Sex is the race's first claim, a first mortgage, as it were, upon the energies of the individual. Only the person who has acquired an ego-identification with sexual activity or with the idea of sexual prowess gains a feeling or sense of personal enhancement through the medium of sexual behavior. But the truly racial and non-individual significance of sex will become clearer to the student in later chapters. It is in the field of personality disorders that the various motives and their most fundamental significations are laid bare.

It has been shown experimentally that the *parental motive* is a stronger tendency in the female white rat at certain periods than either hunger or sex.[1] Perhaps we may conclude with safety, despite the absence of experimental proof, that the parental motive is as strong in humans, at least in women, as it is in rats.

The parental motive is the psychobiologic follow-up of the sexual motive. The sexual motive inclines the individual to such activity as naturally results in offspring; the parental motive inclines the individual to devote a share of his energies to the care and protection of the offspring which have been produced. And, parental activity, when not distorted or perverted by ego-motives, is so obviously racial or unselfish in character as to require no elucidation of its basic significance. Again the student should be cautioned against fallaciously perceiving parental behavior as being motivated by

[1] *Ibid.*, 2nd Revised Edition, pp. 302-305.

pleasure. The present writer is strongly of the opinion that parenthood is very often extremely full of pain. And neither should the student be caught up by the mechanistic fancy, entertained by certain "physiological psychologists," that the true basic "sub-cortical" reason why the mother allows her young to suckle is because of the discomfort which is occasioned by the pressure of her milk. Even a cow will often allow her calf to suckle when her udders are dry.

Sympathy is a motive which inclines the individual to devote his energies on behalf of someone who is in distress. Some persons are so sympathetically inclined that they carefully avoid sympathy-arousing situations. And in some persons sympathy becomes directed toward self, or some mental representation or conception of self; and then, of course, it becomes detrimental to the individual and to the group alike. Tears always tended to come to the eyes of a certain young man whenever he spoke of the "little bit of a feller" that he was as a child.

All persons, perhaps, are more or less *suggestible*, although most of us develop negativistic attitudes in childhood as a protection against our early ignorance-fed suggestibility. But in certain individuals, suggestibility remains, or in part becomes, a very powerful motive. The suggestible person tends to react in accordance with the wishes and purposes of the other person, and to ignore or to neglect his own personal interests. The hypnotic state is the most extreme manifestation of suggestibility.

These four motives in particular constitute within the individual a disposition to devote his energies to the end of perpetuating the species. But there is a second and equally emphatic meaning in the life of the human being. From the standpoint of nature's experimentation with the human family, the perpetuation of the germ plasm is of no greater importance than the *individuation of self*. In other words, side by side in the mind of the average individual there exist powerful inclinations to devote his energies to the ends of the production, security, and welfare of others, and equally

strong proclivities to devote his energies to the security, advancement, and even to the immortality of self.

Egoism has been severely neglected by most schools and systems of psychology. It has been left largely to our philosophers and writers to draw our attention forcibly to that motive or motive-group which inclines the individual to work toward the ends of *security*, *equality*, *distinctiveness*, and *immortality of personal identity*. This last statement requires further elucidation on the part of the writer and, perhaps, some hard thinking on the part of the student.

When we speak of *personal identity*, we have in mind the "I-ness" and "me-ness" of the individual's psychobiologic organization. Here we have a person who is honest and who could not be induced to be otherwise except under the most unfavorable circumstances. Yet why does he cling so tenaciously to this ideal or meaning of personal honesty? To say that his honesty is merely a matter of habit formation is but to say that for some time past this individual has behaved customarily in an honest manner. He is honest because *he has incorporated the idea or ideal or meaning of honesty within his organization of personal values*. Honesty is an integer of his personal identity, of his sense of individuality, of himself as a distinct and autonomous man or woman. It lends its weight to his sense of being a complete entity. If he were to be dishonest, he would feel a sense of loss and incompleteness, and just as acutely as if he had lost an arm or a leg.

The first and most basic end or goal of egoistic striving is a sense of security and of completeness or equality with others as an autonomous entity among the objects and facts of life. But once the individual has attained this end, normally during his developmental period, he goes on to acquire a further differentiation from others than a mere sense of autonomy gives. He seeks, or tends to seek, a personal distinction of one kind or another, and along with this he seeks, wittingly or unwittingly, *to immortalize his identity*. He strives for distinction in business or science or art or literature or farming or sports or politics or religious leadership,

or, perhaps, only in his dexterity with tobacco juice, or in his adeptness at recounting vulgar stories. And he strives, at least yearns, for the immortality of his personal identity. Our old sandwich men who suddenly believe they are God because of a happy but unexpected reversal of their fortunes, our "Napoleons," "Caesars," "Christs," and "Gods" in our mental hospitals, our halls of fame, and our biographies and autobiographies, all attest to the aspiration to personal immortality which resides in the human mind. A few years ago a pathetic old gentleman confided to the writer that he wanted only one thing from life, namely, to land at the Battery and have New York City turn out in a great parade for him. He felt that in that way he would be added to the "immortalized" list of the paraded.

Egoistic motives may lead to almost any conceivable pattern of behavior. Only obvious self-display and self-assertive activity are generally recognized as manifestations of egoism. But we cannot judge the motive by the pattern of activity. Even eating may in a given instance be egoistically motivated, as in the case of the person who seeks to win distinction at the county fair by eating the largest number of pies. Sexual activity is often more an expression of egoism than of the sexual motive, a circumstance due largely to the fact that among men in particular, ego-identifications with sexual prowess are very common. Most of the daily activity of the fairly normal person is, of course, the expression of an integration of ego-, racial, and somato-motives rather than the expression of a single motive of any one type.

In concluding this short discussion of egoism, we wish to remind the reader again how all-important it is to distinguish between the motive and the activity pattern. Certain patterns of activity normally belong to certain motives, but in the case of abnormal individuals, in particular, we find over and over that a given activity pattern or function has been usurped by a motive to which it ordinarily does not belong. Egoism in particular may usurp almost any function of which the individual is capable.

Fear, *anger*, and *curiosity* belong more or less equally to the three different classes of motives. Fear may be aroused by threat of bodily injury to oneself, by threat of injury to an object to which one is attached unselfishly, or by threat to one's personal integrity, i.e. to one's moral integrity, social or professional position, etc. Similarly, anger may be aroused in relation to one's physical well-being, to a racial object, or to one's personal identity. Curiosity is perhaps the most impersonal of all motives in every sense. It subserves the need of the individual's familiarizing himself with his surroundings and thereby impartially contributes to the ends of self and others alike.

The Inherent Antagonism of the Racial and Ego-motives. If the student can succeed in bringing three fairly simple facts into their proper relationship to each other, he will be in a position to comprehend the further extremely significant fact that every individual is born into a state of potential conflict between his racial and ego-motives. The first fact is that any given human individual represents a limited amount of energy, that is, a limited capacity for energy expenditure. The individual is an energy transformer, it is true, but he is limited in his capacity to transform energy and therefore the amount of energy which he may expend is limited. Or, as certain writers have stated the matter, the mind is a closed energic system; the mind is capable of only a limited expenditure of energy. Translated into psychological values this means that an individual who has come to be *wholly* interested in one fact cannot possibly be interested in any other fact at the same time. A person, for instance, who is wholly interested sympathetically in one individual cannot become at all sympathetically interested in a second individual at the same time without a diminution of his interest in the first, unless, of course, he mentally combines the two individuals and reacts to them as to one.

The second fact has to do with the nature of a motive. The essence of a motive, we have said, consists of a propensity or tendency to utilize one's energy in an effort to attain a

certain end-result, that is, to engage in such activity as will make possible the commission of a consummatory act.

The third fact is to the effect that all of one's energy could easily be used in his efforts to attain either racial or ego ends. In other words, *each of the two different sets of motives tends to lay claim to the total energies of the individual.*

And inasmuch as these two sets of motives incline the individual to radically disparate end-results or consummatory acts, and yet may be aroused or active at the same time, and often are, the individual inevitably enters life in a state of potential conflict. Much of abnormal psychology has to do with the various attempts made by individuals to solve this basic conflict.

The Over-development of Motives. Since originally the energy of the individual is free, that is, available to any motive that is excited, it follows that early environmental influences may be of such a nature in any given case as to repeatedly arouse a certain motive to the relative exclusion of other motives. Under such conditions the inevitable result is that the individual tends to become over-sensitized to all situations and stimuli which are in the least potent for arousing this motive. We may speak of this over-sensitization as the over-development of a motive. And the facts which arouse the motive become exaggeratedly prominent values, positive or negative, in the daily life of the individual.

To illustrate what we have said: If fear is repeatedly aroused in a small child, he will come to the point where he will react with fear to a disproportionately great variety of facts and situations. He perhaps will react with fear to a situation which is merely unfamiliar, instead of reacting with curiosity; if a smaller child assaults him, he will react with fear instead of anger, etc. Similarly, sympathy or affection or sex or egoism or any other motive may become unduly developed in childhood as a result of unfavorable environmental influences. In pre-neurotic children the racial motives usually become over-developed. The child becomes too attached to a parent or a brother or sister. This tends to pre-

clude the proper development of ego-interests with their accompanying sense of autonomy, equality, and a normal degree of self-reliance and independence. Such an individual later develops neurotic symptoms in his attempts to desensitize himself to certain aspects of his environment and to the exaggerated values which have come to possess his daily consciousness. Throughout a number of later chapters we shall discuss some of the various ways in which individuals endeavor to solve the problems raised by their over-developed motives.

Under-developed and Repressed Motives. Just as a motive may become over-developed, enforcing a claim to a disproportionate amount of the individual's energy, so it may, on the other hand, fail to develop to a normal and adequate degree. A certain man who was an only child was encouraged throughout his childhood by both of his parents to look forward to becoming the President of the United States. For the most part, only egoistic interests were awakened and kept alive during his daily life. Upon arriving at adulthood, he was relatively incapable of true affectionate or sympathetic responses. He had modified the parental aspiration for him to the extent that he was now ambitious to become the president of one of America's largest industrial corporations. This ambition was the one consuming interest of his life. Obviously, the lack of development of certain motives presupposes the over-development of other motives.

A motive may become normally, or even exaggeratedly, developed, and then be repressed (or suppressed).[1] In a later chapter we shall discuss in detail the nature of repression. At this time we need only to state that once a motive has been repressed it no longer exerts a normal or constructive influence upon the interests and activities of the individual. Generally speaking, the repression of a motive results in a partial or complete negation by the individual of the end-result or goal to which the motive inclines him. Thus, in a typical case of the repression of an egoistic tendency to self-

[1] See glossary.

display, the individual becomes self-effacing around others and consciously regards self-display as an extremely objectionable form of behavior. One who has repressed fear is inclined to scoff at fear and to regard it as a moral weakness; one who has repressed sexual tendencies is prone to see only the unhappy consequences of sexual activity, etc.

The Conditioning of Motives. The student is already familiar with the psychology of conditioning. He may have studied this topic as the conditioning of reactions. It is not, however, the reaction which becomes conditioned to a new and originally indifferent fact; it is the motive that is conditioned. Hence, in the case of the conditioning of fear, it is the inclination or tendency to flee or retreat that becomes conditioned to the conditioned or substitute stimulus. The pattern of activity which comprises the act of fleeing never perhaps exactly reproduces itself upon successive occasions;[1] only the tendency to flee, that is, the motive, reproduces itself.

The conditioning of motives contains much of the story of an individual's life. Although experimental data on the process of conditioning are confined largely to fear and simple reflex responses, which latter do not constitute activities of the organism as a whole, we know from daily and uncontrolled observations that all motives may become conditioned to a wide variety of facts or situations. The conditioning of fear to various harmless aspects of the environment has much to do with the common fears of adults; the conditioning of sex to sexually inappropriate facts and objects enters largely into the broad field of sexual perversions; the conditioning of affection and sympathy to cats and dogs often excludes from the life of the individual the natural psychobiological ends of these important racial motives; the conditioning of egoism to various meanings, facts, and situations belongs to the most interesting, as well as to the most significant, chapter in the history of human progress.

The individual's ego-interests, together with the ways

[1] See Dunlap, Knight, *Habits, Their Making and Unmaking*, Chap. VI, Liveright.

which he adopts in his efforts to attain his egoistic ends, comprise the most complex and intricate aspect of his existence. By comparison, his sexual, affectionate, sympathetic, and suggestible interests are simple. For the most part, egoistic striving takes the form either of efforts on the part of the individual to accomplish some end-act, or to incorporate within his personal identity some meaning. Of course, these two modes of activity are intimately related and by a mild effort at abstraction we could easily reduce the former to the latter. However, it will serve the end of greater clearness to deal with them as separate modes of egoistically motivated activity.

The track star who is about to compete in a race seeks to accomplish the end-act of crossing the finish line first; the politician seeks the end-act of his taking the oath of office; the social climber strives toward the end-act of accepting the social recognition for which he or she longs; the physician endeavors to attain to the act of discharging his patient as cured; the lawyer works toward the end-act of accepting the congratulations of client and friends in token of his victory, etc., etc. It should not be difficult for the student to recognize in egoistically motivated activity a striving toward some end-act or consummatory activity of a personally satisfying nature.

When egoistic tendencies become conditioned to a certain fact, a certain activity or meaning, the individual tends to identify himself with this fact. In other words, as we have stated, he tends to incorporate the meaning of the fact within his personal identity. *Such a self-incorporated meaning constitutes an ego-identification*, and it is the individual's organization of ego-identifications that gives to him a sense of autonomy and individuality.

Normally, the individual begins to achieve ego-identifications rather early in childhood. We observe that the small boy is patterning his acts and attitudes and perspectives after those of his father. He is striving to be like his father, that is, to add to his own personal identity certain meanings

which his father has for him. His father denotes strength and the son in his striving to be like his father seeks to become strong within his own right; when frustrated, the father curses loudly and lustily, and therefore, inevitably enough, the son does likewise when he is thwarted. The mother may protest vehemently against the "naughty habits" which her son is acquiring, and she blames her husband, and she is quite right. What she usually fails to realize is that, whereas cursing may have a vulgar, even an immoral, significance for her, for the boy it is a positive integral of the pattern of activity which he is adopting from his father, and that he is adopting this pattern because it points to the end-result of personal completeness, strength, and superiority.

An individual may make ego-identifications with activities, concrete facts, relationships, and situations, and with abstract ideas or principles. Always in the final analysis, however, the individual is making an identification with a meaning. Thus one tends to make an ego-identification with a material object only if his possession of, or his relatedness to, the object has an individuality-enhancing significance. Thus individuals tend to identify themselves with fine clothes, antiques, heirlooms, works of art, precious stones, speed cars, race horses, unusually tall buildings, progressive organizations, superior persons, etc., because a personal relation to such facts has an individuality-enhancing value. On the other hand, an individual does not tend to incorporate within his personal identity the commonness of the pebbles on the beach, the inefficiency of broken-down automobiles, the slowness of a stifled race horse, or the ineffectual stupidity of a mentally deficient person.

We may say then that under the influence of egoistic motivation the individual is seeking to add to himself such characteristics or meanings as connote autonomy, completeness, distinctiveness, self-sufficiency, and permanence. And although egoistic effort normally brings about the establishment of definite ego-identifications, which to a large extent supply the direction and orientation necessary to a progres-

sive and coördinated life, at the same time, great danger to the individual and to society exists in the acquisition of maladjustive and anti-social identifications. The criminal, for instance, is often nothing more peculiar or mysterious in his psychological make-up than a person who has identified himself with socially harmful and vicious meanings. In later chapters we shall consider some of the unhappy results of undesirable ego-identifications, over-identifications, and paucity of identifications.

The Integration of Motives. At birth there is little or no integration of the different motives of the individual. Hence we often speak of the child as being impulsive. His activity at a given moment tends to be determined by a single motive. At one time he is unrestrainedly angry, at another he is unashamedly afraid, at still another he is embarrassingly curious, etc. But under the influence of environmental agencies and of his intellective processes (perceiving, remembering, thinking, and imagining), his different motives tend to become integrated or organized into motive-systems or *sentiments*.

A sentiment results from the conditioning of two or more motives to a single fact, stimulus, or situation. Thus a cruel step-father may arouse intense anger in his step-child at one time, and at another time arouse strong fear. Now if this procedure is repeated a fairly large number of times, the two motives, anger and fear, tend to become integrated or organized into a single motive-system in regard to the step-father. In other words, *both motives become aroused simultaneously by the same fact.*

Obviously enough, if two or more motives are aroused at the same time by a given fact, the behavior of the individual in relation to that fact will be decidedly different from what it would be if only one motive were aroused at a time. If fear and anger, for instance, are aroused simultaneously by a certain fact, the behavior of the individual will be neither an immediate retreat nor an immediate attack. Each motive will tend to neutralize the other with the result that

the individual's behavior will be of a compromise or modified sort.

When fear, anger, egoistic tendencies, and suggestibility become organized into a single motive system, we have the well-known *sentiment* of *hate*. When the four basic racial motives, together with egoistic tendencies, become organized within an adult in relation to an adult member of the opposite sex, we have the sentiment of *love* between man and woman. A mother's love sentiment toward her child is an integration of egoism, in the form of an ego-identification with the child, affection and sympathy. The most essential motive in the sentiment known as *patriotism* is an ego-identification with country. A *religious* sentiment may have any intensity of ego-identification with the idea of a deity along with one or more of the racial motives. Sexual tendencies are not infrequently found in religious sentiments.

Sentiments which include both egoistic and racial motives to a fairly equal degree are of the greatest value both to the individual and to society. For it is exactly in the process of egoistic and racial motives' both becoming conditioned to the same facts, directed toward the same goals or end-results, that the inherent antagonism which exists between them becomes dissolved. If a man's work truly embodies for him the two values or meanings of providing support for persons to whom he is unselfishly attached and of being, at the same time, a medium through which he may work for personal distinction, then, other things being equal, he is a well-adjusted individual; and if the product of his work is beneficial to society as a whole, he is a social asset. If, on the other hand, a man's work means to him only an opportunity for personal advancement and he feels that the care of his family is a thankless task, he is not well adjusted, for he has no true sentiment toward his work, but only an egoistic interest in it. And again, if a man's work has no other significance for him than a means of supporting his family or of paying his taxes, he is not properly adjusted, however pleasant his family life may be.

It is perhaps unnecessary to point out that a given motive may constitute a very prominent dynamic factor in a sentiment or only a relatively weak and insignificant factor. Two sentiments may be identical in the different motives which they include and yet vary widely in respect to the quantitative arrangement of these motives. For instance, an individual's sentiments toward his two parents may be comprised of the same motives, namely, let us suppose, ego-identifications, affection, sympathy, and suggestibility, but with strong ego-identifications in relation to the father and with but little sympathy, and with strong sympathetic tendencies toward the mother and with only mild ego-identifications.

The most important sentiment in the life of the individual is the *sentiment of self-regard* or self-regarding sentiment.[1] It is not easy to define this sentiment. In its intellective or cognitive content, it consists essentially of the individual's most specific and personal ego-identifications, those particularly personal meanings or characteristics which the individual conceives to be integral features of his character and individuality. The cognitive content of one's sentiment of self-regard also includes a condensed conception of one's own individuality in relation, comparison, and contrast to other individualities. In its dynamic aspects the sentiment consists of egoistic tendencies to maintain intact and to further enhance such desirable qualities as one perceives oneself to possess, and to eradicate all personal qualities and characteristics which are undesirable; and it further consists of suggestible tendencies in relation to other individuals and groups.

Under the influence of the sentiment of self-regard, ego-identifications are often made with ideals of humanitarian and altruistic conduct toward others. Many a man gives to the beggar, not out of sympathy or affection, but simply because his sentiment of self-regard demands that he be a generous individual.

Sentiments of self-regard vary widely in their emotivity. One person is self-loathing, another is self-admiring, a third

[1] See McDougall, William, *Social Psychology*, Chap. VII, Luce and Co.

is self-loving. One individual regards himself primarily as a material object and devotes much care to his physical appearance and welfare. Another person pays little attention to his physical condition but instead jealously guards certain ideals (honesty, generosity, fidelity, etc.), which in his feelings constitute himself as an individuality.

The Personality. We have already said that an individual's personality is in reality the individual as observed from a psychological point of view. But we tend to observe only changes. Then we may say that the personality is the integrated resultant, as manifested in thought, feeling, speech, and action, of the sum-total of the individual's separate capacities, tendencies, and partial reaction patterns. A dead person has no personality; an anaesthetized person has little or no personality—too much of him is inactive; a mentally dissociated person does not have much personality—he is not sufficiently integrated.

It may help the reader to grasp our conception of personality if we draw an analogy between the human individual and an automobile. The movements of the different parts of the car—the various valves, pistons, cog-wheels, etc.—correspond to the different unit functions or activities or changes within the individual; and the movement of the car as a whole along the street corresponds to the personality.

In the next chapter we shall discuss some different ways in which personalities differ from each other and some methods of measuring these variants.

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CHAPTER III

PERSONALITY VARIANTS AND THEIR MEASUREMENT

Classification in Scientific Method. Scientific method is an invention. It is a procedure, rigid in its stipulations, for the investigation and understanding of unknown facts and their relationships. When carried out fully, scientific method consists of controlled observation, accurate description or classification, and interpretation or explanation. At the present moment we are interested particularly in the implications of description or classification as applied to the study of psychological events.

Mankind has been classified from various points of view. Classifications have been erected upon the basis of skin coloring, nationality, religion, occupation, material possessions, blood chemistry, physique, etc. During more recent times he has been classified also upon the basis of variations in sensory imagery, intelligence, temperament, personality, and special interests and aptitudes. Classification is merely abbreviated description and is essential to the economy of scientific enquiry and to the dissemination of scientific knowledge. In the fields of the so-called exact sciences—mathematics, physics, chemistry, astronomy, etc.—fairly rigid classifications can be made without doing violence to the relationships which exist among the facts classified. But in the fields of animate phenomena, and particularly in the fields of the social-biological sciences, man's proneness to classify is loaded with grave dangers to his ultimate goal of a fuller understanding of the facts which he studies. For the human individual, particularly when he is studied as a psychobiological entity, cannot be rigidly and at the same time validly classified in relation to others of his kind. It will be

worth while, therefore, to point out some of the possible dangers in psychological classifications.

Possible Dangers in Classification. When we classify a fact we identify it with a certain group or class of phenomena and at the same time we differentiate it from all other phenomena. If we are dealing with facts which differ from each other in a qualitative manner, we are able to erect sharp lines of demarcation. Thus it is a simple and legitimate matter to make a clear-cut four-fold classification of the simple taste sensations. For sweet is distinctly different from salt or sour or bitter; it is not merely more sweet or less sweet than these other taste qualities. Sweet is identified with the group of gustatory sensations only because, like the others, it is a sensory (perceptive) reaction to certain soluble substances when these are placed in the mouth. The simple gustatory sensations are as significantly different from each other as they are similar and therefore they may be easily and legitimately classified.

But in classifying human individuals in relation to each other, we are seeking to differentiate facts which differ from each other only in a quantitative manner. It is in classifying relative or quantitative differences that the greatest dangers arise. Let us examine a few of the classifications of this sort which we all use every day. We speak of a certain man's being tall, and another's being short. But such statements tell us nothing specifically about the height of the two men. The terms "tall" and "short" are absolutes and yet we are applying them to purely relative facts. The tall man loses his tallness as soon as he is compared to a tree and the short man becomes a towering giant as soon as he is compared in height to an African pigmy. We speak of a person with average mentality as being intelligent and of a moron as being unintelligent. Yet the moron is more intelligent as compared to an idiot than the average person is as compared to the moron. We speak of hot days when the temperature is only one hundred degrees and of cold days when the temperature is actually above freezing. We call a certain object

dark grey or black depending on the background against which we perceive it. Yet the object has not changed at all with respect to its brightness. Such loose designations and differentiations may be adequate to our needs in our everyday social lives; but inasmuch as thinking and verbalizing are inseparable aspects of the same complex mental process, we cannot possibly tolerate such practices in our scientific studies.

The first danger, then, in attempting to classify relative phenomena is that purely quantitative differences tend to be magnified into qualitative distinctions and the extremely important fact of the relatedness of the phenomena tends to become obscured. The understanding of a fact always consists, as we have implied, in bringing the fact into its proper relationship to related facts and of differentiating it from all unrelated facts. And any scientifically adequate classification of facts must subserve equally these two ends.

A second loss to scientific understanding which all too frequently follows in the wake of classifying phenomena is a rapidly waning interest in the facts once they have been classified. Inform the student that this peculiarly behaving individual is a dementia praecox and the chances are—deplorable fact—that his intellectual curiosity will be largely satisfied, even though he has not the remotest idea of the origin, history, or intrinsic nature of the psychosis. We are all prone to confuse the ability merely to label a fact with an understanding of it. Certainly, classification has a legitimate place in science; but if classification is to fulfill its proper function, it must always follow, never precede, a fairly thorough understanding of the phenomena to be classified.

A third danger in classification resides in the fact that many of the phenomena which we classify are very complex. In classifying complex facts there is always the possibility of erecting our classifications upon the basis of superficialities instead of fundamentals. Science, in the course of its history, has known and discarded many such misleading arrangements. A good illustration would be the present tendency of certain over-enthusiastic endocrinologists to differentiate personal-

ities solely on the basis of endocrine functioning. Without denying the influence of the ductless glands upon personality development, we can safely say that both genetic and psychogenic factors are of just as much weight in determining the personality pattern of the individual, aside from a certain few cases where a pathological deficiency of endocrine functioning results in a lack of development.

It is not surprising that the appearance of psychology among the sciences heralded numerous attempts to classify human beings with respect to some one or other of their various mental characteristics. And the fields of psychiatry and abnormal psychology in particular well illustrate most, if not all, of the various harmful results which may be introduced into scientific enquiry by careless, hasty, and faulty classifications. Not many hundred years ago the insane and the feebleminded and the neurotic were believed to be under the influence of supernatural agencies, God or the Devil. Accordingly, they were sharply differentiated from all other persons. And later, when science turned its attention to the problem of mental abnormalities, sharp lines of separation again were drawn on one basis or another. Classifications of mental disorders and abnormalities became popular in psychiatry with the result that they sprang up like mushrooms. And for the most part, to be able to classify (diagnose) a mental condition was the end-goal of the psychiatrist. Inasmuch as some patients recovered while others did not, a category of "incurables" soon appeared. The result was that only within very recent years has psychiatry attempted to go beyond the mere labeling of such conditions and to seek fuller knowledge concerning their genesis and exact nature.

Furthermore, the numerous classificatory systems which appeared in the fields of abnormal psychology and psychiatry gave rise to a great deal of confusion, much of which still remains with us. Where different terms are used to describe or to designate similar facts, one never is sure whether only a difference in terminology exists or whether somewhat disparate facts are being mentioned.

At the present time we still speak too much in terms of "types," "levels," "classes," "syndromes," etc. Such terms, for instance, as idiot, imbecile, moron, or introvert, ambivert, extravert, or autopsychic, somatopsychic, allopsychic, or even manic-depressive psychosis, dementia praecox, paranoia are scientifically permissible only if the user bears in mind that the distinctions which such categorical designations imply are largely inventions and are used solely for the sake of brevity. But brevity should always be sacrificed to clarity if clarity demands it. And in the present state of our knowledge of psychological phenomena, detailed description usually is preferable to condensed classification.

Psychological Types Are Personality Variants. Strictly speaking, no person belongs to a type as distinguished from other persons. In order for different facts to belong to different types or categories, fundamental differences must exist among the facts. Thus the horse is fundamentally different from the sheep. The horse has hair, the sheep has wool; the horse never chews a cud, the sheep does; the horse has an uncloven hoof, the sheep has a cloven hoof, etc., etc. Hence with respect to each other they may be placed in distinct and separate categories. But now if we compare the horse to the ass, the differences are less marked and less fundamental. A rigid differentiation ceases to be wholly applicable. It is true that the ass's ears are always proportionately larger than the horse's ears, except in the case of an anomalous ass or an anomalous horse; and there are other differences which we could point out. Nevertheless the similarities between the two tend to predominate over the differences and therefore we are unable to make any *absolute* differentiation between them. We are on the border line of what amounts to qualitative differences on the one hand and purely quantitative differences on the other.

Human beings are all fundamentally alike. Certainly there are differences among them, so many differences and shades of difference that however much one may have learned concerning a dozen persons of a given age and of the same sex, the

thirteenth person presents a new problem for study. But the differences are relative and never predominate over the basic similarities. Hence it is not legitimate scientifically to invent rigid psychological categories.

Nevertheless, although differences among human beings or human personalities do not permit of rigid categorizing, it is just as essential for the student to bear in mind the fact of differences as the fact of basic similarities. Our old instinct psychologies tended to emphasize similarities to the exclusion of differences and our recent objective and behavioristic psychologies tend to emphasize differences to the exclusion of similarities. The student of psychology must subsume and integrate both conceptions in his thinking. We can draw no sharp line of demarcation between the profoundest idiot and the wisest genius for they differ only in a quantitative manner. But none the less the difference between them is so great that it *would* be extremely difficult to understand the one in terms of the other.

All human individuals differ. Even identical twins are not exactly alike at birth, perhaps due to differences in their prenatal environments. And in abnormal psychology we are particularly concerned, of course, with differences. Yet if we forget the fact of the fundamental similarity between individuals, we shall have lost our only safe approach to an understanding of their differences. For their differences, we shall learn, are but "divergent similarities."

Introversion-Extraversion. Of the various respects in which personalities may differ from each other, introversion-extraversion has received the most attention, except for differences in intelligence. Introversion-extraversion is a linear variant; that is, if we were to place the most introverted individual at one point and the most extraverted person at another point and then connect the two points with a straight line, we would be able to place all other individuals somewhere on the connecting line with regard to their respective degrees of introversion-extraversion. And although contrary to the views of Jung,[1]

[1] Jung, C. G., *Psychological Types*, Harcourt, Brace.

who has been the principal contributor to our understanding of this particular personality variant, studies made from various points of view indicate that introversion-extraversion is a purely quantitative variant, conforming to the normal frequency curve in its distribution.

Among our friends and acquaintances there are a certain number of individuals who appear to be reticent and shy, who laugh but little and are "dry" in their wit, who tend to follow rather than to lead in overt activities, who are poor "mixers," poor losers, and inclined to individual and solitary activities. And among these persons we know a few who are rather extreme examples of this "shut-in type of personality." We speak of these individuals as being *introverted.*

And on the other hand, there are individuals among our acquaintances who are always overtly active, who laugh easily and talk a great deal, who always appear to be interested in their surroundings, who express their feelings and emotions freely, and who are good social "mixers." And among these persons there are a few who are rather extreme examples of this "open, expressive type of personality." We speak of these individuals as being *extraverted.*

But we should hesitate to speak of the majority of our acquaintances as being either introverted or extraverted; they appear to belong between the two extremes. Thus we should perhaps say of a given individual: "Well, he is possibly somewhat introverted or he is perhaps somewhat extraverted, but not decidedly so." For these in between individuals the term *ambiverted* has been suggested.

Such a classification is scientifically no more accurate than a classification of height would be in which we roughly distinguished only three different categories. Obviously, it is far preferable to speak of a person's height in terms of feet and inches than to speak of it as short, average, or tall. And in regard to introversion-extraversion, attempts have been made to designate an individual's relative position numerically, that is, to state his introversion-extraversion index as a numerical value. However, as we shall point out later,

introversion-extraversion is neither sufficiently well understood nor sufficiently susceptible of accurate measurement to have rendered such attempts particularly promising. Hence we continue to speak of persons as being introverted, extraverted, or ambiverted. And if we will use the adjectival terms and avoid the use of the corresponding nouns (introvert, extravert, ambivert) we shall be more able to keep in mind the important fact that we are talking of purely quantitative variations.

The following list of "personality signs," part of which have been suggested by Laird,[1] may be of help to the student.

1. The introverted person blushes easily; the extraverted rarely blushes.
2. The extraverted person laughs more readily than the introverted.
3. The introverted person tends to be blunt in his speech; the extraverted person is usually careful not to hurt the feelings of others.
4. The extraverted person talks more fluently than the introverted.
5. The extraverted person loans money and personal possessions more readily than the introverted.
6. The extraverted moves more rapidly in the routine activities of the day than the introverted.
7. The extraverted individual usually is less self-conscious around others than the introverted.
8. Introverted persons tend to be easily embarrassed when in front of a crowd.
9. The introverted person likes to argue.
10. The introverted person is slow to make friends.
11. The introverted person tends to worry more than the extraverted.
12. The introverted person tends to be more sensitive to personal remarks and to criticism than the extraverted.
13. The introverted tends to deliberate on his future behavior more than the extraverted.
14. The introverted tends to be more obstinate and negativistic than the extraverted.

[1] Laird, D. A., "How Personalities Are Found in Industry," *Industrial Psychology*, Vol. I, No. 10.

15. The extraverted person tends to follow a suggestion more readily than the introverted.
16. The introverted person tends to be more affected by praise than the extraverted.
17. The introverted person tends to seek the motives back of actions more than the extraverted.
18. The introverted tends to radicalism in moral, social, religious, and political philosophies; the extraverted person usually is conservative.
19. The extraverted person resists new ideas; the introverted person welcomes them.
20. The introverted person usually prefers to work alone, the extraverted with others.
21. Extraverted persons tend to follow athletics; introverted persons tend more to intellective pursuits.
22. The introverted person is likely to day-dream a good deal.
23. The introverted person tends to be very conscientious.
24. The introverted person is inclined to be moody.
25. The extraverted person tends to lack perspective on his motives and behavior.

The foregoing characterizations of introversion-extraversion are to be understood as applying only to the more extreme cases. As we have said, most persons are neither strongly introverted nor strongly extraverted, but in between these two extremes. Thus, whereas most persons tend to be sensitive to personal remarks, the strongly introverted person tends to be extremely sensitive. Again, a given individual may react in a definitely introverted manner to a particular type of situation and react in an extraverted manner to all other situations. That this should be true will not seem strange if the reader will bear in mind that introversion or extraversion is not a complex or organization of specific traits.

A Definition of Introversion-Extraversion. The difference between the strongly introverted person and the strongly extraverted person is somewhat analogous to the difference in brightness between a white object and a black object. The difference in brightness between the two objects is purely quantitative, wholly relative, but at the same time it is a very great difference. And since there frequently is such a

marked difference of a fundamental kind between personalities, and since, as we shall see later, this difference is vitally instrumental in the origin of differences in sentiments, attitudes, values, and perspectives of different persons, as well as differences in their overt behavior, it is not surprising that this difference should be reflected in the field of psychological study and interpretation as well as in other fields of human endeavor. In short, a strongly extraverted psychologist will not tend to emphasize the same features and aspects of a given body of psychological phenomena and he will not tend to give the same interpretations of these phenomena that a strongly introverted psychologist will tend to emphasize and to give. That extremely objective system of psychology which is known as behaviorism has been invented and propounded for the most part by psychologists of strongly extraverted personalities. And subjective and introspectionistic systems of psychology have been supported for the most part by psychologists of strongly introverted personalities.

The present writer has observed in his teaching that many students are greatly helped in their efforts to harmonize the radically different points of view and the differences in emphasis which they encounter in different books on psychology as soon as they grasp clearly the fact that any writer in psychology inevitably has a personal point of view toward human personalities and human reactions, and that what he writes always is largely a reflection of his own personality make-up. This is particularly true in the field of interpretive psychology. Of course we psychologists would very much like to attain a truly impersonal attitude toward our subject matter, for the sake of scientific integrity; but honesty forbids us to pretend that we ever actually do it, except, perhaps, in such fields as comparative psychology, and the simpler aspects of experimental psychology. In fact, understanding another person's reactions necessitates "feeling oneself into the other's situation," and feeling (empathetic) responses go far toward excluding a truly impersonal attitude.

Hence, it is not surprising that we should have very differ-

ent definitions of such an aspect of personality as introversion-extraversion. We may approach our definition of introversion-extraversion by frankly refuting some of the more painfully absurd definitions which have been given. Many American psychologists identify introversion with neuroticism and extraversion with normality. Others see in introversion only ego-centricity while to them the extraverted person is the normal and adjusted individual. A prominent psychologist has recently defined introversion as selfishness and extraversion as unselfishness,[1] and he finds, of course, that the normality, adjustability, and happiness of the individual lie along the road of unselfishness, extraversion.

The teaching of such one-sided points of view not only does a grave injustice to thousands of naturally introverted persons but might do them considerable actual harm, if they were to take such teachings seriously.

In fact, introversion-extraversion has nothing at all to do with selfishness or unselfishness. The introverted person's selfish interests are apparently more selfish than those of the extraverted person. But this is only because most persons, including many psychologists, fail utterly to appreciate or even to recognize the extremely important psychological mechanism of identification.[2] Through identification the extraverted person embodies various aspects of his objective environment in his personal identity and then, naturally enough, expresses his egoistic motives through or in connection with these egoistic usurpations. The introverted person, on the other hand, tends to identify himself more with ideas or mental representations and therefore, since an idea is a subjective fact, he gives the impression of being unduly self-concerned. Mussolini's interest in Ethiopia is obviously of an extraverted nature; his interest is in a fact which spacially is easily distinguishable from himself. Yet the most untutored person—except he be an Italian—easily detects the selfish nature of the interest.

[1] Link, Henry C., *The Return to Religion*, Macmillan.
[2] See Chapter II.

A certain woman is a most charming and gracious hostess; she never overlooks the needs and comforts of her guests. Yet a psychological study of her motivation and interests reveals that her attention to her guests is motivated by an unyielding thirst to be an irreproachable person in her own eyes and in the eyes of others. In other words she has perfectionistic strivings; her reactions to her guests are not motivated by any feeling of affection or sympathy or friendliness. Her reactions are simply an old egoistically initiated and supported stereotypy. But even jurisprudence takes cognizance of the motive back of the act. Surely as students of psychology we cannot afford to be less psychological than our courts of law. Almost any act may be the result or expression of almost any motive. The introverted individual tends to be more interested in the motive than in the act itself. The extraverted person is inclined to deal only with the act. The introverted person's interests tend to be few, deep, and intensive; the extraverted person's interests tend to be numerous, shallow, and extensive. The introverted person tends to condense meanings and values; the extraverted person tends to multiply and to expand meanings and values.

Jung believes that the chief differentiating factor consists in direction of attention and interest. In the introverted individual the energies (libido) are preponderantly introverted, that is, directed to subjective facts. In the extraverted person they are directed to objective facts. A subjective fact is a fact which only the individual himself can observe; an objective fact can be observed by more than one person. And he believes that one's introversion-extraversion index is fundamentally a matter of inheritance, that it is an inherent characteristic of the individual's psychophysical constitution.

An individual's concern with subjective facts never means necessarily that he is more egoistically motivated than the person who is chiefly concerned with objective facts. One would not conclude that Head was unduly egoistic because he sought to study the phenomena of cutaneous sensations by severing a nerve in his own hand and then observing the

gradual return of sensitivity. One could safely infer only that Head was interested in the subjective phenomena of sensations, and that for the sake of scientific integrity or in order to preclude the possibility of danger to another person, or for both reasons, he selected himself instead of another individual for the purpose of the experiment. And one would not assume offhand that the silent philosopher, isolated and lost to his own thoughts as he sits in his arm chair, is more egoistically motivated than the socially active person or the bridge player who well might be athirst for social prominence.

We may now state two facts concerning introversion-extraversion: First, this personality variant has nothing specifically to do with selfishness (egoism) or with unselfishness (the racial motives); and secondly, the most distinguishable characteristic of introversion-extraversion is: in introversion a subjective orientation of attention and interest; in extraversion an objective orientation of attention and interest. We cannot agree with Jung that the direction of attention and interest (libido) is inherited *per se*. *Rather, it is the degree of consciousness which belongs to an individual's mental activities or processes that determines primarily the individual's introversion-extraversion index.*

The problem of consciousness has been a troublesome one in psychology and we do not wish to enter into a detailed discussion of it at this point. We may regard it simply as an aspect of certain activities of the organism in very much the same sense that color is an aspect of certain objects. And we may speak of degrees of consciousness or relative saturations of consciousness. As we all know, an individual may be far more conscious of performing one act than another, he may be more conscious of one stimulus than another, etc. And we feel fully warranted in assuming that the daily activities of some individuals are far more highly saturated with consciousness than the activities of other individuals. And we believe that the basic differentiating factor in introversion-extraversion is the degree of consciousness which inherently belongs to the individual's everyday activity. The introverted

person's activity is characterized by a highly saturated consciousness; the extraverted person's by a low degree of saturation.

Let us see if this conception of the inherent nature of introversion-extraversion appears to subsume the facts properly. All infants are extraverted in their attention and interest, not introverted as certain writers contend.[1] Their attention is directed outwardly, not inwardly. They do not tend to sit about, attending to their ideas and mental representations of objective facts. But a certain number of any unselected group of infants will be observed to change in certain fundamental respects as they grow older, whereas the remainder of the group will not manifest this change. This change principally consists in the individual's gradual diversion of his attention from objective facts to mental representations (memory images and imaginative reconstructions) of objective facts; and in his avoidance of complexity and search for simplicity in his environmental situations.

The person who will become introverted is born with a relatively exaggerated capacity for being conscious. And as all introverted and perhaps most ambiverted individuals know, being intensely conscious of a fact or situation incapacitates the individual in adjusting to that fact or situation in the majority of cases. But the activity of attending to a mental representation cannot be as conscious normally as the activity of attending to an objective fact. Therefore, the individual who possesses an unusually great capacity for being conscious gradually learns during his developmental period that it is easier to deal with many of the various meaningful aspects of his life situation in the form of mental representations than in the form of objective reality. He accordingly slowly substitutes mental representations for objective facts.

But the psycho-socio-biological nature of the individual demands a certain amount of intercourse with his fellow-beings. One cannot make a complete substitution of mental

[1] See, for instance, Link, *op. cit.*

representations for objective facts and remain normally adjusted. The introverted person usually seeks to meet the problems of his social life by reducing the complexities of this aspect of life to their greatest possible simplicity. He tends to be less conscious of the presence of a single individual than of the presence of two individuals, of two individuals than of a group. He therefore tends to associate with only one or two persons at a time and to avoid group activities. Where he is a member of a group, the saturation of his mental processes makes it extremely difficult if not impossible for him to switch from one topic of conversation to another, from attending to one person to attending to another, with the ease and rapidity which social intercourse usually demands. He is stifled by his own consciousness, both of himself (self-consciousness) and of others. His inability to execute rapid shifts of attention and interest results in a blocking of his mental processes which is discomforting and painful. At those moments when the other person or the group suddenly elects a new topic for conversation, our introverted individual just as suddenly finds himself caught between two opposing inclinations: The one to persist, at least sub-vocally, along the previous line of thought, and the other, to seek to divest himself of his line of thought and to yield to the new direction of attention and interest which is imposed by the others. The result, often, is embarrassment with its accompanying diversion of attention to himself.

Most introverted individuals are trying in one way or another to be extraverted. Some of them succeed in achieving a certain capacity for a stereotyped, extraverted sort of activity, of which they frequently are quite proud. For the definitely introverted individual to devote his time and energies to becoming extraverted is decidedly the wrong course to pursue. He will become but a poor imitation at best. The wiser course to a satisfactory adjustment consists in standing by his introversion. If he will come to recognize the fact that introversion is but a position in the range of a perfectly natural personality variant, and refuse to let the more extra-

verted person talk him into the belief that he is abnormal, and not let himself be misled by the relatively superficial swirl of much extraverted activity, he will have gone a long way toward making a perfectly satisfactory adjustment to his social-economic life. If he can but realize it, he is fully compensated for his lack of variety and versatility in his experience by the greater intensity and depth which are his. He should not cast aside too readily the great introverted teachings of the past: "Silence is golden," "It is a wise man indeed who says what he has to say, and when he has nothing to say, is silent," etc.[1]

Strongly introverted persons are more prone to the development of personality disorders than extraverted persons for the simple reason that modern western societies place a premium on extraversion. Social-economic adjustability in modern life reduces largely to the individual's ability to sell—either a commodity or his own services. Salesmanship is a natural expression of extraversion and an unnatural expression of introversion. But the strongly extraverted person is by no means immune to personality disorders. Many of those conditions and activities of individuals which society more or less condones, such, for instance, as mediumship, astrology, fortune telling, characterology, etc., are as truly personality abberations as the condition of the introverted person who sits at home and day-dreams. And as we shall see later, there are major classes of scientifically recognized personality disorders which are particularly peculiar to extraverted personalities.

Ascendance-Submission. Ascendance-submission becomes an important personality variant when the individual is observed from a strictly objective and a psychological point of view.[2] Whenever two individuals meet for the first time they tend to establish very rapidly an ascendant-submissive relationship toward each other. If one of the persons is an

[1] These quotations are cited from memory and the writer cannot vouch for the correctness of their wording.

[2] For a more detailed discussion of ascendance-submission, see Allport, Floyd Henry, *Social Psychology*, Houghton Mifflin.

adult and the other is a child, the relationship usually arises spontaneously. The adult assumes an ascendant and directive attitude, the child, a submissive and compliant attitude. If the two individuals are adults who are of comparable intellectual, physical, and social status, the establishment of a definite relationship between them may take some time. And when it has become established, it may consist of a combination of ascendant and submissive reactions and attitudes on the part of each toward the other. Thus one may take an ascendant attitude toward the other when the conversation turns to medicine, should the first be a physician, and the attitudinal relationship may become reversed when the conversation turns to jurisprudence, should the other be a lawyer.

Ascendant-submission relationships are apparent on all sides. And there is perhaps no instance of such relationship wherein ascendant and submissive attitudes and reactions are exactly balanced in an individual's relation to another person. Approximations to such balanced relationships are fortunately fairly common among adults, particularly where the two individuals are of the same sex. The ascendant-submission relationship between man and wife is traditionally disproportioned. The man's attitude is ascendant, the woman's is submissive. But at the present time we are witnessing what appears to be a universal correction of the ancient unbalance in this socio-biological unit. Woman's often mentioned emancipation is essentially nothing more than a correction of her undue submissiveness toward man.

A somewhat similar correction is apparent to a less general extent in parent-child relationships. Observations and researches in the field of child psychology have revealed the fact that the child may be altogether too submissive toward his parent, and the parent too ascendant and dominant toward his child, for the welfare of the child.

As we have said, ascendant-submission relationships become immediately apparent on all sides as soon as we direct our attention to the overt behavior of individuals toward other individuals. It would be grievously false to assume,

however, that the observable behavior of one individual toward another constitutes the whole of his reactions to that individual. Many a person outwardly submits who inwardly is boiling with resentment and antagonism. His submissive reactions may be but a false indicator of his true inclinations toward the other person. Overtly, extraverted individuals tend to be ascendant toward others, and introverted individuals tend to be submissive. But implicitly or subjectively, just the reverse of this is true. The silent submissiveness of the strongly introverted person frequently is nothing more than a self-effected concession to his need of lessening his intense consciousness of the other person's demands and expectations, while the extraverted person's ascendant attitude often conceals far more submission to the other person's presence than is immediately apparent. The extraverted person is often submitting as he shouts his "No!" and the introverted person often is actually holding back as he inclines his head in affirmation. When the introverted person is urged to submit to an extreme degree, as in an attempt to hypnotize him, he proves negativistic, whereas the extraverted person tends to be submissive (suggestible) in the same situation.

Cycloid and Schizoid Personality Variants. Those variants in personality, or more specifically speaking, those variants in temperament, which have been termed cycloid and schizoid appear to be more intimately related to the incidence of serious personality disorders (the psychoses) than any of the variants which we have discussed. The mood-coloring of the cycloid temperament swings between the poles of cheerfulness and sadness, of hypomania and depression. This tendency to a variation in mood is its most noticeable characteristic. Kretschmer gives three categories of peculiarities which are common to cycloid temperaments:

1. Sociable, good-natured, friendly, genial.
2. Cheerful, humorous, jolly, hasty.
3. Quiet, calm, easily depressed, soft-hearted.[1]

[1] Kretschmer, Ernst, *Physique and Character*, p. 128, Harcourt, Brace.

The first set of peculiarities is to be found in the cycloid temperament irrespective of its mood-coloring. The second set of temperamental traits is particularly observable during the hypomanic moods and the third set during the depressive moods.

We perhaps can do no better in our efforts to make the cycloid temperament clear to the reader than to quote briefly from Kretschmer's exposition.[1]

In speaking of the cycloid temperament which tends toward the depressive extreme in habitual mood variations: "If we ask directly about his temperament, then we get something like this: 'In normal times he is friendly; people like him; he never grumbles; he has a sense of humor; he joins in a laugh, and even makes a bit of a joke himself at times. Only, tears come easily to his eyes, he can't get over even quite little things, and he grieves longer and deeper than other people over sad situations.' That is to say: in the case of such individuals, it is not that the temperament itself is sad, but only that it is more easily roused by sad conditions." And further on: "This is the conclusion we have reached: men of this kind have a soft temperament, which can swing to great extremes. The path over which it swings is a wide one, namely between cheerfulness and unhappiness. It does also swing toward the cheerful side, but not so often and not so far; on the other hand it lingers over the unhappy direction. . . .

"We observe the same thing the other way round in purely hypomanic temperaments. Not only is the hypomanic disposition well known to be a peculiarly labile one, which also has leanings in the depressive direction, but many of these cheerful natures have, when we get to know them better, a permanent melancholic element somewhere in the background of their being. . . ."

And again: "The majority of cycloids have a particularly well-orientated emotional life, which shades away from the sanguine, quicksilver temperament of the hypomanic, to the

[1] *Ibid.*, Chap. IX.

deep, warm-hearted feelings of the more melancholic natures, with all possible transitional stages. The temperament of the cycloids alternates between cheerfulness and sadness, in deep, smooth, rounded waves, only more quickly and transitorily with some, more fully and enduringly with others. . . ."

The schizoid variant in personality is not easy to describe. "Cycloid men are simple and uncomplicated beings, whose feelings rise directly, naturally, and undisguised, to the surface, so that everyone can soon get a correct judgment of them. Schizoid men have a surface and a depth. Cuttingly brutal, dull and sulky, bitingly sarcastic, or timidly retiring, like a mollusc without a shell—that is the surface. Or else the surface is just nothing; we see a man who stands in our way like a question mark, we feel that we are in contact with something flavorless, boring, and yet with a certain problematic quality about it. What is there in the deep under all these masks? Perhaps there is nothing, a dark, hollow-eyed nothing—affective anaemia. Behind an ever silent façade which twitches uncertainly with every expiring whim—nothing but broken pieces, black rubbish heaps, yawning emotional emptiness, or the cold breath of an arctic soullessness. But from the façade we cannot see what lurks behind. Many schizoid folk are like Roman houses and villas, which have closed their shutters before the rays of the burning sun; perhaps in the subdued interior light there are festivities." [1]

Kretschmer again distinguishes three sets of temperamental traits, as in the case of the cycloid temperament:

1. Unsociable, quiet, reserved, serious (humorless), eccentric.
2. Timid, shy, with fine feelings, sensitive, nervous, excitable, fond of nature and books.
3. Pliable, kindly, honest, indifferent, dull-witted, silent.

The first set of traits are common to all schizoid personalities. The unsociability and the lack of humor are particularly noticeable in all individuals of schizoid temperament.

[1] *Ibid.*, Chap. X.

Such persons not only take life seriously, but they often seem utterly incapable of seeing anything humorous in any fact or situation, particularly, of course, if the fact or situation is related to them in any way. As McDougall has pointed out,[1] a true sense of humor consists of the ability to laugh when the joke is on oneself. If one laughs hard enough at the eccentricities or irrational or unwitting acts of the schizoid person, one might possibly be rewarded with a humorless smile of puzzlement but never with a frank smile or laugh of amusement.

The characteristics contained in group 2 are somewhat in contrast to those contained in group 3. "He alone, however, has the key to the schizoid temperament who has clearly recognized that the majority of schizoids are not either over-sensitive or cold, but that they are over-sensitive and cold at the same time, and that in quite different relative proportions."[2] The second group of traits contains all the various degrees of the phenomena of over-sensitivity from timidity and fineness of feeling to a continual state of passionate excitation, while the third group presents varying degrees of affective dullness and insensitivity. Strindberg once said of himself, "I am hard as ice, and yet so full of feeling that I am almost sentimental." Such a statement suggests the bilateral nature of the affective aspects of the schizoid personality. And it is this lack of inner harmony and consistency which is chiefly responsible for our tendency to regard such a personality as "queer." The schizoid individual is encumbered by an undifferentiated, undefined and painful affectivity of which he finds it impossible to rid himself in conformity with his everyday situations. This affectivity tends to take flight on the wings of some random and seemingly irrelevant idea, or to burst violently forth in utter violation of the nature of the situation of the moment, or, finally, like a magnet, to draw into itself much of the individual's intellective continuum, only to return it to the surface in the form

[1] McDougall, Wm., *Outline of Abnormal Psychology*, p. 391, Scribner's.
[2] Kretschmer, *op. cit.*

of grossly distorted, bizarre, and phantastic thoughts and ideas.

The student will have recognized certain apparent similarities between the introverted and the schizoid personalities and between the extraverted and cycloid personalities. These similarities, however, are largely superficial. Introversion is not schizophrenia, and extraversion is not cyclothymia. A depressive mood tends to have an introvertive effect upon a cycloid temperament but it does not give rise to those manifestations which are peculiar to the shy, sensitive schizoid temperament. Likewise, although a happy or hypomanic mood tends to have an extravertive effect upon a cycloid temperament, it does not produce a schizoid excitement.

There are still other personality variants which could be cited. There is the very important intelligence variant; but this will be dealt with in a later chapter. There are variations in respect to special aptitudes, interests, mental imagery, etc. We omit these not because they are unimportant but because of lack of space and because for our purposes they are of only secondary importance in comparison with those which we have considered. In connection with our discussions and interpretations of the nature and causes of personality disorders in later chapters, we shall have frequent occasion to refer back to what we have said about introverted, extraverted, ascendant, submissive, cycloid, and schizoid personalities.

The Measurement of Personality Variants. At one time many psychologists held high hope of being able to devise and construct fairly exact means of measuring personality variants, and a few psychologists appear to labor under the belief that this hope has been largely realized.[1] The truth of the matter is, however, that with the exception of measurements for a certain few personality variants (particularly intelligence, certain special aptitudes, reaction time, etc.) a few hours' properly directed questioning and observation of, and conversation with, an individual reveals more about his

[1] See Link, *op. cit.*

peculiarities, problems, modes of reaction and personality make-up than the hundreds of tests which are in current use. This does not mean that reliable measurements of personality variants cannot be perfected; it simply means that such measurements have not yet been perfected.

The most common approach to the measurement of personality variants has been by way of the construction of questionnaires or personality inventories. Questionnaires have become quite numerous, some widely used examples of which are those constructed by Laird, Freyd, Woodworth, Heidbreder, Conklin, Marston, Neymann-Kohlstadt, Bernreuter, and Northwestern University. A typical personality inventory consists of a number of questions or statements concerning individual reactions and "traits." The person who is being tested is required to evaluate himself in respect to the reactions or traits mentioned. Thus, a given question might be: Do you worry? The subject or reactor would be required to check that answer in a given series of answers which he believed to be truest for his case. The series of answers might be (1) Never, (2) Infrequently, (3) Frequently, (4) Very frequently, (5) All the time.

The major criticism which may be brought against questionnaires or inventories of this sort is that they are subjective. The score which an individual makes is his own subjective estimate or evaluation of himself in respect to the reactions and traits mentioned. Even a quite normal person's evaluations of himself are unreliable enough; the neurotic's tend to be even more so. Even an insane person, a paranoiac, for instance, often will make a quite normal score on inventories which are designed for the purpose of revealing neurotic and psychotic tendencies. According to one writer: "As it appears at present, the attempt to make a mechanical pencil-and-paper instrument for 'spotting' the non-adjusted personality is a shaky proposition." [1] And another investigator concludes that questionnaire methods are neither sufficiently

[1] Moran, Thomas F., "A Brief Study of the Validity of a Neurotic Inventory," *Jour. of Applied Psychol.*, Vol. 19, 1935.

valid nor reliable for individual measurements.[1] The following correlation coefficients obtained between various personality inventories for measuring introversion-extraversion clearly indicate the uncertain significance of the results which are secured with this type of measurement.[2]

Correlations of different tests:

	Bern.		*Col.*		*Mar.*		*North.*		*Intelligence*	
Bernreuter.....	*.80	.02	.47	.04	37	.05	−.09	.05	08	.05
Colgate.....	.47	.04	* 55	.04	30	.05	.10	.05	.08	.05
Marston.....	.37	.05	.30	.05	* 84	02	.25	.05	.07	.05
Northwestern .	−.09	05	10	05	25	.05	*.62	.03	.07	05

* These figures represent reliability coefficients. Scores corrected by the Spearman-Brown formula.

Free-association tests have considerable diagnostic value in the fields of psychotherapy and mental hygiene. Typically they consist of a list of stimulus-words. Certain of the words are chosen for the purpose of eliciting evidence of non-adjustive emotional tendencies or complexes in the subject or patient. These words are selected from words which studies have shown to be commonly associated with facts and meanings of emotional and personal significance. The remainder of the words, such words as have been found to be but rarely associated with emotionally arousing facts, serve the purpose of establishing the subject's average reaction time and of diverting his attention from the emotionally toned line of thought which the crucial words arouse. The two classes of words are arranged in more or less random order.

The subject is required to respond verbally as quickly as possible with the first word or thought which comes to his mind as each stimulus word is pronounced to him. Peculiarities of the subject's responses are called *complex indicators.* Important among these are delayed reaction time, repetition of the stimulus word, repetition of the same response word,

[1] Guilford, J P , "Introversion-extraversion," *Psychol. Bull.*, Vol. 31, 1934.

[2] Gulliland, A. R., "What Do Introversion-Extraversion Tests Measure?" *Jour. of Abnor. Psychol.*, Vol. 28, 1933.

substitution of another form of the same root word as the stimulus word, personal and moral evaluations of the stimulus word, consistent "parlor" responses to crucial words, etc.

The chief value of the free-association test lies in the suggestions which the results often give for further enquiry. Thus if the subject or patient responds very slowly to the word "failure," he perhaps harbors a feeling of having failed, however secretive he may be or reluctant to admit the feeling; if he responds to the word "guilty" with "not guilty," he is probably troubled with a sense of guilt, even though it be subconscious. To the word "mother" a certain young man very quickly responded with the word "witch" and then immediately began protesting and imploring the examiner to ignore the response. To the word "indecent" a young woman was unable to find an association of any kind. After several weeks of psychotherapeutic treatment she volunteered the information that she believed that in some sense or other she had felt indecent for years although she was aware of no such feeling at the time of the test.

Considerable progress has been made in the fields of tests for vocational aptitudes and special interests and abilities. These matters rightfully belong, however, to vocational and industrial psychology rather than to abnormal psychology as such.

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CHAPTER IV

CRITERIA OF PERSONALITY ADJUSTMENT

Orientation. Recently the writer asked a man of fifty what he thought one should expect to derive from one's life. The man answered that he did not know and that he had never thought about the matter. The writer persisted, and asked, "Well, for what does one live, for what does one work? What are human beings after in their daily activities besides food and shelter? What meanings or values or ends does the human individual strive to attain, to capture, to make his own?" The man appeared perplexed and said he guessed he never had looked at life from such a point of view. The writer then asked why the man had never married. "Well, I don't know, I guess it's because I've just never *happened* to meet a woman who appealed to me in *that way*."

What abiding, child-like faith many of us have that the "good fairy" will manage our lives properly for us! Human thought all too often is but a sleepy driver indolently riding the forces of human nature. The student of abnormal psychology must seek to acquire a definite perspective on life, an orientation. Otherwise human reactions, particularly abnormal or maladjustive reactions, will always be an utter enigma to him. Why does this intelligent young man look away whenever anyone speaks to him? Why does this successful man talk about his work for hours to anyone who will listen and then blush and squirm in his chair the moment one offers him a word of esteem? Why do these two educated young women become furious because someone offers the opinion that modern women are universally disturbed by a sense of dissatisfaction or unrest?

In the present chapter we shall discuss several different angles from which the activity of an individual must be studied if one is to arrive at a satisfactory evaluation of the

adjustiveness or maladjustiveness of that activity. These different angles are simply different positions taken by the observer for the purpose of bringing the different aspects of the individual's activity into the clearest relief. Unfortunately we do not have reliable objective measures or tests for most of the different features of human activity; we therefore must approach the problem of personality maladjustment largely by way of clinical observations. We shall distinguish four different aspects of the individual's activity, corresponding with four basic respects in which the activity may be maladjustive. In each of the four instances we shall endeavor to give a fairly clear conception of what constitutes adjustive activity.

The first aspect of activity which has much to do with its adjustiveness or maladjustiveness is the direction of attention and interest (effort) in respect to past, present, and future events. The second aspect of activity is its subjective content and the feeling-tone of the individual in his day-to-day life. The third aspect is the objectively observable content, particularly in relation to the individual's educational, economic, and social situations. And our fourth and last angle of approach will be from the standpoint of the individual as a psychobiological entity, a member of the human species.

Direction of Attention and Interest Criterion. Broadly speaking we may say that the activities of individuals are devoted to three different ends in respect to time; and we may speak of these ends as, (1) Maintenance, (2) Acquisition, and (3) Restoration. Much of the activity of the average individual is devoted to the maintenance of what already is. One endeavors to maintain the integrity of his home, to retain the affection and respect of his family and friends, to retain the confidence and good-will of his business or professional associates, to retain whatever degree of self-respect, personal independence, and sense of individuality he has. Some persons expend a major part of their energy to the end of preserving that which they feel they already possess. And

in the case of any individual who finds himself in a crucial situation in which family or friends, or professional, moral, or social standing is threatened, the end of preserving that which is and has been may become for the time being his sole objective.

But most persons do not stop with merely making certain of what they have. They devote much of their energies to the attainment of future ends. Many persons actually risk losing what they have in order to gain more. And this aspect of human effort holds true in relation to all values, from those of a purely materialistic nature to those of the most abstract sort. This man risks losing what money he has by investing all of it in a single enterprise in an effort to gain more; and this other man risks losing whatever affection a certain woman has for him by seeking to intensify her interest in him through flirtation with another woman; and this third man risks sinking into political oblivion by giving up his governorship and running for the United States Senate.

Finally, an individual may devote much of his effort to retrieving what he has lost. From a truly psychological point of view an important distinction may be drawn between one's seeking to retrieve that which he has lost and which now belongs to the past and seeking to gain as much as he once had. Each of two men loses his business. One of them dwells on that which he once had and hopes to be able to retrieve his losses; the other looks forward to achieving as much as he once had. The first man is looking backward; the second is looking forward. The first refuses to accept his altered position as something which has actually occurred, and he reveals his refusal to do this by dwelling in his thoughts on his former position. The other man accepts the change as a fact and therefore is free to look to the future.

As Dunlap has rightly pointed out,[1] it is weak, that is, maladjustive, to expend time and energy in repentance or regret for one's past acts or mistakes. The more adjustive

[1] Dunlap, Knight, *Habits, Their Making and Unmaking*, p. 224, Liveright.

way of reacting is to draw a lesson from past errors and then to go ahead with present and future.

Now if we were able to measure accurately these different directional aspects of human efforts and activities, we should find that a great deal of diversity exists among different persons. One person spends most of his effort in writing a book which he expects to publish two years hence; a second person devotes most of his time to reviewing his past life and regretting his former mistakes; and a third person is always chiefly devoted to the fact or interest of the moment. Now the habitual direction of attention and interest, in respect to past, present, and future, has much to do with the degree of adjustment of the individual to his life-situation. Hence we take as our first criterion of normal and abnormal reactions, the respective amounts of attention which the individual gives to present, future, and past events, that is, to the ends of maintaining, acquiring, and restoring.

A certain woman suffered the loss of her only daughter. She refused to accept the loss as an unalterable fact, however, and each evening she had the bed turned down in which her deceased daughter had slept and at each mealtime she had a plate, knife, and fork placed on the table and a chair drawn up to the vacant place. Obviously this behavior was not adjustive and the energy devoted to its execution was wasted. Not only was this energy wasted but the woman's devotion to the memory of a fact which no longer existed consumed or utilized the energy which should have been devoted to the acquisition of a new fact or meaning to take the place of the one which had been lost.

Most neurotic and psychotic individuals devote disproportionately their time and energy to past and present facts and very little to the attainment of future ends. We can unhesitatingly say that an individual should concern himself but little with the events of his own past other than to draw upon his past experience for a better guide to his future behavior. The justification for our making this statement should be obvious. It is to present and future problems that one must

adjust, not to past problems. The past cannot be changed whereas the future is not yet determined. To devote ourselves to the past is to let the future overtake us unawares, while to devote oneself to the future is to anticipate and to prepare for the problems that will arise. So we can say that habitual attention to past events (memories of past events) constitutes abnormal or maladjustive activity.

But to what extent should one's attention be on the present and to what extent on the future? Here we must be careful about generalizing too readily, for very much depends upon an individual's particular situation. If your house is on fire or your child is ill, what you had planned to do tomorrow well might be forgotten for the time being. Or, if a person has tuberculosis or a cancer, first consideration should be given to the present facts. Generally speaking, however, *one's major interests and activities of today should have an immediate and integral relationship to anticipated activities of tomorrow.* The man who is building a bridge certainly should have in mind at the time the weight and extent of the traffic which is going to pass over the bridge when it is finished. Many of the constructions of mankind appear to have been undertaken without much thought or anticipation of future needs. The builders of many of the narrow bridges throughout this country appear never to have thought of the possibility of two drivers wishing to use the bridge at the same time. Many students finish college without giving much thought to what they are going to do upon the completion of their courses. Many individuals get married with nothing beyond the wedding night in mind. Millions of persons live a hand-to-mouth and a day-to-day existence. Such activity is not truly adjustive. The squirrel which stores nuts in the fall of the year and as a consequence of this has a good supply later when the ground is covered with snow has behaved in a more adjustive manner than the man who spends all of his money as fast as he earns it.

In concluding this discussion of orientation of attention and interest, we may say that an excessive degree of attention

to past facts is definitely maladjustive; that excessive attention to present facts which have no facilitating or constructive bearing on future effort is likewise maladjustive; and that considerable effort to anticipate future problems and to align today's and tomorrow's activities is absolutely necessary to proper adjustment. But today is tomorrow's greatest rival and very few persons succeed in always subordinating the desire of the moment to the claims of the future even when they believe that such should be the case. Perhaps we should point out that more or less frequent and periodic relaxations and diversions (concessions to present inclinations) are not only permissible but desirable and profitable to the person whose daily activities are largely subservient to future ends.

The Subjective Criterion. But the proper orientation of attention and interest does not of itself insure the adequate adjustment of the individual. The old gentleman who desired only that New York City should turn out in a great parade for him was decidedly orientated toward the future; the young man who incessantly day-dreams about his future accomplishments is similarly orientated; the young man who was searching about for a means of giving everyone what he wanted and of thereby achieving a stature of God-likeness for himself was looking to the future. But obviously none of these individuals could be called well adjusted. There are other aspects of adjustive and non-adjustive activity besides orientation of attention, and therefore other criteria.

A second important criterion of adjustment, one which too often is neglected by students of psychology and sociology, is the feeling-tone of the individual as he goes about his daily life, the degree of satisfaction or dissatisfaction which he derives from his everyday activities. Families and friends often are surprised almost into speechlessness by an individual's becoming insane or otherwise severely incapacitated mentally "over night." "He appeared to be perfectly all right yesterday. There was nothing unusual about his actions. He appeared just as he always has." But the individual's

family and friends were perceiving only his overt reactions. They were unable to perceive that second content of activity, an individual's purely subjective processes. Had they been able to look into these they not only would not have been surprised at the advent of his mental collapse, but they would have been aware months before of a current of activity which was distinctly out of line with the person's overt behavior.

Many persons feel their daily work to be a tasteless task which is difficult to endure, or their domestic situations are laden with a distressing dissatisfaction to themselves, or they are daily preoccupied with some personal problem of a disquieting nature. Yet these persons may succeed in concealing their discontent from everyone. A quiet introverted young man suddenly walked away from his place of work and went home and to bed. His family could not account for his strange behavior and he would offer no explanation. For months he had been preoccupied with the belief that his genitals were not properly formed. A man of forty goes about his activities in an apparently happy mood. Some of his friends envy him his zest for life. They are quite unaware that his pleasant manner and jocularity are largely affected for the purpose of concealing from both himself and others the constant sense of emptiness and futility which gnaws at him. A certain woman who was utterly unable to go out-of-doors alone even during the daytime nevertheless succeeded in concealing this fact even from her husband for five years. All of her friends regarded her as being a very well-adjusted person.

Hence it becomes clear that the subjective criterion of personality adjustment must be taken into consideration if one is to evaluate properly an individual's degree of adjustment to the various problems of his life. And we might point out that the subjective indicators of maladjustment are often very elusive. In the first place many individuals themselves fail to see a connection between the cause of their distress and the distress itself. This usually is because they do not wish to recognize the true cause. A certain young woman

became moody, despondent, and irritable following the loss of her chastity. She failed to see any connection between the two facts and stoutly declared that she was too liberal minded to let such a trivial matter as the loss of her virginity disturb her. However, the fact remained that in her case the two events—loss of chasity and despondency—were causally related.

In the second place many individuals make symptomatic or non-adjustive reactions to some problem which distresses them but fail to see any connection between the distressing problem, or their distress, and their reactions to it. A certain young man was consciously very distressed at the immoral conduct of his wife, of whom he was very fond. But he failed to see the causal connection between his distress and the functional contracture which he developed in his left arm.

Generally speaking, a subjective indicator of personality maladjustment can be more easily elicited from the maladjusted introverted person than the maladjusted extraverted person. Or, to state the same fact in another way, the maladjusted introverted person tends to be more conscious of distress and dissatisfaction than the maladjusted extraverted person. This will not seem surprising if we will recall that the introverted person's subjective processes are more highly saturated with consciousness and that his attention is largely subjectively orientated. A strongly extraverted person may develop paralyses or even blindness and still be unable to find anything of which to complain in his personal life.

The Objective Criterion. And again we cannot rely solely upon the two criteria which we have discussed. In fact, if we were to evaluate the individual's degree of adjustment on the basis of subjective indications alone, we should have to conclude that some of the most perfectly adjusted individuals are in insane asylums. For some insane persons are thoroughly happy and wholly satisfied both with themselves and others. They have a keen zest for living and apparently gain a great deal of personal satisfaction from their daily lives.

Under the objective criterion we may properly distinguish several sub-criteria. Of chief importance among these are the educational, economic, social, and psychometric criteria. The class room and study hall situations constitute an important aspect of the environment in the case of most minors of school age, and the individual's proper adjustment to them constitutes an essential feature of his total adjustment. And on the other hand the school situation is sufficiently different from other situations into which the individual enters to frequently bring to the fore maladjustive personality trends which other situations fail to reveal. A given child or youth may appear to be well enough adjusted in his home, at play, and in social groups and yet be obviously maladjusted at school. A certain college student was severely incapacitated in his school work by an intense dislike of professors. His older brother, toward whom he always had felt a sense of inferiority and hostility, was a school teacher. This caused the young man to dislike all school teachers even before he met them. A little girl of six got along quite well at home and with her playmates, but when placed in the school room she was troubled by frequent vomiting. She had difficulty in adjusting to the degree of restraint which the schoolroom situation imposed.

Because of difficulty in making a proper initial adjustment to the school situation many persons develop maladjustive attitudes and emotional reactions to this type of situation which carry with them throughout their school life. Some little tots become unduly impressed with the seriousness of the schoolroom situation; others are unduly disturbed by the competitive element which is involved in their "race" for the highest grades; still others acquire an early dislike for, or a sense of inadequacy in relation to, certain subjects as a result of a poor start or the improper methods of the teacher.

Some forty or more colleges and universities in the United States now have mental hygiene clinics for the benefit of their students. It has been learned finally that many failures in school, even on the college level, are due to maladjustive

personality trends, sometimes in relation to the school situation and sometimes as transferences from other situations, which have nothing to do with the intelligence capacity of the individual. And thus it follows that if we are to gauge properly an individual's degree of personality adjustment we must take into consideration his present or past reactions to school situations.

Many persons appear to be well adjusted except when they have to work or to concern themselves with economic affairs. Perhaps the most common cause of maladjustment to working situations in general is an ego-identification with idleness. Some persons feel like genuine, worthwhile individuals only when they are idle. Having to work robs them of their feeling of autonomy and personal freedom; they feel oppressed, coerced, painfully hampered, and restrained. Many "lazy" persons find work as painful as well-adjusted persons would find enforced idleness to be. And it is not the necessary mental or physical effort which distresses the "lazy" one, it is the sense of oppression which he experiences in the working situation.

Positive ego-identifications with work-situations are necessary to an individual's proper adjustability to his economic environment. In other words an adult individual should have a more satisfying sense of completeness and autonomy, a more adequate sense of self-satisfaction, when he is engaged in some meaningful occupation than when whittling sticks or habitually lounging in the shade of a tree or sitting at a fishing hole or in a poolroom. Positive identifications with idleness (negative identifications with work) usually result from too much work during childhood together with too little praise or recognition of the effort expended and the results obtained. If a child is forced into work and responsibilities before he is old enough to comprehend fully the necessity and value of his efforts, and if along with this the results of his work are simply added to the family pot of achievements, the child will inevitably come to dislike work because his efforts in such a direction fail to distinguish him as a

separate and distinct individual. Aside from all the other reasons which might be mentioned in support of laws against child labor, there is the very good reason that child labor is conducive to laziness in adult life and to early aspirations to Townsend-plan-benefits.

A certain man of very high intelligence and high efficiency in various fields of work held eighty different positions in the course of two years. It seemed to him that he could find satisfaction in no kind of work or working situation. Another young man who sold vacuum sweepers always suffered from despondency upon making a sale. He so heartily welcomed frustration as encouragement to idleness that anything tending to encourage greater effort on his part, as, for instance, making a sale, brought on a state of depression. And, similarly, thousands of persons avoid work simply because it carries with it for such persons the meaning of self-effacement. But the capacity for sustained effort on behalf of future economic ends is an essential aspect of the average individual's adjustment and an evaluation of a person's economic history is necessary to a complete appraisal of his degree of adjustability.

In considering the individual's reactions to social situations it is desirable to distinguish the family from the community or extra-familial social group. Many persons are sufficiently adjusted to their social group but not to their family, and *vice versa*. Extraverted persons often make good adjustments to groups and poor adjustments to their families. Introverted persons are often better adjusted to their families than to social groups. The social group calls for scope, versatility, and variety in reactions; the family situation often requires greater intensity and perseverance in a given direction. It is a fact of common observation that the strongly extraverted man, because of his excessive devotion to group activities, is prone to neglect his family's emotional needs and to fail to gain a close understanding of the different individualities in the family group. The strongly introverted man on the other hand is inclined to isolate his family from

the social group and to encourage too intense affective relationships within the family circle.

The individual who has made a too sharp distinction between family and social group and therefore who has two decidedly different patterns of reaction habits corresponding to the two situations usually will be found to be poorly adjusted to family or to group or to both. Ideally the family institution should be a definite integer of the larger social organization; there should be a gradual, not abrupt, transition from family to group. In other words, an individual's attitudes, sentiments, and reaction habits in relation to his family situation should be largely applicable to, and true of, his relationship to his group. The same motives which are aroused for the most part in his family circle should be aroused and in essentially the same quantitative ratios in his group situations.

Unfortunately, however, the family and the community exist in the minds of many persons not only as sharply separated organizations but as being opposed or antagonistic to each other. Many individuals react to their families with excessive affection, sympathy, trust, and suggestibility and to their extra-familial social situations with excessive selfishness, distrust, and negativism. And on the other hand quite a few persons are irritable, selfish, and negativistic toward their families and friendly, generous, soft, and yielding toward others.

The proper social adjustment of the individual requires from an objective point of view that he conform to the standards and expectations of his family and of the society in which he lives. In any given instance of the social maladjustment of an individual the fault may lie, however, not with the individual but with the family or even with his social group. From the standpoint of the social criterion the fault cannot lie with society, of course, but from the standpoint of other criteria the conclusion might be that it does. And again one may be maladjusted to the smaller social group of which he is an immediate member and yet in feeling,

thought, and action be in consonance with the basic criteria of society as a whole. In other words, as we shall point out later, a social group may itself be definitely maladjusted.

Finally, we include under the caption of objective criteria psychometric measures of various kinds. These measures as we have implied in an earlier chapter are attempts to incorporate within short verbal, written, and other types of tests the essential indices of individual adjustability. And we have pointed out that except for a few aspects of personality these tests are not sufficiently valid and reliable for us to regard them as instruments of scientific precision. To determine in an hour or a few hours within the circumscribed and artificial environment of a psychological laboratory an individual's adjustability to all of the varied aspects of his personal and social life is a goal which psychology has not yet achieved.

And now, supposing we have an individual who is reasonably well orientated toward future ends in his daily efforts and activities, who derives an adequate degree of personal satisfaction from his activities, and who complies with family and group demands to a degree that is acceptable to family and group, do we have a well-adjusted individual? *Not necessarily.*

The Psychobiological Criterion. The human individual is not merely an individual; he is also a trustee of the race. He is not only a differentiated somato-plasmic structure; he is a carrier of the differentiated and undeveloped germinal ingredients of future generations. An individual is not only a distinct and autonomous chain within himself; he is also a tiny but essential link in a much longer and larger chain of many strands. His existence as an individual is only temporary; but in the germ plasm which he carries resides the past of the race and its future. The germ plasm is not merely a highly complex chemical substance; it is a living link between the race's infinitely long past and its most distant future.

At different times during the history of mankind whole groups have been psychobiologically maladjusted. Infanti-

cide, practiced by different peoples at different times, is psychobiologically a maladjustive activity irrespective of the economic or other circumstances of the group. The practice of seeking maximal personal sexual gratification, while at the same time rigorously precluding the natural end-act of an orgasm, a practice recently initiated by a pseudo-art group near New York City, is distinctly maladjustive. And those social attitudes which condone the substitution of lap dogs for human infants, even in the midst of our most congested populations, and those social sentiments which extend greater recognition to the possessor of a new importation of a canine distortion than to the possessor of an intelligent and healthy child, reflect a very marked degree of psychobiological maladjustment in modern society as a whole. Hence an individual's attitudes and activities may be wholly consonant with the standards of his particular group or with certain values of society at large and yet be definitely maladjustive from a psychobiological point of view.

If the activity of the individual is to be truly adjustive it must comply not only with those criteria which we have discussed but it must be consonant with the basically important psychobiological facts and meanings of life. What are these basic facts and meanings? Without attempting to distinguish all of the facts which are of psychobiological importance and which should be perpetuated in future generations, we can safely name a few. Of greatest importance is the continuation of the human species. Only an over-individualized point of view, arising under the influence of our acute consciousness of ourselves as distinct and separate entities, little worlds apart, can foster statements to the effect that it does not matter whether the human race goes on or perishes. We need not know what life is or what its ultimate ends are in order to perceive its tendency to endure as its most fundamental characteristic. And this holds true whether we study life in the form of the amoeba or man or plants.

The proper psychobiological adjustment of the individual first of all requires, then, that he shall be *inclined* to propa-

gate himself, to render perpetual, in as far as he can, the germ plasm which he carries. Many persons, *apparently* painfully conscious of some of the more disastrous results of mating, but often with their eyes very much on the matter of their personal freedom and the avoidance of responsibilities, stoutly defend their refusal to participate in propagation on the grounds of a conscientious concern for the welfare of succeeding generations. They contend that their offspring might be imbecilic or crippled or otherwise defective and that therefore they are unable to participate conscientiously in such an important matter as the perpetuation of the germ plasm. But as Jennings correctly points out, one cannot avoid influencing the genetic combinations of the future generations. He says: "Against all action in the direction of eugenics is at times raised the meaningless cry that men must not 'tamper with the germ plasm.' To tamper with the germ plasm can mean only to so act that the germ plasm in the future will be different from what it would be if one acted otherwise. But no normal being can avoid this. Every individual is custodian of a portion of the germ plasm; he cannot avoid determining its fate, and thereby altering the germ plasm combinations of the future. Every individual that begets children or that refrains from begetting children tampers with the germ plasm; it will in the future be different in consequence of his conduct. Every individual that chooses one mate rather than another tampers with the germ plasm. The priest who does not marry tampers with the germ plasm; it will be diverse as a result of his conduct. Every person that limits in any way the production of offspring, or that does not limit it, tampers with the germ plasm. The proposals of eugenics are merely that attempts shall be made to employ common sense in the unavoidable effects of conduct in the germ plasm of the future, so that this germ plasm shall be better rather than worse." [1]

We have said that the proper psychobiological adjustment of the individual assumes an inclination to participate di-

[1] Jennings, H. S., *The Biological Basis of Human Nature*, pp. 227–228, Norton.

rectly in the propagation of the species. We arrive at this conclusion not only through rational channels but through clinical observations as well. Such clinical data as the following are strong evidence that a conscious effort to deny or to divert racial motives to non-racial ends for the purpose of avoiding future unselfish efforts and activities constitutes a maladjustive orientation. A man of fifty has always avoided emotional attachments to women and thereby marriage and propagation. He is now obsessed by an intense and involuntary interest in a woman who, incidentally, is far from his ideal of the opposite sex. He would marry her if she would consent but even while doing so he would be silently denouncing his own stupidity. He has always secured an ample sexual outlet on a purely physical level. A certain man of thirty-eight suffers from daily despondency. His thoughts turn obsessively to marriage and children, but he reasons that it would be foolish to give up his personal freedom and assume the burdens of a family. He has led a very active sexual life. A woman of thirty-eight complains that a certain man whom she has never met, exercises a hypnotic influence over her and persistently interferes with her thoughts and actions. She asks only that she be left alone to her work, which is her particularly great personal (egoistic) interest in life. She has always regarded her married sisters as rather stupid, dull individuals. Another woman of about the same age is convinced that her ovaries have completely atrophied and that she therefore can never have children. She too has always been too ambitious (self-concerned) to think about men and marriage.

Without going into the genesis of such personality disorders at this point, we may simply state that they result from the individual's deliberate efforts to preclude the natural fulfillment of racial motives, and that they represent belated and therefore abnormally strong and insistent racial claims on the energies of the individual. If we may borrow a bit of poetic license we may say that such symptoms are the inarticulate voice of the race speaking through the specialized

and individualistically orientated mental functions of the individual.

But when we say that the psychobiological adjustment of the individual requires an inclination to propagate himself, we do not mean that he must invariably follow out this inclination in order to be adjusted. We learn that in the final analysis it is what the individual is *inclined* to do rather than what he actually does that determines his adjustment or lack of adjustment. A woman who adopts a dog because she is unable to bear children or because she knows she is unfit to bear children but who consciously yearns for children is radically different in her psychobiological orientation from the woman who adopts a dog in preference to bearing children out of consideration for her own personal freedom and a desire to avoid responsibilities.

A second fact which is unquestionably of great psychobiological worth is intelligence. Intelligence is man's greatest single instrument of adjustment. To argue that it is immaterial whether intelligence increases or decreases with future generations is to deny the value or significance of man's control of his environment. And a third fact of importance, one which we may include along with intelligence, is physical adaptability—physical strength, resistance, endurance. We are assuming that these two facts or traits are of fundamental worth and that their further enhancement with succeeding generations is basically sound and desirable. And what does their furtherance necessitate with respect to the orientation of the individual? It requires that the individual shall be inclined to mate with a superior and not an inferior psychophysical specimen. Thus, the woman is properly orientated and adjusted in this respect who seeks to mate with a superior man; and the woman who seeks to mate (wed) with a given man primarily because he is *manageable* is not properly adjusted. There are persons who are psychosexually attracted only by inferiors—mental defectives, cripples, sexually impotent or frigid persons, emotionally or physically infantile persons, etc. Persons who are attracted

to such "incomplete" specimens of the human family are not properly adjusted; their inclinations are not so orientated as to likely bring about a further enhancement of what we must regard as mankind's most important inherent possessions.

We could mention other meanings, traits, and capacities which are probably in line with the soundest principles of human evolution. But we do not wish to become any more speculative than is necessary to the presentation of the psychobiological aspect of individual adjustment; and we perhaps have said enough to indicate the great importance of this aspect or criterion of adjustment.

We may summarize the index to the psychobiological adjustment of the individual by defining it in a slightly different manner. Such an adjustment requires that the racial motives shall participate fully as determinants of the individual's activities and that these motives shall be directed toward truly biological ends. Sex, affection, sympathy, and suggestibility must be active and reasonably unhampered forces within the dynamics of the individual's mind, and they must be properly directed. Sex must incline the individual toward a strong and healthy member of the opposite sex and not, for instance, toward a member of the same sex or an otherwise unsuitable genetic partner. Affection must incline the individual primarily toward a mate and an offspring and not toward a dog or a picture of himself as a little tot in curls. Sympathy must incline one toward others who are in distress and not toward oneself. And suggestibility must incline one to comply with the standards of a superior person or a group and not, for instance, to grossly over-estimate the significance of an ache in one's own stomach.

Summary. A condensation of what we have said regarding aspects of personality adjustment may be of value. To be adjusted: 1. An individual's attention and interest, and therefore his efforts and activities, must be orientated to a considerable extent toward future ends. We cannot say to just what extent; this depends largely upon the particular individual and his circumstances. An individual whose daily activity

has no anticipative bearing upon his future activities is not adjusted; neither is an individual adjusted whose attention and interest are directed chiefly toward events of his own past. 2. An individual's daily activities must yield him what he himself regards as a reasonable or near-adequate degree of personal satisfaction. If he experiences life as a drag or as a thankless burden he is not properly adjusted. 3. An individual's overt activities—not his feelings and inclinations—must be in reasonable conformity with the standards and demands of the group to which he belongs. And his conformity to group standards must include his activities in school, home, and out-of-home groups. The group to which he belongs is the judge of the adequacy of his overt activities and not the individual himself. 4. Finally an individual must have inclinations to participate in such psychophysical activities as tend to insure the perpetuation of the species and to further enhance those mechanisms of adjustment which in the past have proved of value.

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CHAPTER V

COMMON MODES OF REACTION TO DIFFICULTIES

ADJUSTIVE REACTIONS: OVERT TRIAL AND ERROR REACTIONS; IMPLICIT TRIAL AND ERROR REACTIONS; INHIBITORY REACTIONS

Orientation. In the last chapter we spoke of different criteria of the normality or adjustiveness of the individual's activity as a whole. In the present chapter and in the immediately following chapters we shall be concerned not with criteria of activity as a whole but with different modes or types of activity as distinguished from different points of view. Thus we can distinguish overt trial and error activity from implicit trial and error activity in respect to the objectively observable content of these two modes of activity. We can distinguish inhibitory reactions from repression in respect to the individual's cognizance or lack of cognizance of the motives involved in the two instances, etc.

Some of the reactions or activities which we shall discuss may always be regarded as inherently adjustive; others as adjustive or maladjustive, depending upon the individual's situation; and still others as always maladjustive. In our discussion we shall proceed from the more adjustive to the less adjustive modes of activity.

The reader should bear in mind throughout our discussion of different modes of reaction that all reactions of the individual are motivated, and that in his reactions the individual makes manifest his motive organization. By studying his reactions we learn about his particular system of sentiments, attitudes, and interests. In other words, we come to know the pattern of his mental dynamics, the pattern of his energic processes.

Many Reactions Are Reactions to Difficulties. One hardly could speak of an individual's reacting to difficulties in sitting at a table eating his dinner, or in carrying on a casual conversation, or in idly walking among the flowers of his back yard. But beyond the level of such highly automatized and habitual activities as eating, sleeping, casual talking, walking, dressing, shaving, bathing, etc., many of the activities of most individuals are sequences of reactions to difficulties. And it is in the manner in which an individual endeavors to overcome or to adjust himself to a difficulty that he reveals his basic orientations and therefore his degree of adjustability. We accordingly are interested primarily in the different ways in which individuals react to difficulties and not the differences in the manners in which individuals talk or walk or eat.

If there were no human motives there would be no difficulties in human life, for a *difficulty always is something which tends to block a motive*, that is, something which tends to preclude or to render difficult the activity which the motive inclines the individual to execute. A difficulty may exist without or within. We therefore can classify all difficulties as objective or subjective.

Objective Difficulties Defined. *Environmental obstacles* comprise objective difficulties. Examples of the blocking of motives by such factors are numerous. The presence of a policeman thwarts the desire of the anti-socially orientated person who would loot the building; the presence of the river frustrates the desire of the picnic party to explore the opposite shore; the ledge of granite is a difficulty in the path of the railroad engineer; the height of the door handle is an obstacle to the infant who wishes to leave the room; the absence of money is a difficulty in the way of the penniless young man who wishes to marry; the presence of the professor is an obstacle to the desire of the bored student to fall asleep; the presence of the wife is a barrier to the husband's flirtatious proclivities; a popular president is an obstacle to the aspirations of rival candidates.

Any law the purpose of which is to restrict the activities of the individual for the good of the group may constitute an objective barrier to activity in the case of any given individual. The fact of legal penalties is assumed to be a potent factor in checking anti-social tendencies in individuals. Clubs and small group organizations of various kinds, including social and scientific fraternities, are devised and effected quite as much for the purpose of excluding undesirables from certain activities and situations as for the purpose of bringing individuals of similar interests and attainments together. The requisites for a given social standing often constitute an insurmountable obstacle to the social aspirant.

Life is full of environmental obstacles and a considerable part of the time and energy of most of us is devoted to our overcoming such difficulties, that is, either literally removing them from our paths or adjusting ourselves to them. The surveyor of wooded land fells the trees in his line of vision; but when he encounters a traffic light on the highway he adjusts to it by recognizing the value and need of such devices. At least this is what he should do. Often, however, individuals stop before trees and fell traffic lights instead.

As numerous as environmental obstacles or objective difficulties are, they play but a small role in the genesis of personality disorders and therefore in the acquisition of systematized patterns of truly abnormal activity. Personality disorders are principally the result of disharmony and frustration from within and not to oppressiveness and thwarting from without. In fact there is no better tonic to mental health than a good lively battle with environmental forces. It is in relation to subjective difficulties that individuals are prone to react in maladjustive ways.

Subjective Difficulties Defined. We may distinguish two general classes of subjective difficulties: 1. Motives may be blocked by personal deficiencies or limitations. 2. Motives may be blocked by antagonistic motives.

A small crippled boy goes to a school where physical sports and activities are emphasized a great deal. The phys-

ical activities of his schoolmates naturally arouse strong inclinations or desires in him to participate. But his physical incapacitations make it impossible for him to take part in the play with the result that his inclinations are blocked. *His blocked proclivities constitute a subjective difficulty.* A certain young woman is so unattractive that she fails to stimulate any interest in desirable young men. Nevertheless she is emotionally very much alive. She is affectionately and sexually drawn toward members of the opposite sex. Now we might regard her difficulty as an objective one inasmuch as we are supposing that members of the opposite sex are insensible to her as a female member of the species. We might perceive this insensibility as the thwarting factor to the young woman's inclinations. But since we are postulating a marked deficiency in physical attractiveness in the woman, we may more correctly regard the difficulty as subjective. The young woman's adjustment or lack of adjustment to her difficulty may, incidentally, depend largely upon whether *she* regards it as subjective or objective.

Personal limitations and deficiencies may be imagined or real, merely assumed or tested and proved. A certain college student regretted that his parents were not of higher intelligence. He wished that he might take up graduate study but assumed that he did not have the necessary degree of native intelligence. His inclinations to engage in graduate research were frustrated by his merely taken-for-granted, not proved, inferior intelligence. But another young man who actually was of inferior intelligence utterly failed to recognize his limitations in this respect even after he had failed repeatedly in his attempts to master public accountancy.

Feelings of inferiority or the "inferiority complex," about which so much has been written in recent years, may be included within the category of personal limitations and deficiencies. Such feelings constitute obstacles to self-assertive and competitive proclivities. Where they are strong and of daily occurrence they usually have a history reaching back to the individual's childhood. They are, of course, no index

to the individual's inherent capacities. Many superior persons suffer from feelings of inferiority, while many inferior persons do not know what such feelings are.

The second class of subjective difficulties consists of those instances in which inclinations to action are thwarted by disparate or incompatible inclinations which are active at the same time. When two disparate motives are aroused simultaneously, we speak of the fact as a *mental conflict*. Mental conflicts are of daily occurrence in the lives of most persons and it is to this class of difficulties or problems that the individual is less apt to make a proper adjustment. The genesis of most personality disorders includes a history of inadequately solved mental conflicts.

As we pointed out in Chapter II, every individual is born into a state of potential conflict between his racial and ego-motives. And it is between these two basic sets of motives that the majority of conflicts occur. We will recall that under the influence of the ego-motives the individual develops a sense of autonomy and individuality and acquires a system of ego-identifications. *In most if not in all conflicts which are instrumental to the development of personality disorders some motive or motive-complex is involved which is in support of the maintenance of the sense of individuality, personal completeness, and integrity.* In other words, the really significant conflicts in a person's life are those in which some powerful motive (impulse to action) threatens the integrity of the person's system of ego (personal) values. To illustrate: If an individual has made a very strong ego-identification with the idea (ideal) of sexual chastity, any sexual impulse which is aroused in him will come into sharp conflict with his ego-motives. To lose his chastity would cause him to feel "psychically mutilated." A person who has made a strong ego-identification with honesty will experience a mental conflict should he have a strong impulse to lie or to steal.

But although the ego- and racial motives are particularly prone to come into conflict with each other, conflicts may occur between any two motives. Thus conflicts may occur

between fear and anger, fear and sex, fear and affection, sex and sympathy, sex and affection, sex and suggestibility, etc., and between different inclinations belonging to the individual's system of ego-motives. Not infrequently persons experience conflicts between their inclinations to preserve their honesty on the one hand and to impress the other person by lying on the other. But generally speaking, as we have said, the great conflicts of mental life are between the ego- and racial motives, that is, as viewed objectively, between the individual and the race (other person or group).

Environmental obstacles, personal limitations, imagined or real, and mental conflicts comprise the major difficulties of life. We now turn to some of the more common ways in which individuals seek to solve their difficulties. And the student may assume at this point that a personality disorder is an unsolved difficulty and that neurotic and psychotic activity is a persistent but unsuccessful attempt at solution.

Overt Trial and Error Reactions. Although the student presumably is familiar with the essential characteristics of trial and error activity, he probably has not definitely related such activity to the problems of abnormal psychology. We may safely state that it is the most universally adjustive of all modes of reaction to difficulties. And we may arbitrarily distinguish between overt trial and error activity and implicit trial and error activity although, to be sure, no sharp line can be drawn between them.

Trial and error reactions may be observed in the lowest forms of animals, as is indicated by the following citation from Jennings.[1]

> Let us suppose that as Paramecium swims forward in the way just described, it receives from in front a sample that acts as a stimulus, that is perhaps injurious. The ciliary current brings to its anterior end water that is hotter or colder than usual, or that contains some strong chemical in solution, or holds large solid bodies in suspension, or the infusorian strikes with its anterior end against a solid object. What is to be done?

[1] Jennings, H. S., *Behavior of the Lower Organisms*, p. 47, Columbia University Press.

> Paramecium has a simple reaction method for meeting all such conditions. It first swims backward, at the same time necessarily reversing the ciliary current. It thus gets rid of the stimulating agent, itself backing out of the region where this agent is found, while it drives away the stimulus in its reversed ciliary current. It then turns to one side and swims forward in a new direction. . . . The animal may thus avoid the stimulating agent. If, however, the new path leads again toward the region from which the stimulus comes, the animal reacts in the same way as at first, till it finally becomes directed elsewhere.

In short, we can say that if motivated activity in a given direction is blocked, even in the case of the unicellular organism, the individual is disposed to resort to trial and error reactions in an attempt to adjust to the thwarting factor in the situation.

A considerable part of the activity of the *normal* (adjusted) human individual, child or adult, which is concerned with adjustment to baffling situations, is of this same type. Observe the activity of the small boy who has sighted a large red apple in the upper branches of a tree. The sight of the apple arouses an inclination which would find consummation in the act of eating the apple. But the motive is temporarily blocked by the fact that the apple is out of reach. Now the type and the scope of the activity which follows will be a measure of the boy's capacity to adjust himself to this particular situation. Let us assume that the boy sits down at the foot of the tree and cries. Such activity is not of the trial and error type nor, in this particular case, is it adjustive. The blocked motive finds its only vent through a non-adjustive pattern of activity which does not adapt the individual to the situation, which does not overcome the obstacle. The passer-by, recognizing the situation, would perhaps regard the child either as "spoiled" or not very intelligent.

Let us now suppose that a second boy of the same age as the first comes along and sees the apple. Instead of sitting down and crying he immediately catches up a stick and tries to reach the apple. But the stick is not long enough and a

longer one is not in sight. He discards the stick and attempts to climb the tree. But he finds that he is unable to do this. He then tries to shake the tree, but the tree is too heavy. Finally, he gathers some stones and succeeds in knocking the apple from the tree. Through his trial and error reactions he has succeeded in adjusting himself to the situation; the end-act of eating the apple can now occur.

Implicit Trial and Error Reactions. Let us again take the example of the apple and suppose that still another boy comes along and sees the apple and wants it. This boy also sits down but does not cry. Since many of his reactions to the difficulty of obtaining the apple are not directly observable we shall have to supply them. He glances at the long stick and then up at the apple. He *judges* the stick to be too short and therefore turns his attention to other possible solutions. He measures the size of the tree trunk with his eye, briefly *checks* this fact against his estimate of his physical strength, possibly *recalls* having once tried to shake a tree of comparable size, and *rejects* the *idea* of trying to shake the apple from the tree. He *silently estimates* the distance to the lower branches and *rejects* the *idea* of climbing the tree. He sees some small stones lying about, at once *concludes* that the stones offer a possible means to the desired end, and jumping to his feet he succeeds in knocking the apple from the tree.

Like the second boy, this third boy also went through a series of trial and error reactions. But his reactions were largely implicit whereas the second boy's reactions were largely overt. The third boy implicitly tried to reach the apple with the stick and implicitly failed; he implicitly tried to shake the tree and to climb the tree and in both instances he failed, just as the second boy did. But the third boy's trials and failures were thinking reactions, rational judgments, while the second boy's reactions were largely motor reactions. The third boy's reactions had the advantage of requiring less time and effort, while the second boy's reactions had the advantage of making more certain of the feasibility of the different possible ways of obtaining the

apple. The third boy might have erred in his judgment of the length of the stick in relation to the distance to the apple and consequently, had the stick been long enough, gone on to other possibilities when it was not necessary, whereas the second boy would have succeeded in obtaining the apple in his first attempt since he actually tried to reach it with the stick. And from these considerations we may infer that all in all the most profitable trial and error activity consists of a nice combination of implicit and overt reactions. Either type of reaction may be overdone. Strongly extraverted persons tend to rely too much upon overt reactions and strongly introverted persons upon implicit reactions.

But whether trial and error reactions in a given instance be essentially implicit or essentially overt they still belong to our category of the most adjustive reactions to difficulties. The principal directive factor in trial and error activity in the human individual is intelligence, and when one is relying upon his intelligence in his efforts to meet his problems he is utilizing the greatest instrument of adjustment which mankind possesses. Trial and error reactions together with inhibitory reactions, to be discussed shortly, supply us with rough standards with which to measure the adjustiveness of other modes of reaction to difficulties. Many of the objectives which we strive to reach in life can be gained only by circuitous routes. Intelligence usually would identify these routes for us were it not for the fact that the stronger the motivation, the desire to reach our objectives, the more intolerant we are of delay and the more inclined we are to push thought aside and to adopt the shortest path even though it will inevitably lead us to an insurmountable wall. When confronted with difficulties we often behave like the cat which is caught by its tail. We cast thought to the wind and scratch madly in a blind effort to free ourselves from the thwarting factor.

Inhibitory Reactions. Although trial and error reactions have a place in the individual's adjustments to all classes of difficulties, they are particularly appropriate to objective

difficulties and to problems of personal deficiencies and limitations. When it comes to the issues raised by our mental conflicts a more immediate solution often is required than trial and error reactions would permit of. Moreover many of our conflict situations are familiar to us and trial and error reactions are not called for. Generally speaking the adjustive manner of solving our conflict problems is by way of inhibition.

To inhibit is to reject an inclination to action. The normal individual is alive with various inclinations to action throughout his waking life. One cannot walk down a street without experiencing numerous fleeting impulses to disparate lines of action which are being constantly aroused by visual, auditory, and other stimuli. Thus inhibitory reactions are a necessary feature of our daily activities. We are able to maintain a given line of action only at the cost of constantly inhibiting inclinations to shift our attention and to engage in some irrelevant activity.

An inhibitory reaction is a two-fold process. The first part of the reaction consists of a rejection of the inclination which we speak of as being inhibited. And the second phase of the reaction consists of disposing of, discharging, expending the energy represented by the inhibited impulse. As we pointed out in an earlier chapter, a motive, an inclination, an impulse, a proclivity, is inner tension, kinetic energy. Hence if an individual is angered but inhibits his impulse to strike or otherwise to vent his anger, he has a load of tension, active energy on his hands for which he must provide a harmless pattern of discharge if he is to make the best adjustment to his conflict situation. The angry person who "holds his tongue," thereby conforming to the demands of the situation, but who fidgets in his chair or paces the floor or curses silently to himself is reacting more adjustively than the person who not only "holds his tongue" but denies himself any other, even partially natural, expression of his anger. The person who may become very angry and yet "not show it" is imposing upon himself an inevitable temporary disorganization of

his visceral functions. A few hours later he will likely suffer from a headache or indigestion or a sense of fatigue.

There is such a thing as over-doing our inhibitory reactions. Our social situations ordinarily impose sufficiently stringent demands upon us that we inhibit social and anti-social inclinations without our adding to the restrictions. Yet the individual himself is often the worst imposter in this respect. A certain young woman went about her daily life in such a state of tension that even her walk and speech were incoordinated. She was naturally of an impulsive and active disposition. She was full of healthy energy, most of which tended to course into motor channels of discharge. But somehow and somewhere during her history she had become enamored of a mental picture of herself as a very serene, quiet, and perfectly self-composed individual. She accordingly sought desperately to inhibit her constantly arising spontaneous impulses to chatter and laugh and flit hither and thither as many young women quite naturally do. Her inhibited impulses maintained too much tonicity throughout her musculature and therefore interfered with her motor coördinations. As might be expected she was given to frequent attacks of weeping.

Apparently where an impulse is aroused which inclines the individual to a pattern of activity which is not too disparate to the pattern of activity in which he is engaged at the moment, or to activity which is not too different in meaning from the activity which is in progress, the energy of the newly aroused propensity tends to be drained into the already active reaction-patterns. But in such instances we are dealing not with inhibitory reactions but with the integration of reactions or motives. An example will make this clear. A man is hurrying home from his office. He is hurrying because he is already late for dinner. And now he recalls a pressing matter at his office to which he forgot to attend. Momentarily he is inclined to return to his office and he slows up his car. But he concludes after a rapid calculation of the time factors involved that he will possibly be able to eat his

dinner and still get back to his office in time to take care of the matter which he forgot. He now accordingly drives even faster than before toward his home. His inclination to return to his office has become integrated with, and adds its weight to, his desire to reach his home.

There are other aspects of inhibitory reactions which not only are of great importance in themselves but an understanding of which is essential to a distinction between inhibitory reactions and other somewhat similar reactions, particularly repression. In the case of the inhibitory reaction the pattern of activity to which the impulse inclines the individual is rejected but the existence of the impulse is acknowledged. And the individual's acknowledgment of the presence of the impulse is of the greatest importance to his proper adjustment, as we shall clearly see later. When an individual makes an inhibitory reaction he has left the way open for the future arousal of the impulse, for the future recognition of the existence of the impulse, and for the future conscious experience of the impulse's inclining toward the same pattern of activity as formerly. The extreme significance of these facts will become fully appreciated only when we have taken up our discussion of repression. At this point we need only say that if an individual is to make a proper adjustment to his conflict situations it is essential that he be entirely cognizant of the different factors and implications in the conflict of motives. A necessary basis for such a cognizance is an utter self-frankness.

The principle of trial and error activity finds a place in the second phase of inhibitory reactions. To a large extent we have to learn how to make an adequate disposition of our inhibited motives, of the energy which they represent. Due to individual differences we cannot safely rely always upon the example set by someone else. If a certain young man finds it necessary to inhibit his sexual motives, for instance, because of his particular situation, he is confronted with the problem of discovering the most satisfactory means of relief from sexual tension. The adoption of a trial and error method

of solution is not only entirely in order but often such a procedure is necessary. For one person will find help in dancing and other social activities, whereas in the case of another person such activities will only increase his tension; one person will gain help from reading, another will not; one person will find in hiking a usable substitutive activity while another will find the same thing true of horseback riding, etc.

Finally, we are interested in the inhibiting agent. If an impulse is inhibited, obviously something in the nature of a force inhibits it. To say simply that the individual inhibits his unacceptable impulses does not shed much light on the matter. When sex or anger or fear is inhibited, of what does the inhibiting agency consist? And when egoistic impulses are inhibited, again of what does the inhibiting agency consist?

The inhibiting agency is that organization of motives or dynamic factors which is in support of the individual's ego-identifications, his personal values or meanings, his sense of individuality. And it is this organization that constitutes the I-ness of the individual. Thus: "I am an honest man. Honesty is one of my personal values, one of my most personal characteristics, one of my ego-identifications. And if necessary I can devote most of my total energy to maintaining my honesty in any situation which threatens it. I accordingly will not tolerate actual dishonest activity in myself. But, since I am capable of distinguishing between actually being dishonest and merely imagining myself to be dishonest, I may permit any inclination to dishonesty that is aroused in me to motivate a daydream of dishonest activity. I likewise wish to be a brave man. To me cowardice is one of the worst traits in human nature. I may have a cowardly impulse but I will not permit it to divert me from courageous behavior. And since I am devoted to the ideal of complete self-frankness in my personal life, I will always admit to myself any cowardly impulse or any other loathsome impulse which I may have however painful or distasteful the fact of my having such an impulse may be to me. My whole system of personal values are ego-

values. They constitute for me as an individual my heritage and my major accomplishments. But to a large extent these values are distant ends toward which I am working. They are my selections from all those meanings in life which when made personal and incorporated within one's own identity, constitute a fulfillment of one's strivings toward individuality and completeness. But sometimes I feel that I am so imperfect and incomplete and so far from those ends of personal fulfillment to which I aspire that I become acutely dissatisfied and restless. At such times I am inclined to pretend that I am superior to what I am. I have a tendency to 'show off' around others and to seek for something in the mirror that I can admire. But to me frankness before others as well as with oneself is such a highly desirable value that I will not permit myself pretentious behavior. Occasionally I permit myself to day-dream that I am more powerful, influential, and self-sufficient than I am. In short, I inhibit many impulses every day because they are opposed to what I feel I am and want to remain or they are in opposition to what I am striving to become in my own personal and individual right."

We speak of inhibitory reactions only in those instances in which motives or impulses are inhibited or redirected which are not consonant with the personally approved values and intents of the individual himself. If a powerful impulse "carries the individual away" and causes him to behave in a manner which does not meet with his own approval, we do not have an instance of inhibition. For such a phenomenon, which is not at all uncommon in human life, we have no technical term other than involuntary behavior, except where the activity is definitely symptomatic of a personality disorder. We then speak of "compulsions," "automatic acts," etc.

In conclusion it may be well to call the reader's attention to the fact that the same motive or impulse may be incompatible with the individual's ego-values in one situation and not at all in another. Anger in one situation, as when aroused by a small child or an aged or feeble person, is in-

hibited by the same person in whom it becomes righteous indignation in a different situation. Sexual impulses, suggestibility, and fear are the most frequent threats to pride and self-esteem, but even fear is condoned by most persons in certain situations. Some women actually make ego-identifications with "ideals" of timidity and fear.

Trial and error reactions, both overt and implicit, and inhibitory reactions followed by adequate substitutive reactions for the inhibited motives, comprise the most normal and adjustive manners of meeting the difficulties of life. If all of us relied fully upon such reactions from infancy to adulthood, personality disorders would be far less frequent than they are. But, unhappily, many of us often resort to other and much less adjustive methods of handling our problems.

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CHAPTER VI

COMMON MODES OF REACTION TO DIFFICULTIES (*Continued*)

PARTIALLY ADJUSTIVE MODES OF REACTION: COMPENSATORY REACTIONS; RATIONALIZATIONS; INTROSPECTIVE REACTIONS; OVER-REACTIONS

Feelings of Inferiority. Compensatory reactions are made to feelings of inferiority, a sense of inadequacy, feelings of personal deficiency. It is therefore necessary that we know something about the origin and nature of such feelings.

As we already have said in an earlier chapter, an individual's ego-identifications—those meanings, values, and objectives which he incorporates and strives to incorporate within his identity of self—are the fundamental regulators of his activities. Usually, basic and enduring ego-identifications are acquired during the individual's formative period and therefore under the light of an only partially developed intellectual capacity. Hence it is not surprising that early ego-identifications often are made with values and objectives which later prove detrimental to the individual.

Ego-identifications may be made either with positive or with negative meanings and objectives, as such meanings and objectives are evaluated by others and later, perhaps, by the individual himself. The child who early makes strong identifications with positive, socially approved values, thereby wins for himself a feeling of self-confidence and a wholesome sense of personal completeness, and of relatedness to his environment and to other persons. Thus we may assume that a given child lives in a fishing village and that early in his life he elects as his principal future objective that of becoming a successful fisherman. He has thereby taken to himself a meaning and an objective which nicely aligns him with the

orientations and activities of his group. Upon his approaching maturity he may well afford to turn away from his early objective and to aspire to something quite different, for through his early identification with the idea of becoming a fisherman, and through all of the reaction-patterns which we may suppose he has built up in line with this objective during his childhood, he has won for himself a sense of competence and individuality. But even though he should turn to something else he always will be inclined to rate a good fisherman higher among men than others would.

Now let us suppose that under the influence of a frustrated mother a second child in the same community early aspires not to become a fisherman but an actor; and that all the folk of the community, excepting the mother, look upon actors with contempt. It readily becomes apparent that the second boy's ego-identification is going to have a decidedly different effect upon his total personality development from that of the first boy. His aspiration to become an actor will tend to isolate him from the other members of the community; to a large extent it will be a secretly nourished value. And since the weight of numbers and maturity is against him he will gradually come to regard himself as deficient in most respects as compared to others. Only when he is alone day-dreaming or with his mother or enrapt in reading or watching a play will he come into possession of positive self-feeling. When around others, perhaps feebly attempting to enter into their activities and interests, he will feel incomplete, inadequate, and inferior. And even when this boy has matured and has achieved success on Broadway, he still will tend to feel inferior around the fisherfolk of his home village, though they completely reverse their former attitudes and treat him as a great personage.

Abnormally strong and persistent feelings of inferiority result from ego-identifications with negative meanings, meanings which have a negative value in the feelings of the individual himself. The "inferiority complex" is a system or constellation of ego-identifications with negative values and always, perhaps,

has its origin during the formative period. An inferiority complex may be quite limited and relate only to certain capacities, traits, or activities or it may be generalized and relate to nearly all sorts of activities and situations.

The individual who comparatively speaking *fails to acquire* ego-identifications during childhood will not be characterized by a typical inferiority complex in adult life. Rather his most noticeable peculiarity will be an absence of any definite orientation. He will tend to be characterized by daily indecision, the inability to "make up his mind" as to what to do or try to become.

Some Common Precipitating Factors to the Development of the Inferiority Complex. Identifications leading to a sense of inadequacy and feelings of inferiority are by no means always made at the individual's own election. More frequently the child is forced to identify himself with facts and indications of personal deficiency either by virtue of unalterable circumstances or by the attitudes of persons about him. The fact with which he is forced to identify himself may or may not be of negative value. If it is not, then other persons, usually family members, react to it as if it were and in his ignorance the child follows in the line of their judgments.

Physical defects, imagined or real, are frequent original sources of feelings of inadequacy or incompleteness. The badly crippled child cannot very well overlook the fact of his deficiency and since it is a strictly personal matter he cannot avoid some degree of ego-identification with the idea of personal deficiency. At the same time, if he is intelligent and his parents are wise and tactful he may achieve other identifications, with positive values, which will largely counteract the influence of his identification with the idea of personal deficiency and thereby preclude the development of a strong inferiority complex.

The attitude taken by the parents is of great significance. A certain little girl of five had bright red hair. Her mother openly deplored the fact and constantly drew unfavorable comparisons between the color of her daughter's hair and

that of other little girls. The little girl was thus forced to identify herself with the idea of physical repulsiveness. Needless to say, by the time she had matured a million complimentary remarks about her hair would not have undone the self-disparaging feeling-complex which she would have developed had not the foolish attitude of the mother been corrected.

Any *sensory or mental defect*, such as poor hearing, poor memory, or mental slowness may occasion the development of a maladjustive ego-identification. And again, the defect may be more imaginary than real. Many parents loudly voice their estimates of, or their apprehensions concerning, their children's mental abilities the first day of school, sometimes before. A devoted but foolish mother notes the fact that her small son has forgotten the new word she taught him the previous day. She thereupon exclaims: "I was afraid of it! He's just like his father, he can't remember a thing. I'm afraid he is going to have a terribly hard time in school." The child immediately begins to associate the idea of mental inadequacy with himself.

An *inferior social status* may lead to incapacitating ego-identifications and subsequently to feelings of inferiority. This is particularly likely to be true if the child's parents are given to deploring their poor standing or to unsuccessfully competing with their neighbors for social recognition. The same thing may be said of an *inferior economic status. Differences in religious beliefs* have worked severe hardships upon the entire Jewish people and has resulted in what some believe constitutes a universal inferiority complex among them.

The *prolonged or permanent absence of a parent from the home*, particularly the father, often leads a child into regarding himself as somehow inferior or defective. This is still more likely to be true in the case of the child who early learns that he is illegitimate and who overhears unkind remarks by his playmates or the neighbors. Recently a certain youth committed suicide shortly after learning that he was an adopted illegitimate child.

There are, of course, many other factors which are conducive to the development of self-negativing ego-identifications. But what we have said should enable the student to go ahead and infer additional ones for himself. We are next concerned with the ways in which individuals react to the difficulties which arise as a result of their ego-identifications with negative values, to their feelings of inferiority and inadequacy.

Compensatory Reactions Defined. There are but few chapters in modern psychology that are wider in their scope or more complex in their content than that of compensatory activity. Indeed, some writers appear to extend their definition of compensation to include all thinking and much of the individual's overt activity as well.[1] But such an extension of the concept of compensatory activity renders it valueless for descriptive and interpretative purposes. In the present text we shall limit the meaning of compensatory activity to the definition given below.

In Chapter II we spoke of different levels of egoistic striving. We mentioned personal security, personal equality and autonomy, personal distinction and preeminence, and personal immortality as the successive and respective objectives of egoistic effort. And we have said repeatedly that there are no greater ends or values in human life, as felt by the individual, than the first two objectives of egoistic motives. Until or unless an individual feels reasonably secure and essentially comparable or equal to others of his age and kind, *these two problems of his personal security and equality will be his first and major considerations in life*. Now a person who engages in compensatory activity is one who has failed to gain a normal sense of equality with others. And we shall always find the reason for his failure in this respect to consist of, or reside in, ego-identifications with negative (self-negating) values and meanings. The person lacks a normal feeling or sense of equality and completeness because he has identified himself with meanings of inequality and incompleteness. A

[1] See, for instance, Robinson, Edward Stevens, "A Concept of Compensation and Its Psychological Setting," *Jour. of Abnor. Psychol.*, Vol. 17, pp. 383-394.

sense of inequality or incompleteness engenders a feeling or sense of inferiority or inadequacy in any situation or activity to which the sense of inequality or incompleteness relates. The person who long since has taken to himself the idea of his own physical unattractiveness, for instance, as one of his most prominent personal characteristics, and who did not acquire at least one equally strong identification with some positive value, still tends to feel inadequate in situations where personal appearances are in the least emphasized. More than this, the personality tends toward unity, and a sense of inadequacy which initially relates only to a single trait or capacity, or to a single type of situation, tends to expand and to color all aspects of the person's sentiment of self-regard or sense of personal identity. The man, who as a little boy felt inferior only when his cross-eyedness appeared to be the focus of another person's attention, now feels inferior in respect to most situations and activities.

Compensatory activity is a substitutive activity, elected by the individual for the purpose of securing a sense of equality with others. Several implied facts are contained in our definition. Since compensatory activity is always substitutive, it is never the activity in which the individual would engage if there were not some factor which prevented his engaging in the non-substitutive activity. This factor, of course, is a feeling of inferiority or inadequacy in respect to the non-substitutive activity or the situation to which such activity belongs. The individual's feeling of inferiority causes him to turn away from this type of situation, often enough without his having made even a feeble attempt to adjust to it. This turning away from a given type of situation, or from some aspect of the situation, or else refusing to make a genuine effort to meet the situation in a truly adjustive manner, is always a necessary prelude to the occurrence of compensatory activity.

The individual is *disposed* to engage in non-substitutive activity, that is, in such activity as the situation demands. He is kept from doing this by his feeling of inadequacy and, often, by the incapacitating intensity of self-consciousness

which the feeling of inadequacy occasions. He is painfully distressed by his feeling of inferiority; and since it renders him incapable of applying himself to the task of adjusting to the situation which arouses it, he turns about, under its distressing weight, in search of some means of achieving a greater personal satisfaction with himself and an adequate recognition from others. Hence the substitutive or compensatory reactions which he now makes will be motivated not alone and directly by his natural egoistic motives but *in part and indirectly by his distress, his feeling of inferiority.* Hence we see that compensatory activity is a mode of reaction to difficulties of the nature of feelings of personal deficiency or limitations.

The reader will bear in mind that true compensatory reactions ensue following an individual's failure to adjust to a given type of situation only if the individual has strong ego-identifications with negative values, that is, an inferiority complex. An individual who does not have such identifications may readily give up one line of activity in which he has failed and take up an entirely different activity; but he will not suffer from feelings of personal inferiority in relation to the first activity and his second line of activity will not be partly motivated by feelings of inferiority and therefore will not be compensatory. Of two individuals, both of whom fail in similar undertakings, one may suffer from intense feelings of personal inferiority, whereas the second may blame objective circumstances for his failure or, without suffering from a sense of inferiority, he may simply conclude that he was not adequate to the task. The first person had an inferiority complex and therefore was over-sensitized to personal frustration while the second did not.

Common Examples of Compensatory Reactions. In any instance of compensatory activity the individual is endeavoring to relieve himself of painful feelings of inferiority on the one hand and to gain an added sense of personal competence and individuality on the other. Usually one cannot tell merely by observing the activity of an individual whether

or not the activity is compensatory; one must know the nature of the motives involved. Lying may be compensatory or not; talking about oneself may be compensatory or not; building a house may be compensatory or not. Before one can say, he must know *why* the individual lies, why he talks about himself, why he builds a house.

Day-dreaming is the most common form of compensatory activity of strongly introverted persons. Being already subjectively orientated, the introverted person who suffers from feelings of inferiority naturally will seek compensation through implicit activity. Even the child of seven or eight sometimes worries his mother by his proneness to go away by himself and day-dream. Introverted adolescents who have difficulty in making adequate adjustments to their social situations because of feelings of inferiority are particularly inclined to resort to day-dream activity. The young girl pictures herself as a successful movie star who is being showered with attentions; the young boy pictures himself as an All-American football star or as a daring aviator or as a famous scientist. But adults, too, have their day-dreams, and their content is as varied as human experience.

There are certain peculiarities of day-dreaming which must be recognized if one is to understand fully this interesting mode of human activity. In the first place the day-dream is always the product of frustrated motives. Usually these motives are egoistic, although it is possible that sexual tension alone may motivate day-dream activity. Secondly, day-dream activity is perhaps the most implicit of all activity. Thirdly, since the consummatory or end-acts of day-dream activity are merely subjective or implicit, they are psychobiologically inadequate and therefore fail to result in a normal degree of satisfaction to the individual. Fourthly, since in day-dreaming one rejects or ignores the stipulations of reality, he enjoys far greater scope and freedom in his day-dream activities than in his reactions to actual situations. And from this last fact it results that day-dreaming tends to estrange the individual from reality.

Mental hospitals are full of examples of day-dreaming which has been carried to a pathological extreme and has come almost wholly to supplant overt efforts to adjust to the difficulties of life. This woman who sits stiffly in her chair, casting haughty glances on those around her, believes herself to be the Queen of England. Another person sits murmuring and smiling to herself all day long; that she is incessantly active in an implicit manner is obvious, although she may refuse to let anyone into the secrets of her thoughts. And here is this man who perhaps always suffered from feelings of inferiority, who was not richly endowed with talent, and who failed to make a satisfactory adjustment to life. His life was mostly a series of failures and frustrations and yielded but slight personal satisfaction. But he found a way in which "to overcome" his difficulties—he has achieved the conviction that he is Henry Ford, and no one could doubt that he is now much happier and more satisfied with himself than when he was struggling with the problems of reality.

As a merely complementary and adjacent activity, day-dreaming may have a definite value to the individual. Many persons who are engaged in simple routine work from year to year, gain partial relief from the monotony of their work through day-dreaming. And there is perhaps some value in erotic phantasies for the person whose circumstances do not permit of overt sexual activity. In neither of these two instances is day-dreaming compensatory in the meaning of our definition. But even as a compensatory activity it may contribute to the person's general level of adjustment, provided, of course, it is not carried too far. As a major activity it is decidedly maladjustive.

Many writers in the field of psychology believe that the inferiority complex is peculiar only to strongly introverted individuals and therefore that only such persons resort to compensatory reactions. This misconception results chiefly from two facts. The extraverted person who has a system of ego-identifications with negative values and who therefore is disposed to suffer from feelings of personal inferiority,

largely escapes such feelings through the extraverted direction of his attention. One cannot be aware of subjective factors whose attention is directed outwardly; and the strongly extraverted person's attention remains predominantly extraverted even though he has an inferiority complex. *He becomes aware of feelings of inferiority only if his attention is forced to himself; otherwise his dissatisfaction with himself tends to be projected and seen as inadequacies of his environment.* Hence, since he does not experience feelings of inferiority, he has none to report. In the second place, extraverted persons with inferiority complexes usually resort to modes of activity, the very nature of which tends to conceal rather than to expose any sense of personal inadequacy in the individual.

The process of effecting ego-identifications with superior persons, with groups, with institutions and organizations, is the mode of activity which is most frequently adopted by the extraverted person who is in need of compensation. We already have mentioned the inevitability and basic value of ego-identifications. But when such identifications become *over-identifications* they are definitely compensatory and they often result in the serious maladjustment of the individual.

The small boy who feels inferior, or tends to feel inferior, perhaps over-identifies himself with his father. He boasts of his father's prowess and smartness and courage. Obviously his father's traits and capacities could not add to the boy's sense of importance and prestige did he not intimately associate them with himself, that is, achieve a sense of possessiveness toward them.

A common example of compensation through over-identification with another person is found in the case of marriage. The woman of painfully short stature marries an unusually tall man and thereby gains, as it were, in stature. The person who is lacking in self-confidence and aggressiveness becomes attracted to the person who has them. The mother who is troubled by a sense of personal inadequacy often over-identifies with her daughter. Consequently her hopes and ambitions, her sentiments, goals, ideals, and wel-

fare all tend to be invested in her child. As the child matures and begins to express views and likes and ambitions of her own, which differ from those of her mother, the mother becomes baffled and hurt and at an utter loss to understand how her own daughter can be so inconsiderate and disloyal. If the girl does something which the mother regards as unbecoming or disgraceful, the mother reacts with deep shame and humiliation, as if she had committed the act herself. A few years ago a mother murdered her unmarried daughter who had become pregnant. An identification is always an egoistically effected relationship and it may therefore stand in sharp opposition to affection, sympathy, suggestibility, or even sex.

Compensation through over-identification of oneself with a particular group or institution is also common. Just as the boy boasts of his father so does the man often boast—though in a less obvious manner—of his club, his home town, his political party, his country. The tendency to identify ourselves with groups, institutions, country, is one of the basic factors underlying our social organization; but over-identifications with such facts reduce one to the status of a mere puppet, devoid of true autonomy and individuality in thought or act.

It is not entirely unusual for individuals to over-identify themselves with various aspects of the inanimate world. A small boy made a strong identification with railroad locomotives. When he became a young man he devoted a large share of his time to making photographs of locomotives. He soon possessed hundreds of these photographs. When he was forced to dispose of them and to turn his attention to other things he felt lost and helpless. An inmate of a mental hospital constructed a "castle" from some old boxes and pieces of rope on the top of a tumble-down barn. For the most part his castle was an imaginary structure but it meant the world and all to him and he never tired of pointing out its splendors to the visitor. More ordinary instances of over-identifications with inanimate objects are to be found on every hand. This man becomes very angry if one speaks dis-

paragingly of his car; this woman glows with pride if you compliment the jewels which she purchased with her husband's money.

The chief dangers of compensation through over-identification lie in the individual's tendency to identify himself with facts, meanings, movements, which are so large or strong or comprehensive as to be wholly unmanageable by him. He then is in danger of being absorbed by the fact with which he has made the identification. Many a politician starts out to run the party only to be completely dominated by it. There results a loss of true individuality and the individual finishes by being but a miniature reflection of the fact which he sought to possess.

Compensatory activity may take the form of an *over-evaluation of a personal trait or capacity or of personal property.* A certain young woman had unusually lovely teeth. She also was troubled with feelings of inferiority. She developed a habit of smiling in such a manner as to reveal her teeth to the best advantage. Incidentally, she developed a neurosis and her lips became contracted, leaving her teeth permanently exposed. Inferiority complexes are supposed to be more common among women than men. Many women devote so much time and attention to their physical appearances that they quite neglect the development of their minds and personalities, to the detriment of their husbands and children as well as themselves. And not a few men turn to their physiques as a source of egoistic enhancement, often having found their minds to be lacking. One often sees such persons walking back and forth in front of mirrors in gymnasiums. Even sensory capacities are sometimes utilized for compensatory gain. One person constantly complains of the foul odors on the street, in the office, or wherever he happens to be. He "apologetically" explains that he has a very keen sense of smell and strongly implies that he is a very sensitive sort of individual.

A person may make a great deal of some personal possession, without being truly identified with the fact. Heirlooms and

antiques are often bartered for recognition from others. Unusually large diamonds and other precious stones may have little significance other than that they lend distinction to their owner, provided, of course, others know that he has them and express their envy. One's sense of equality with others is always dependent to some extent upon the reactions of others to him.

Belittling others is always compensatory. If one feels inferior to another person, the relationship can be altered either by raising oneself or by lowering the other. The latter is always easier and quicker provided one can remain sufficiently obtuse to the nature of his motives to enable him to proceed to his desired end. All of us have met persons who are accustomed to look through the wrong end of the telescope when viewing the undertakings and achievements of others. They are chronic disparagers, insatiably destructive critics of the work of other persons. The gossip is a well-known example of one who compensates in this manner. She (or he) endeavors to gain a sense of superiority, at least of equality, not through constructive efforts at self-improvement but by seeking out and discussing the weaknesses and shortcomings of those around her. She implies her own superiority by her disparagment of the other person.

A psychologist of the writer's acquaintance, a man who is scarcely known in his field, recently remarked that he makes a practice of apologizing to his students for the fact that a certain man (who enjoys an international reputation in the field of psychology) is a psychologist. The compensation is made possible by the fact that the two men hold very different views. By belittling his colleague, who is generally conceded a place of considerable importance in the field of psychology, the unknown one raises himself, so to speak, to an even greater height. But, if one is going to compensate by disparaging others, there is every reason for choosing a person who is decidedly superior. The reader should note the fact that we never belittle those whom we actually recognize as being inferior to us.

Blaming others for one's failures is a favorite method of compensating with many persons. Thus one individual laments the stupidities of social customs and traditions, another the unfairness of his business associates or his employer, arguing that these facts prevent his realizing his true potentialities. Some students succeed in convincing themselves that the instructor is biased and that they do not receive full credit for their work, whereas other students receive more than full credit. In any given instance the contentions and reasoning of such persons may be entirely valid. In most cases, however, such persons are defending themselves against feelings of personal inferiority.

In general blaming others for one's lack of success is indicative of a definite personality maladjustment. To the extent that a person convinces himself that others are to blame, he will feel justified in relinquishing further effort along constructive lines. Pool halls and public parks are full of persons who have convinced themselves of their blamelessness for their failures and who have succeeded in justifying themselves for no longer trying. The young woman, for instance, who believes that she has an unlikable disposition which was *inflicted upon her by the unwise tactics of her parents*, and who has further convinced herself that her disposition is no longer amenable to change, is in a very poor position to make adequate social adjustments.

Closely related to the manner of compensating which we have just described is that of *encouraging a fatalistic philosophy*. Everything comes to an end, nothing is permanent, time effaces all achievements; so why try? When one has succeeded in convincing himself that it is both foolish and useless to take himself or his work seriously, he not only is in a position to scoff at any efforts which he might be inclined to make but he is in an equally good position to scoff at the efforts and achievements of others. "You are an intelligent man," said such a person to the writer recently, "and therefore you cannot but agree with me that all of this effort and worry and achievement in life is just plain nonsense."

Compensation through *anti-social acts* has long been recognized. The person who is without reasonably strong ego-identifications with moral values and who suffers from feelings of inferiority, may quite readily resort to lying, stealing, or to carrying a gun as a means of overcoming his feelings of personal deficiency. Most pathological liars feel inferior around others, or would feel inferior if their lying could be prevented. It is well known that many of our most dangerous criminals appear frightened and helpless once they are divested of their firearms and their body-guards.

There are many other patterns of activity which often are compensatory. Usually boastfulness, habitual loud speech, undue self-display, an unusually dignified bearing, and innumerable little mannerisms of speech and action conceal feelings of inferiority. We have perhaps mentioned a sufficiently large number of examples to give the reader a fairly clear idea of the wide variety of forms which compensatory striving may assume.

Rationalization. Many different modes of compensatory activity are made possible *only by the process of rationalization*. Rationalization is a purely implicit activity and consists of the individual's unwittingly misconstruing the nature of the motives for his thoughts, beliefs, or acts. The reason for his misinterpretation is that the motive itself is reprehensible or else the means which he is inclined to adopt for the consummation of the motive is objectionable. One or two examples will make this clear.

The gossip is a person who gains great egoistic gratification from ferreting out and exposing ghosts in other persons' closets. But unless our gossip is a completely demoralized person she must conceal from herself the true reason for her gossiping activities. She does this by an act of rationalization. Thus, she has just learned of a dark and delectable secret concerning Mrs. Smith's past life. She was told this secret by another gossip, whom she secretly detests, and up to the present moment she is quite guiltless of any reprehensible behavior of her own. But she aches to pass the secret

on; for it is only by passing it on that she can procure that tingling satisfaction of a deflated ego's coming to life. Her problem now is to justify the act which she is strongly inclined to commit. She thinks—thinking is as much in the service of a vicious motive as a friendly motive. That is, she rationalizes. Notice her line of thought. She must have someone to whom to tell her secret and she must have a laudable reason for telling it to this person. She runs over her different acquaintances as she washes her dishes. Most of them will not do and besides she has a score to even with Mrs. Jones; for Mrs. Jones recently told her the most shocking secret about Mrs. Edwards. She is only vaguely aware of her envy of Mrs. Jones. But Mrs. Jones persistently recurs to her thoughts. In the intensity of her concentration she drops a dish and ignores the lusty crying of her infant in the adjoining room. Then she has it! Why, Mrs. Jones' son is paying attention to Mrs. Smith's daughter. There is simply no way to avoid it, Mrs. Jones simply must be told what Mrs. Smith was like before her marriage. Conveying the secret to Mrs. Jones is now a moral obligation which devolves upon our poor gossip. "Mrs. Jones, I just hate to tell you this but I feel I must. . . ."

Rationalization is self-deceit. And it is one of the most deplorable of all the activities of human beings. It is very common. One may observe daily examples of it on all sides. The most superb example of rationalization that ever came to the writer's attention was the case of an elderly man of sixty-five who beat his wife's brains out while she slept in order to stop her worrying. There was no doubt in this case that the old gentleman was completely self-deceived temporarily and that he felt wholly justified in what he was doing at the time. But many persons murder others and take their rights from them in less obvious manners but with the same egoistically, albeit unwittingly, achieved self-righteousness. Think, for instance, of the butcheries of the crusaders! Except with the aid of rationalization one cannot make overidentifications and naïvely laud himself through boasting of

his home town; and one cannot go about belittling others, or blaming others for all his failures, or serenely encourage fatalistic philosophies and preach doctrines of futility. Certain writers contend that if we could not rationalize we would all go insane. If this is true then it is because rationalization makes insanity superfluous.

In the original edition of this book the author endeavored to explain the interesting activity of belittling oneself as a compensatory mode. Belittling oneself is not a true compensatory activity; it is a peculiar hybrid form of rationalization. One belittles himself in order to go on boasting about himself. This sort of activity occurs in individuals in whom the tendency to boast is so strong and violent that they cannot help perceiving it. In their feeble efforts to be less self-devoted, they repeatedly denounce their tendency to boast by belittling themselves. But usually, their denunciations are almost immediately followed by further boasting, as anyone may easily observe. They are very much like the mother who has developed the practice of slapping her child and then immediately taking it upon her lap and caressing it.

Introspective Reactions. Introspective reactions or *self-analysis* must be clearly distinguished from day-dreaming. In day-dreaming, personal satisfaction is the objective; in introspective reactions, self-understanding is the objective.

Many persons are badly in need of a bit of frank self-inspection. It would tend to dampen their proclivities to rationalize their way around unpleasant facts of a personal nature; it would give them a better and truer perspective on their reactions and relationships to others; it would give them more tolerance toward the peculiar reactions and personal problems of others; it would lend them a touch of befitting humility toward the mysteries of life. If the person who recently said that all homosexual individuals should be taken to sea and drowned were to make a frank inspection of his own proclivities he might find an unrecognized and unadmitted homosexual tendency in himself. If the college dean who believes that abnormal psychology should not

be taught to college students would engage in a bit of frank introspection he almost certainly would discover that he stands in fear of ghosts in his own mental closets. If that chairman of a department of psychology who believes that scientific treatises on sex should be kept from college students and who felt that he should ask the university authorities to expel a woman student because she was overheard to use such expressions as "damn" and "God" in her casual speech, could peer into some of the locked rooms of his own mental castle he undoubtedly would be severely shocked by what he saw. If the late William Jennings Bryan could have become cognizant of the true reasons why he wished to have the teaching of evolution abolished, he certainly would have been compelled to change his mind and to grant to science the privilege of investigating its own subject matter.

Strongly introverted individuals tend to introspect too much; strongly extraverted persons tend to introspect too little. Introspective tendencies may become morbid, pathological. It is not normal or adjustive for one to go about striking comparisons between himself and every person he meets or to be forever asking himself why he did this or that or why he feels this way or that way. One young man was endlessly probing among his childhood memories for explanations of his failure to make satisfactory adjustments in his present life. He was later committed to a mental hospital, where he undoubtedly continues his retrospective investigations.

And, on the other hand, an obtuseness to the nature of one's motives and interests may reach a pathological degree. A certain young woman developed functional blindness without being able to report any dissatisfaction in her personal life. Yet her blindness was a turning away from certain distressing facts. A certain man readily forgave his wife's sexual infidelities but immediately became sexually impotent. He refused to see his bitter resentment and humiliation because he wanted to believe himself to be a big-hearted and liberal-minded person. All too often rationalization usurps the need of frank introspection.

Strongly extraverted persons find it difficult to introspect because of their shallow consciousness and outwardly directed attention. Lacking a close familiarity with their motives, they often possess an enviable composure and self-satisfaction. The strongly introverted person tends to be so conscious of his spite, envy, jealousy, animosity, and other selfish motives toward others that he is embarrassed in their presence. The extraverted person has similar inclinations but usually is unaware of them. His attention is on the other person, not on his feelings or inclinations as such toward the person.

Over-reactions. Many writers distinguish a certain type of activity which they term *over-compensation*. This mode of activity results not from the re-directing of a blocked motive into other patterns of activity but from an over-intensification of the motive in its initial direction. In other words, over-compensation is nothing more or less than the exaggeration or intensification of a direct and perfectly normal and adjustive mode of reaction to a difficulty. Accordingly, a better term for it, and the one we shall use, is *over-reaction*. An example of this type of activity would be the case of the young woman who, upon entering college, was told that she had very weak lungs, which, it was explained, predisposed her to tuberculosis. She immediately undertook to develop her lungs by a system of exercises, which she continued till she had the greatest chest expansion of any girl in her class. Another girl, if faced by such a difficulty, might conceivably have reacted in an entirely different manner; for instance, by sitting around and talking a great deal about her misfortune or by secluding herself and day-dreaming of what she might have been and done. Another instance of over-reaction is that of a case cited by Vaughan.[1]

> CASE 1. Let me illustrate how inferiority was compensated through athletic accomplishment in the life of Gene Neely. He was a listless young man until a shotgun wound deprived him of one arm. This "crippling

[1] Vaughan, Wayland F., *The Lure of Superiority*, pp. 6–7, Henry Holt.

> accident did a strange and great thing for Gene Neely. It gave Gene Neely a cause. It seemed . . . to charge him with a burning mission to prove to the world that a man with one arm can do anything that a man with two arms can do. But for that misfortune, it is quite probable that he would merely have been a good-natured fat man on cordial terms with the world, an easy-going individual with no particular drive nor dash to him. . . . But as it was Neely became a sort of flaming crusader in the cause of the maimed. There was edge and bite and fire and fury to him. There was a constant challenge in his steel-gray eyes, a seething unrest in his powerful limbs. He measured every man—his power, his skill—and as he measured him, he prepared to fight him. 'He thinks he's good because he's got two arms,' he used to confide, . . . 'but I can lick him the best day he ever saw. . . .' " He was perhaps the most remarkable athlete in intercollegiate annals. "He made the All-America team in football, played a crack center field, both at Dartmouth and later with one of the fastest semipro nines in the South, could flail a golf course in the 80's, play a masterful game of tennis, was a demon wrestler, a strong swimmer, a good dash man in track, an expert at billiards, a champion trap shooter, and a fair basketball forward."

The reader will observe that in the two cases of over-reaction just given there was no re-directing of a motive; the motive which had been aroused in each case manifested itself quite in keeping with the situation which tended to block it. Thus over-reaction consists not of making up for a deficiency by engaging in some activity which does not involve the deficiency but rather of an over-intensified effort to overcome it in the most direct manner. It is simply an unusually strong attempt to overcome directly a personal limitation, and it becomes over-reaction only by comparison with the activity of the majority of persons in similar situa-

tions. Most one-armed men do not achieve renown in the field of athletics; when one does we may speak of his achievements as over-reactions, provided it is clear that his feeling of deficiency strengthened the drive back of his activity.

Summary. We have seen that compensatory reactions to difficulties may result in at least a partial adjustment of the individual to his feelings of inadequacy, or that they may lead to an even more serious maladjustment. Rationalizations are inevitable in many persons but never necessary to the best adjustment. Whatever value they may have lies in the fact that they tend to preserve the individual's peace of mind and to insure his self-satisfaction. But they are escape mechanisms and tend to leave the person on the thin ice of self-deception. Introspective reactions are good or bad, depending upon the individual, his situation and relationship to others, and the extent to which he makes such reactions. At the present time we can say that the majority of individuals, groups, and nations are in need of more self-inspection and understanding of themselves. Over-reactions may result in a very satisfactory adjustment, or they may leave the individual with nothing to show for a lifetime of intense effort devoted to a single end.

In the following chapter we shall discuss some modes of reaction which tend to be still less adjustive than those just considered.

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CHAPTER VII

COMMON MODES OF REACTION TO DIFFICULTIES (*Continued*)

NON-ADJUSTIVE REACTIONS. PERSEVERATIVE REACTIONS; NEGATIVISTIC REACTIONS; REGRESSIVE REACTIONS; INFANTILE REACTIONS

Perseverative Reactions. The term "perseverative reactions' is used here in the sense of persistent non-adjustive reac tions. If an individual fails to make an adjustment to a difficulty but nevertheless persistently reacts to the difficulty in the same manner, we may speak of his reactions as perseverative or as persistent non-adjustive. Perseverative reactions, then, are repetitious non-adjustive reactions. Such reactions are peculiar not to man alone but to many of the lower animals.

Hamilton made an interesting study of the reactions of primates and rodents to baffling situations.[1] The reactions of gophers were so interesting and unusual that he made further observations of the reactions of twelve of these animals, each placed in a separate nest in a single cage. He noticed that when one of the gophers left its nest and went to the center of the cage for food, it quite as frequently sought to enter one of the other nests as to return to its own. In such instances the intruder was ejected provided the rightful occupant of the nest was the stronger. Whereupon the intruder, instead of entering one of the other nests or going to its own, would again enter the nest from which it had just been ejected. And it would continue to do this until either it or the other gopher was exhausted or killed. Hamilton reports that at the end of a few days only two gophers,

[1] Hamilton, G. V., "A Study of Perseverance Reactions in Primates and Rodents," *Behavior Monographs*, Vol. 3, No. 2. Also *Objective Psychopathology*, by the same author.

males, occupying nests at opposite sides of the cage, were still alive. The others had succumbed to the injuries inflicted in their persistent attempts to occupy each others' nests. Here we have a splendid example of perseverative reactions to difficulties. May we safely assume with Hamilton that this peculiar mode of reaction to a baffling situation is a feature of the gopher's native reaction patterns to difficulties?

Perseverative reactions are common to other animals. The domesticated hog is very strongly inclined to react in such a manner, as all know who have ever handled him. Hence we have such expressions as "stubborn as a hog," "bull-headed," etc., characterizing the individual's tendency to persist in a given pattern of behavior even though the behavior proves wholly non-adjustive. The sheep, too, is prone to persist in a given direction, often taxing the shepherd's endurance, and rendering the dog an invaluable asset to the control of the flock. The dog arouses fear in the sheep, and the fear "inhibits" or counteracts the perseverative tendency. The cat's scratching and whining when caught by its tail is another excellent example of perseverative activity and one which often delights the small boy.

Perseverative reactions are quite common in the small child. The little tot starts to leave the room but comes to a closed door. He grasps the handle and pushes and pulls and perhaps cries. He may continue making such reactions till the adult watching him wonders why the child does not try some alternative mode of solution. But the human individual is not richly provided with alternative patterns of reaction to a difficulty by his inherent nature; and whereas this lack is more than compensated by the function of intelligence in the older child or in the adult, the small child's intelligence is not yet sufficiently "developed" and therefore alternative lines of reaction are not apprehended.

But we also find perseverative reactions in adults of normal or even superior intelligence. An example would be the activity which is often observable in the person who discovers that he has forgotten his key when he arrives at his

office. He knows the door is locked but nevertheless he tries it. He distinctly recalls that he left his key lying on the dresser but even so he goes through all of his pockets. Then he tries the door again. Now he searches again in some of his pockets, as he starts to turn away. He suddenly curses and tries the door once more. Another common example would be the activity of the driver whose car stops without apparent cause. He steps on the starter but there is no response. The ignition is already on so he turns it off and then on again and tries the starter once more. He looks up and down the road and again steps on the starter. He begins to grow impatient and repeatedly tries the starter. Then finally he lights a cigarette, sighs, and commences a systematic, trial and error examination into the possible causes of the trouble. These are everyday instances of perseverative reactions in normal adults. In many abnormal or maladjusted persons, perseverative reactions become distinctly pathological.

A young man is told by his physician that he has a predisposition to pulmonary tuberculosis, that unless he is very careful of his health he will contract this disease. The young man reacts with fear and anxiety and instead of his devoting himself to the establishment of proper health habits, he goes from person to person to talk about his unfortunate condition. When at home or when there is no one to listen to him, he sits around brooding and forecasting for himself the most unpleasant consequences of his predisposition to tuberculosis.

Perseverative reactions are frequently made to other individuals, either to their influence or in an unwitting attempt to influence them. The chief instigating factor in the following case of dipsomania was clearly the exhorbitant demands of the mother.

> CASE 2. Harold W., a young man of twenty-eight and an only child, took to drinking heavily shortly following his marriage and the death of his father, which events occurred near the same time. Harold inherited his father's business, and along with it his mother's very active

interest in the business. Harold found himself in the position of supporting his wife and his mother in separate homes by his efforts in a business which his mother sought to supervise from a distance. In short Harold's mother made it very clear to him that she expected him to visit her daily, to enquire about her health and happiness, to make a report on conditions at the office and to receive suggestions (corrections) on his management of the business. Now many young men would have been able to adjust to such a situation very nicely. But Harold had been an only child; he had been babied and spoiled and kept from achieving a normal sense of individuality and competence. Throughout his formative period his world had been a sharply circumscribed three-sided province; his father, his mother, and himself constituting respectively the three sides. He had acquired very strong ego-identifications with both parents, or more correctly, with this unity, this singleness of the family group. When he reached manhood (in years) he devoted himself almost with violence to the end of achieving a sense of autonomy and individuality. He went to a fairly distant city where he worked for a number of years. The illness of his father forced his return. Largely as a result of an unwitting effort to lessen his mother's influence upon him, he sought the company of and married a very intelligent and charming young woman. Then his father died and Harold had no choice but to take charge of the business; and this meant to consolidate his energies with those of his mother, to cast his energies again into the family pot and to let go of any sense of individuality and personal autonomy in his work.

In his distress Harold began to drink. Drinking allayed his feelings of inadequacy and gave him a temporary sense of autonomy and completeness and competence. When drinking, he became relatively indifferent to his mother's expectations and often neglected to visit her.

Later his mother would reproach him for his neglect, with the result that he would drink the more in order to escape from the sting of her reproaches. His drinking soon became regular and habitual and constituted perseverative reactions to his unsolved problems.

Interpretation of Perseverative Reactions. Why do individuals persist in their non-adjustive reactions to difficulties? Why does the gopher persistently try to enter the other gopher's nest, even to the point of becoming exhausted or killed? Why does an intelligent man continue to drink in the face of his difficulties when a moment's thought would clearly reveal the futility of such behavior?

There is a perseverative tendency in all individuals, both humans and animals. Various interpretations of this tendency have been offered.[1] Without such a tendency true trial and error activity, or any sort of sustained activity, would be impossible. Once a line of activity is initiated the individual tends to persist in this same pattern of activity till its goal is reached. But in the case of most individuals at least, humans and animals, there is also a disposition to relinquish a pattern of activity which proves ineffective and to try some other mode of activity. And without such a disposition we again could not have true trial and error activity. Hence we see that trial and error activity and, we might add, adjustive activity in general, depends upon a nice balance between the dispositions to persevere in a given mode of activity and to relinquish one mode in favor of another.

Inasmuch as there is unquestionably a disposition in the individual to persevere in a given type of reaction to a difficulty, we may safely infer a variation in this disposition among different individuals of the same species, whatever may be the nature of this disposition in the final analysis. But does the genetic variation which we must assume to occur in the disposition to persevere account for the wide

[1] Edwards, K. H. R., "The Perseverative Tendency," *Jour. of Abnor. Psychol.*, Vol. 28, 1933, pp. 198–206.

differences which are observable among individuals, or are there distinguishable secondary factors to be considered? And might not two different instances of perseveration be due to quite different sets of factors?

First of all we must not overlook the fact that an individual does not manifest the same degree of perseveration in his reactions to different classes of difficulties. A cat makes perseverative reactions when caught by its tail. But the cat is a tree climber and throughout its phylogenetic history it has been accustomed to scratch away from backward pulls, from gravity itself. The writer has not observed that the cat is particularly disposed to persevere in a given type of reaction to other situations. The gopher is a burrower and safe from its natural enemies only when in its nest. All in all it may have been decidedly to the advantage of its species in the past for it to get into its nest at any cost once it had undertaken to do so. It is therefore characterized by an unusual degree of persistence when attempting to get into its nest. Perhaps its reactions to other types of difficulties would be less perseverative. A child may react in a persistent non-adjustive manner to one type of difficulty and not react in a persevering manner even to a closely similar difficulty. For instance the little boy still weeps whenever his mother refuses to permit him to have his way, and this despite the fact that his mother has long since consistently ignored his weeping, and yet he never weeps when his father thwarts his wishes.

The perseverative disposition does not affect equally an individual's reactions to different types of difficulties; there is a variation in its inherent strength among individuals of the same species and, many instances of perseverative reactions among humans can be reduced largely to the influence of secondary factors. Thus, although feebleminded children appear to have less capacity for sustaining a given line of activity than normal children, still they are inclined to repeat the same ineffectual sequence of responses to a difficulty. The difference here apparently is due to the more intelligent

child's greater capacity for thinking of other possible ways of meeting the problem.

An extremely important factor in perseverative reactions, and one which in many instances appears to be an adequate explanation of such reactions, is emotion or intensity of motivation. It is readily observable that human adults usually tend to persevere to an abnormal degree only when they are emotionally excited. But an emotionally aroused person is a strongly motivated person; most of his energy is concentrated in a given direction and his intellective processes are either inhibited or else brought into alignment with his emotional orientation. This observation sheds considerable light upon the causes of perseverative reactions. Whereas among human adults the intellective functions—perceiving, remembering, thinking—are the chief directive factors to trial and error activity, in the case of their perseverative reactions, emotion or intensity of motivation is the principal directive factor. The initial reaction of an individual to a difficulty may be either predominantly rational or it may be predominantly affective; in the former cases, trial and error activity is likely to follow, in the latter case perseverative activity is likely to follow.

But what about the individual who reacts non-adjustively to a difficulty today and then tomorrow when he is confronted by the same or a similar situation he again reacts non-adjustively and in the same manner? It is not difficult to understand how strong emotion may cause an individual to persist in non-adjustive reactions at the time, while he is still emotionally disturbed, but how do we account for his reacting again at a later time in the same non-adjustive manner? It seems that on the second occasion he would be inclined to approach the difficulty from a different angle, having failed in his previous attempt. It will be found that perseverative reactions are usually made to difficulties which the individual is loath to think about during the intervals between successive presentations of the difficulty. Since the difficulty has been out of mind since its last occurrence he

tends to take up where he left off the last time. Thus the jealous wife perhaps weeps herself to sleep and when she wakes in the morning she steadfastly turns her thoughts away from her husband's flirtations or infidelities. When her attention is again forced to his conduct she immediately reacts emotionally and accordingly perseveres in her weeping. There would be fewer perseverative reactions in life if we would all take time off during our emotionally undisturbed moments and think over those difficulties which are of a recurrent nature. We then could elect a new mode of attack under the guidance of our thinking. But difficulties are unpleasant facts and when we can get them out of mind we are disposed to keep them out as long as we can.

We may summarize our discussion of perseverative reactions as follows: (a) There is a disposition in the human individual to continue or persevere in a given direction once a line of activity is initiated. (b) There is a disposition in the individual to relinquish a reaction pattern that does not immediately prove adjustive and to turn to some other mode of reaction. (c) When the proper balance exists between these two dispositions, typical trial and error activity results, other things being equal. (d) Since trial and error reactions depend largely upon intelligence (intellective functions) in the human individual, any factor which tends to inhibit or to interfere with these functions favors perseverative reactions. (e) Strong feelings and emotions have a narrowing and inhibitory effect upon the rational functions. (f) Perseverative reactions in the human adult usually are of an affective character. (g) From (e) and (f) it is to be inferred that feelings and emotions are major causative factors in perseverative reactions.

The disposition to react in a perseverative manner increases in childhood with increasing age,[1] and among adults it appears to be more pronounced in men than women. Studies of fairly large groups of children from "undesirable homes"

[1] Pinard, J. W., "Tests of Perseveration," *Brit. Jour. of Psychol.*, Vol. 23, 1932, pp. 5–19.

and of adults in mental hospitals revealed that 75% of the most difficult and unreliable subjects were either extreme perseverators or extreme non-perseverators.[1] And although no correlation between the disposition to perseverative reactions and introversion-extraversion or other basic personality variants has been demonstrated, high correlations are found between the disposition and certain personality disorders.[2]

Negativistic Reactions. Negativistic reactions may be distinguished from perseverative reactions on the one hand and from regressive reactions on the other. A perseverative reaction is a repetitious non-adjustive reaction; a *negativistic reaction is a refusal to react, a sustained determination not to be influenced by the situation.* The child who is given to perseverative reactions may weep in the face of every difficulty; whereas the negativistic child clenches his teeth and refuses even to weep.

Negativistic reactions are found not only in humans but among the lower animals as well. A well-known example is balkiness in the draft horse. The balky horse will not move forward, or backward. He will stand for hours hitched to the wagon without moving. If left to himself he would perhaps starve before he would exert himself against the collar of his harness. He cannot be coaxed or frightened and very often he cannot even be lashed into making an effort to draw the load. Another example is the reaction of the sheep—or the absence of reaction—when it encounters a fallen log in its path as it comes down the mountain. Instead of retracing its steps or seeking a way around the log it will often remain in its tracks and slowly perish from hunger.

Negativistic reactions are not uncommon among children. Everyone knows the pouting child, the stubborn child. This little girl of six refuses to speak to anyone but her grandmother. The greater the efforts of anyone else to get her to talk the more determinedly silent she becomes. A negativistic reaction is a "standing pat" reaction; it is an im-

[1] *Ibid.*
[2] *Ibid.*, pp. 114-126.

plicit rebuff to all stimuli which tend to arouse a response. This little boy of five is extremely negativistic. Even his digestive and eliminative functions are affected by his negativistic attitude toward his environment, with the result that he suffers from chronic constipation.

Adults too are often negativistic. From the negativism of the essentially normal individual who takes pride in the fact that nothing can cause him to change his mind once he has arrived at a decision, to the patient in the mental hospital who for twenty years has consistently refused to speak a single word to anyone, all degrees of negativism are to be found. The following case illustrates a degree of negativism which is distinctly abnormal and yet which is frequently encountered in our so-called normal population.

CASE 3. Mildred Y. has been married for twenty-two years. She lives with her husband and their two daughters in a four-room apartment in a large city. For the past five years she and her husband have not spoken to each other once. She vowed five years ago never to speak to her husband again, following a quarrel over financial matters.

Mrs. Y's elder daughter recently sought psychological help for her own personal problems. She complained, and quite rightly, that the unrelaxing obstinancy of her parents made the home almost unbearable and that her own role of "go-between" was becoming unendurable. She was bordering on a nervous breakdown.

The mother was consulted and informed that her attitude toward her husband was jeopardizing her daughter's mental health. She refused to consent to end her silence. She was then told that if her daughter were to be committed to an insane asylum, and that such an eventuality was extremely likely, that she would be wholly to blame. She weepingly replied that she could not and would not speak to her husband even to save her daughter from insanity.

Interpretation of Negativistic Reactions. Negativistic reactions are among the most non-adjustive of all reactions. Yet they are frequently found in individuals of good intelligence whose intellective functions are inherently intact. How do we account for the peculiar manner of an individual's reacting to a situation *by refusing to react to it* even though the situation be of the most vital significance to him?

In the case of the human individual at least, a negativistic reaction is usually if not always the resultant of a deadlock between two basic and antagonistic tendencies or dispositions. The person who reacts negativistically to a situation *tends* to react in an aggressive, self-assertive manner, and in a submissive, self-negating manner, at the same time. In many instances we can definitely say that the person's initial inclination is to react submissively. But his inclination to react in a submissive manner is exaggerated; and it is because of the exaggerated character of this submissive inclination that the individual's immediate egoistic consideration is to check the submissive tendency. Hence in reality our negativistic person is not reacting to the objective situation; he is reacting to his own exaggerated inner submissive inclinations.

With this fact in mind it is no longer a matter for surprise that one should frequently encounter the most exaggerated suggestibility side by side with extreme negativism in the same person. One individual will be abnormally suggestible toward one particular person or one particular type of situation and pathologically negativistic toward all other persons or situations. In other individuals we find exaggerated suggestibility and exaggerated negativism co-existing toward the same situation. We shall consider some of these conditions in later chapters.

Negativistic reactions are peculiar to persons who suffer from a sense of ego-insecurity, and who are deficient in social reaction patterns. By a sense of ego-insecurity we have in mind a lack of a definite orientation. Such an inadequacy in one's sense of individuality may be due primarily to an absence of positive ego-identifications or to abnormally de-

veloped racial motives, particularly suggestibility. In either instance the individual is in danger of excessive submissiveness to the other person. If he is relatively lacking in ego-identifications he is without an adequate guide to his conduct, particularly toward other persons. He therefore is inclined to rely too much upon their suggestions and judgments. If his suggestible proclivities are over-developed, he again is in danger of foregoing his own autonomy and initiative. If he were well equipped with habitual social reaction patterns, he would be able to effect a compromise of his assertive and submissive inclinations. But the absence of early positive ego-identifications or the presence of over-developed suggestible tendencies precludes the development of such patterns. The individual therefore is always in the position of being forced either to yield to, or to resist the influence of, the other person or the situation. He is unable to react at an intermediate point on the ascendance-submission scale of social behavior. Since to yield would be to "over-yield" and to endlessly sacrifice the end of a sense of personal autonomy and individuality, he resists. That is, he reacts negativistically.

Regressive Reactions. Various definitions of regressive reactions or of regression have been offered. Morgan says regression is ". . . the tendency to solve the problems of life by reverting to childhood."[1] Wells states that "When a less important trend thus absorbs energy that, for the fullest life of the individual, should go to the furthering of fundamental trends, this is called *regression*."[2] And Pfister says, "If inner or outer conflicts obstruct a trend, the course of mental energy is turned back. It is expressed in various other trends. This backward turning is called regression. It is always a reversion to the infantile; and it is either (topically) a representation of childish fancies, feelings and strivings, or (functionally) a renewal of types of behavior which are adapted to an infantile stage of development."[3]

[1] Morgan, John J. B., *The Psychology of Abnormal People*, p. 507, Longmans, Green.

[2] Wells, Frederic Lyman, "Mental Regression, Its Conception and Types," *Psychiat. Bull.*, Vol. 9, pp 445-492.

[3] Pfister, Oskar, *Die Psychanalytische Methode.*

Early in life, let us suppose, a certain child develops a definite sentiment or motive-complex toward his mother; and we are able to determine the principal aspects of this sentiment by observing the child's reactions to his mother. Thus we observe that he reacts to her as to one who is superior to himself, one who is stronger, who knows more than he does, who can do many things which he cannot do. We also note that he reacts to her as to one who will protect him and feed him. He follows her about at times, climbs on her lap, and seeks her caresses. From such reactions and many others we are able to determine the nature of his mother sentiment. Now if we take this same individual when he has reached adulthood and closely observe his reactions to his mother, we shall have to conclude that his sentiment toward his mother is quite different from what it was when he was a child. He no longer reacts to her as to one upon whom he is dependent; he does not climb on her lap and coax her to rock him to sleep; there is nothing in his attitude that indicates that he attributes a superior knowledge to her—quite the reverse is perhaps true. In fact, many of his reactions to her are the opposite of his childhood reactions. He reacts to her now as to one who is largely dependent upon him; he makes her comfortable instead of looking to her to assure his comfort. His sentiment toward his mother must have changed very much. There is no indication of a close identification of himself with her; there is no evidence of any suggestible tendency toward her. And not only this but he expresses his affection for his mother in a very different manner, and he is more sympathetic toward her and he expresses his sympathy differently. Now, if for any reason whatever, he were to revert to his earlier patterns of reaction to his mother, giving no evidence of his more recently acquired reaction patterns, we should have a case of *regression, of regressive reactions.*

From a descriptive point of view it is possible to distinguish two types of regression. In one, there is a revival or restoration of the individual's early sentiments, interests, and

reactions. An example would be the case of the adult who regresses to the age of three, again eats with a spoon, shows interest only in toys, talks like a child, has a very limited vocabulary, and calls a puppy a kitty. Such an individual appears simply to have forsaken his more recently developed sentiments, habits, and ways of reacting for those which were specifically peculiar to him as a child. In the other type of regression the individual substitutes for his adjustive and adult levels of reaction, reactions of a childish caliber which, however, were never specifically characteristic of him. An example of this type of regression would be the instance of the person who turns to homosexual interests and acts when frustrated in his heterosexual aims, provided, of course, there is no history of homosexuality prior to the time of his heterosexual frustration; or the case of the person who because of frustration finally resorts to unlawful and dishonest means of gaining his subsistence, always previously having been honest and socially minded. But in principle and dynamically all cases of regression are similar and consist of abandoning ontogenetically higher level interests and reactions for lower level interests and reactions, of abandoning emotional maturity for emotional immaturity.

Regression may be generalized, involving all of the individual's interests and modes of reaction, or it may be specific and limited to only certain of his motive systems and their corresponding reaction patterns. One person regresses only in respect to his sentiments and attitudes toward members of the opposite sex. He renounces all interest in them and acquires a substitute object or reverts to an earlier mode of activity. Another individual regresses in all ways, psychologically. He becomes an infant again except for physical size. His adult interests and sentiments and even his adult level of intellectual capacity disappear.

All instances of regressive reactions do not indicate definite personality disorders. Regressive reactions over periods of short duration are by no means uncommon among essentially normal adults. The young woman's sweetheart does not

appear at the expected moment and she weeps. Weeping in an adult usually is to be regarded as regressive; it is a type of reaction which normally belongs to childhood. The football player is angered and strikes his opponent. Such a reaction is also more in keeping with the immaturity of the child than the maturity of the adult. Fearing he will fail the examination, the student cheats. Cheating in order to overcome a difficulty is not consonant with an adult level of reactions. The adult who stamps upon the stick which tripped him, or who angrily breaks the twig that switched him in the face, is guilty of regressive behavior, provided, of course, he ordinarily reacts on a higher level. Many of the pranks of college students, such as clipping hair, kidnaping the Freshman president, undressing each other, etc., are of a regressive character. Bathing, dressing, and fondling poodle dogs are often regressive, sometimes abnormally so.

Thinking as well as overt behavior may be regressive. Common examples are dwelling upon one's childhood days, fabricating stories for the purpose of impressing others, entertaining throughts of suicide as a means of avenging one's wrongs. Day-dreaming or autistic thinking is often regressive as well as compensatory.

The following cases are instances of abnormal regression.

CASE 4. Arnold Y., a young man of twenty-eight, college graduate and ex-football star, suffered a nervous breakdown following a frustrated romance. The father of Arnold's sweetheart forbade Arnold to pay further attentions to the young woman. The girl proved to be too little interested in Arnold or too submissive to her father's wishes to accede to Arnold's desire to elope. Arnold thereupon "hurried" back to childhood and to his mother. He became so timid and childish that his mother found it necessary to permit him to sleep with her. When he occupied a separate bed, even in the same room, he suffered from nightmares and terror dreams.

During the day Arnold played golf most of his time.

He manifested no interest whatever in members of the opposite sex,—except his childish dependence on his mother—and no interest in work. Otherwise he appeared to be quite unaffected. But later when he was forced to sleep away from his mother he attempted suicide by cutting his throat and jumping from a second-story window. He did not cut very deeply, however, and he was uninjured by his fall. At the end of a year's time following his attempted suicide, when he was submitted for treatment, he appeared cloudy minded and vague in his recollections of his broken romance. He incidentally made a complete recovery, married another young woman, and became a devoted husband and father.

Case 5. A young girl was in love and was very anxious to marry. The young man she loved was not ready to marry. He wanted to run around and have what he considered a good time for awhile before he settled down. This led the girl to fear the consequences of marriage with such a carefree youth and, aided by the disapproval of her fiancé expressed by her relatives and friends, she tried to decide that she would stay single. Yet she could not bear the thought of remaining single indefinitely. She was in a strange dilemma; she wanted to marry and she was afraid to do so. This led to the wish that she did not have any of the tendencies toward love life. If she were only a child again she would not want to marry and the trouble would be at an end. So she tried again to be a young innocent girl who knew nothing of love. She took the same attitude toward the whole affair that she would have taken when she was a pre-adolescent girl, and she seemed to get satisfaction from this for a time. When this satisfaction did not continue, her physiological maturity eventually forcing her to recognize that she was a woman, she attempted to commit suicide. After gaining insight into what she was doing, the girl adjusted her attitude, took a forward

view instead of wishing to revert to a childish stage, and has made a satisfactory adjustment ever since.[1]

The next case, one adapted from a report by Nicoll,[2] is more extreme than the two just given.

CASE 6. An officer of twenty after being taken prisoner under somewhat doubtful circumstances escaped and was interned. Soon after, there occurred a gradual loss of sight, hearing, and speech, the regression continuing till these functions were lost. Both arms and both legs also were affected; but he soon recovered the use of his right arm. The regressive movement continued till he was psychologically about twelve years old. After remaining stagnant for some time at this level, there was a further regression to the age (psychological) of five. "He called the servants by the names which had belonged to servants who had been in the house when he was five. He called his younger sister by the name of his eldest sister, etc. His speech was infantile. He lisped and used phrases and recalled incidents that his mother remembered only with difficulty. He remained at this level of regression for about two weeks." Following this period the patient gradually regained his sight, hearing, and speech and he "grew up" to about the age of seventeen; but his left arm and legs were still paralyzed.

Interpretation of Regressive Reactions. Since an individual's habitual reactions are a direct and immediate expression of his mental integrations—his sentiments, attitudes, ego-identifications—we must think of regression as somehow involving or affecting these integrations and of regressive reactions as the resultant of the subjective change which has taken place. We know that ordinarily the adult's senti-

[1] Morgan, John J. B., *The Psychology of the Unadjusted School Child*, pp. 145–146, Macmillan.

[2] Nicoll, Maurice, "Regression," in Miller, H. Crichton, *Functional Nerve Disease*, pp. 102–105, Oxford.

ments and attitudes toward the various aspects of his environment are very different from what they were when he was a child. And we are forced to assume that the sentiments and attitudes of childhood become slowly transformed into those of adult life. That the average individual has a hierarchy of sentiments corresponding to the different periods of his development is wholly untenable. Yet, unless this is so, how is it possible for an individual to revert to the sentiments and attitudes and therefore to the reaction patterns of childhood?

Dynamically viewed, a sentiment, an attitude, or an ego-identification is a disposition of the organism which facilitates energy displacement in a given direction or manner; it is a disposition or a readiness to feel and think about a fact. But descriptively or objectively a mental integration (sentiment, attitude, or ego-identification) consists of a hierarchy of reaction patterns to a fact. In the course of development the dynamic aspect of a sentiment may change but little or a great deal; the individual may cease to love one object, for instance, and come to love another, or he may continue to love the same object, but the objective aspects of a mental integration usually change considerably. This change consists for the most part of the acquisition of new reaction patterns, of new ways of expressing the sentiment. However, in the acquisition of new reaction patterns the individual does not lose his capacity for reacting in the old ways. To illustrate: A given man has a strong love sentiment for his wife. The sentiment is expressed in particular through the man's efforts to safeguard his wife's future well-being and happiness. He subscribes to life insurance, builds a home, etc. Then the man regresses. His reactions to his wife are now of a quite different order. He expresses his affection for her by kissing her, by buying her ice cream cones, and doing little things for her about the house. But note this: Before his regression the man was not incapable of these reactions which are now so characteristic of him. In fact he used to caress his wife, bring her a

cone occasionally, do something about the house for her. But such reactions originally constituted but a minor part of his total reactions (and energy expenditure) to his wife, whereas now all of his reactions are of this nature. Hence we see that his regression has merely brought about a displacement of energy from more mature and adjustive reactions to less mature and less adjustive reactions.

In case of extreme regression there may be a complete functional abolition of a sentiment and a disappearance of all of its corresponding reactions patterns. And, if we are to gain insight into the nature of regression, we must enquire into the dynamic factor which is responsible for it and into the mechanisms whereby regression is effected. McDougall has suggested, and we think correctly, that fear is the dynamic factor in regression.[1] It is well known that strong fear may paralyze action and completely "inhibit" thought and memory processes; and the history of every case of regression reveals a fear episode, either fear of physical injury or death, or fear of loss of personal identity, fear of a self-effacing subservience toward someone else. Regression follows thwarted love affairs only if the individual's pride and self-respect are involved and if a conflict occurs between these ego-ideals and his inclinations to submit to an unusual degree to his partner's demands. In his regression the person is implicitly declaring the difficulty never to have arisen, to be nonexistent, and in order to do this he has to renounce all interests, values, and reactions which are in any way related to the difficulty.

Thus we may recognize the process of regression as somewhat analogous to the process of inhibition. There are certain vital differences, however. In the case of inhibition the individual preserves his personal values or ego-identifications and the conflicting motive is forced into acceptable patterns of discharge. In the case of regression the situation is so acute and unmanageable that fear is aroused and becomes the "inhibiting" agent. Under the influence of fear per-

[1] McDougall, Wm., *Outline of Abnormal Psychology*, pp. 294–296, Scribner's.

sonal security becomes the main or sole objective. The superstructure of the individual's system of ego values is sacrificed to the foundation stones of personal safety. The individual gives up all attempts to solve the problem which has arisen and flees to the safety of the simpler life of the child.

This does not explain, of course, how this renunciation of adult interests, sentiments, and reactions is effected. The person who has suffered regression does not continue in a state of fear. What is the nature of the permanent barrier to adult thought, feeling, and action? We can only frankly admit that we do not know. There is some evidence that there is a continuous mental activity, perhaps largely subconscious, which maintains a deflection of mental energy into the infantile reaction patterns to which the individual has reverted, and that where entire sentiments have been abolished, the attention (energy) is automatically diverted the very instant it tends to "revive" thoughts or feelings which constituted the sentiment. But whatever the inner mechanisms are, whereby attention and interest are maintained on an infantile level and away from adult levels, we may safely regard regression as the most complete form of implicit retreat from a difficulty.

Infantile Reactions. *Regressive reactions are infantile reaction but all infantile reactions are not regressive.* Some persons fail ever to reach a normal or adequate level of emotional maturity; they remain infantile or childish in their interests, sentiments, and attitudes. Their reactions are correspondingly infantile.

Emotional maturity is as important to the adjustability of the individual as intelligence and knowledge. Human relationships are feeling and emotional relationships. And though one be a giant in intellect he still may be a child in his emotional reactions to other persons.

CASE 7. Frank T., twenty-four years old, is of superior intelligence and has completed two years of college. He is married and the father of one child. Frank is a path-

ological liar, and his major goal in life is to impress others with his own importance. He tells that he has hunted big game in Africa, that he has been a deep sea diver, that he attended a foreign university, and that he delivered his wife of her baby. The attending physician, who arrived late, told him that he had never witnessed such a perfect delivery in his thirty years of practice. Frank says he has prepared a textbook in organic chemistry for college students. Of course, Frank has never hunted game, attended a foreign university, or been a deep sea diver. He was absent at the time his wife gave birth to her baby and he has no book of any sort on chemistry. He has lied so much he is no longer certain when he is telling the truth.

Frank has never contributed to the support of his wife or child. He says he regrets this fact very much and he weeps when you ask him if he loves his wife and baby. He bemoans the fact his wife will not live with him since he sometimes catches cold during the night, as there is no one to see that he is properly covered. Frank says his idea of an enjoyable evening is to cuddle down in his wife's arms and go to sleep.

Emotional infantilism ranges from the existence of one or two infantile traits in the essentially mature person to such pathological instances as the one we have just described. And a person may react in a very mature manner to certain situations and in a distinctly childish manner to others. The hard-headed business man is often child-like in his reactions to his wife or to the Broadway show-girl. The trained scientist may become painfully sentimental when he undertakes to write a novel. The young wife sometimes weeps and runs home to her mother the first time her husband crosses her. There was the college professor who always stood rigidly at attention while delivering a lecture.

Particularly in the fields of psychotherapy and mental hygiene it is always important to distinguish between regres-

sive reactions and infantile reactions. The grown man who is sitting on the floor playing with toy trains while his wife or child is ill may be suffering from regression or he may never have developed beyond such a level. If he has regressed, it will not usually be difficult to help him to regain his lost reaction patterns; if he has never reached a level of emotional maturity beyond that of the small child, it will be a long and tedious task to bring him up to adulthood.

Summary. Perseverative reactions to difficulties stand in sharp contrast to trial and error reactions and, of course, are non-adjustive. They are not, however, distinctly *maladjustive;* they do not obscure the difficulty and they are efforts to adjust. Negativistic reactions at one and the same time are denials and admissions of the difficulty. Possibly, as some believe, they betoken an older phylogenetic mode of reactions in which the individual simply remained quiescent till the difficulty (danger) passed, such as the squatting reaction of the rabbit when the coyote approaches. Negativistic reactions to everyday social situations hold out even less promise of an eventual adjustment than perseverative reactions. Regressive reactions are implicit flights from the difficulty. They constitute a denial of the difficulty and therefore become maladjustive rather than merely non-adjustive. Infantile reactions are inadequate reactions; they are underreactions in the sense that they result from a failure of the individual to encompass fully the true nature of the situation.

In the following chapter we shall discuss some of the most maladjustive of all reactions to difficulties.

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CHAPTER VIII

COMMON MODES OF REACTION TO DIFFICULTIES *(Concluded)*

MALADJUSTIVE REACTIONS: REPRESSION; SELF-REPUDIATING REACTIONS; PROJECTION; UNDOING

Repression. We may best approach repression [1] by comparing it carefully with inhibitory reactions. Although many writers in the field of psychology confuse these two modes of response to difficulties and regard them as one and the same, the difference between them is the difference between mental health and disease, between mental integration and mental dissociation. Repression is not necessary to mental health and social adjustability; inhibition is.

Let us list the more characteristic features of inhibitory reactions and in each instance determine whether or not repression is similar or dissimilar. And where they are dissimilar we shall also note their respective bearings on the adjustability of the individual.

(a) An inhibitory reaction may be thought of as the shunting of a motive into patterns of reaction other than those which the motive would take were there no inner interference. (b) This shunting of the motive results in a pattern of activity which is different from that to which the motive most specifically and strongly inclines the individual. The only difference to be pointed out so far is that usually the activity to which an inhibited motive leads is less disparate or diverse from the activity to which the motive "normally" inclines the individual than in the case of the repressed mo-

[1] The present writer suggests the adoption of the term "repressive reaction." The term "repression" signifies a static and not a dynamic event. Similarly the term "projective reaction" should be adopted and used frequently in place of the word "projection." However, he deems it best to comply with established usage in the present book.

tive. The reason for this difference will become obvious in a moment. (c) To inhibit is to reject; to repress is to deny. (d) From (c) it follows that upon the subsequent arousal of a motive by a situation similar to that in connection with which it has been previously inhibited, the individual will be cognizant of the motive, will correctly identify it, and will again consciously experience its qualitative aspect (feeling or emotional tone). But if a motive has been repressed, then although it is again aroused by a situation similar to that which occasioned its repression, *the individual will not be cognizant of the motive as such, he will not correctly identify it and he will not experience its qualitative aspect.* And herein lies the tremendous and significant difference between inhibitory and repressing reactions. Once a motive—a sentiment, an attitude, a feeling, an inclination—has been repressed it still participates as a determinant in the individual's thoughts and actions, but indirectly. The individual has lost conscious and correct knowledge of this aspect of his motivation and therefore *is not capable of exerting a normal degree of control over it.* (e) The individual tends to inhibit when the unacceptable motive is not *too* disparaging of his ego-ideals, or when the motive is not *too* powerfully aroused, or when the motive is not *too* suddenly aroused. He tends to resort to repression on the other hand if the motive is too incompatible with his ideals or self-regard, if it is too strong, or suddenly and unexpectedly aroused. (f) A motive which has been inhibited tends upon being subsequently aroused to incline the individual to the same originally rejected reaction pattern. But when a motive has been repressed it does not *appear* to be susceptible of arousal by subsequent similar situations, and when aroused, it does not *appear* to incline the individual to the originally rejected reaction pattern. (g) An individual has more control over a motive in relation to the reaction pattern to which it immediately and specifically inclines him than he does over any other pattern which the motive may assume. For instance, an angry person has a strong impulse to strike the person who angered him. But he is more capable

of rejecting the act of striking than he is of his trembling which follows or of effacing the sequence of angry thoughts which course through his mind. Thus since in the case of repression the repressed motive, when aroused, immediately assumes some secondary and fairly disparate reaction pattern, the individual is able to exercise but little control over the motive.

A careful study of the following case of repression will further clarify some of the points which have been made. The case is adapted from a report by Hamilton.[1]

> CASE 8. A woman in her early thirties was troubled by the following symptoms: A haunting sense of craving something intensely, without which life seemed utterly bleak, but with no idea as to what it was she craved; a persistent feeling that she had nothing to live for; attacks during which she felt weak and feared that she would die for the lack of the will to live; fear of suicide; she was sometimes afraid to go to sleep; a lonely, depressed feeling which came over her in waves. Except for these symptoms, which she was wholly unable to account for, her life was entirely satisfactory.
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> A study of her case brought out some interesting and significant facts which she had completely forgotten. When she was twelve years old she went to the city to live with her childless aunt and uncle that she might have the advantage of better schools than those near her home. One night her uncle came into her room after she had retired, ostensibly to close the window. He sat down on her bed and commenced to fondle her. After he had gone she felt somewhat ashamed but had, nevertheless, been pleasurably stimulated by her uncle's actions. Thereafter he habitually came into her room at night, gradually taking more and more liberty with her. She both resented and welcomed his attentions. Finally she awakened one night to find her uncle in the act of

[1] *Op. cit.*, Case 1.

attempting to seduce her. Immediately her whole nature rose up in revolt. The whole affair with her uncle suddenly struck her as being overwhelmingly nasty, immoral, and disgusting. At this time she was fifteen or sixteen years of age. From that time on her whole attitude toward sex was radically different. For the next few years she took great delight in demonstrating her total lack of susceptibility to sexual stimulation, mixing with a group of morally loose young people but remaining absolutely frigid and a virgin without making the least conscious effort to do so. Later she decided to break away from her immoral associates and lead a more conventional life. She married a man of whom she became very fond and whom she respected very highly. After her marriage she was surprised to find herself sexually anaesthetic. She submitted to the advances of her husband out of a sense of duty but not without a certain degree of repulsion. Gradually the symptoms developed which have been mentioned.

This case is very instructive concerning the matter of repression. This patient's relations with her uncle when she was a girl were of such a nature as to arouse the sexual motive on the one hand and strong ego-motives on the other. Her feelings of shame, guilt, and disgust which followed each experience were egoistically engendered self-reproaches and resulted from the fact that her sexual acts and interests infringed upon her ego-ideals of personal purity and chastity. Thus each visit of her uncle occasioned an ego-sexual conflict. Sexual inclinations were partially inhibited each time; and with each repetition of the experience her sexual motives assumed the same partially adequate reaction pattern. On each occasion she was fully aware of her sexual inclinations and of her egoistically effected resistance. But finally things were brought to a crisis, partly, perhaps as a result of a gradually increasing moral (egoistic) resistance, but largely because of the sudden approach of her uncle and of her own

half asleep state. These last two facts created an emergency situation, calling for an immediate and definite solution of the difficulty, of the conflict situation. The patient thereupon resorted to repression instead of inhibition; she violently renounced and denied the very existence of her sexual motives.

That sexual interest was repressed and not merely inhibited in this case was clearly shown by several facts: The patient became frigid, totally indifferent to sexual stimulation; she completely forgot her experiences with her uncle and was able to recall them only with considerable difficulty. Finally, the symptoms which she had developed disappeared with the patient's recollection of her past experiences and with her comprehension of the causal connection between these experiences and her symptoms. The symptoms may be regarded, in this particular case, as substitute reaction patterns for her conflict of sexual motives and her resistance to them. When she *tended* to become sexually aroused she reacted symptomatically instead, because of an enduring barrier (resistance) to her sexual motives, assuming a natural pattern of discharge. This resistance was overcome only with the aid of her psychotherapist.

The reader must be careful not to assume that a repressed motive amounts merely to a dormant motive, that is, to a motive which is not susceptible of arousal. A repressed motive is susceptible of arousal and becomes aroused but due to an inner resistance which emanates from egoistic motives which are antagonistic to it, it is kept from assuming its natural or original pattern of expression. When aroused it becomes discharged in symptomatic, indirect, and vicarious manners. Often, apparently through a process of drainage,[1] the energy of the repressed motive actually becomes directed against its own ends. Thus the sexually repressed person who becomes a crusader against sexual immorality is nevertheless occupying himself with the matter of sex and is thereby implicitly exercising his sexual inclinations but in a negative manner.

[1] See, for instance, McDougall, *op. cit.*, pp. 228–230.

We have seen from our preceding example of repression that if a motive is strongly repressed the individual no longer experiences its true qualitative aspects. Yet, we have said that a repressed motive not only becomes aroused but *tends* to assume its natural or original reaction patterns. What then prevents the individual's experiencing the qualitative aspects of a motive when it is aroused even though there is resistance to the activity to which the motive inclines him? It is because of the form taken by this resistance. Thus in the case of the woman cited above whenever sexual desires were aroused they "pushed" to the foreground of her conscious implicit activities the resistance which took the form of a feeling of disgust or a feeling of helplessness. But disgust is disagreeable and inclines the individual away from the fact which arouses it, whereas sexual excitement is agreeable and inclines the individual toward the fact which stimulates it. It is difficult to feel pleasantly and unpleasantly disposed toward the same fact at the same time. The feeling of disgust came first and therefore tended to preclude a pleasurable excitement.

Repression may affect only certain ones of the various reaction patterns belonging to a motive. Thus in the case of sexual repression, for instance, the preparatory reactions of the total pattern of sexual activity may be unaffected whereas some partial pattern of the consummatory activity may be completely lost to the volitional control of the individual. Such is usually the case in sexual impotence in men and often is true of sexual frigidity in women. And not only are many of the partial reaction patterns left unaffected but their normal feeling or affective component is likewise preserved intact. In brief, an individual may be normally responsive to caressing or "petting" and yet be incapable of participation in the consummatory sex act even under ideal conditions.

Repression may affect reactions of a certain order to one particular person or to one specific type of situation and not to other persons or to other types of situation which arouse the same motive. A man may be impotent with respect to

one woman and not to other women, or a woman may be frigid to one man and not to other men, and this irrespective of his or her conscious wishes and judgments.

Repression may affect motives and reactions other than those of a sexual nature. The emphasis of psychoanalytic literature upon sex and upon the process of repression has encouraged a belief among many persons that only sexual interests ever become repressed. *Repression may involve any motive.* There is a condition known as *anorexia nervosa* in which hunger is repressed. The individual experiences no desire for food and if forced to eat he (she) develops a positive aversion to food. Egoistic motives or aims are frequently repressed as well as inhibited. The repression of suggestibility conduces to negativism, and of sympathy, to callowness. Even affection often suffers the fate of repression; while fear was all too commonly repressed by soldiers during the World War.

Repression may result in mental dissociation. If a motive is merely repressed, not dissociated, there continues to be at least a slight leakage into the pattern of reaction to which it originally led; the drainage is not complete. Perhaps a part of the original pattern is retained, or perhaps the entire pattern becomes restored implicitly on certain occasions, or perhaps there is a vague idea in the background of the individual's mind as to what he is actually inclined to do and feel, or perhaps the leakage manifests itself in some other way. But in the case of mental dissociation there is no leakage; the functional separation of the motive from the mental integration of the individual tends to be clear-cut and complete. Note carefully the following case of mental dissociation given by Janet.[1]

> CASE 9. Here is an hysterical woman, Leg., who has led a very eventful life, and has had several very dramatic adventures, capable of upsetting her mind and filling her head with those fixed ideas that lead to somnambu-

[1] Janet, P., *Major Symptoms of Hysteria*, pp. 61-63, Macmillan.

lisms. One day, at the period of her menstrual discharge, she had searched her lover's desk and had found a letter that confirmed her suspicions, showing her that he had deceived her. She fell into a great passion; her menstrual discharge was stopped, of course, and she had a crisis of delirium in the form of monoideic somnambulism, during which she acted the scene over again. Another day, as she was taking a walk with her lover, she had been surprised by a violent storm and frightened by a very loud thunderclap. Her lover, it appears, had not proved courageous, and had not been equal to the task either of reassuring her or of finding a shelter for her. She got terribly angry with him, had a violent crisis of somnambulism, during which she heard the thunderclap, fainted, and then made a scene with her lover. That, again, is quite simple and conformable to the rule. Now a third story. One day, again at the period of her menstrual discharge, she stole a revolver, placed herself in ambuscade on the roadside, and saw a carriage pass by in which was her lover with her rival. She shot at them, and fell back in a crisis of delirium. Other adventures happened to her, the result of which was the same.

After all these accidents, she was admitted into the hospital, and nearly every day, on the slightest occasion, she falls into crises of delirium. These crises begin at hazard, by the recital or by the acting, as you please, of one of her adventures. She has a haggard look, trembles, and puts her hands before her face with an expression of violent terror. She shuts her eyes as if before flashes of lightning, and acts the scene of the storm; then, suddenly, without awakening, her face takes on another expression. She seems to be looking for keys, breaks open drawers, reads letters, utters shrieks of fury. Lastly, her hands grasp an imaginary revolver, she looks out at the window with an infuriated air, pulls the trigger, and falls back in a fainting fit. These three scenes and others quite like them begin over and over again indefinitely,

succeeding one another, but not always in the same order. They may last for hours together. That is again a somnambulic state. The mind is likewise concentrated on one idea, and remains closed to external things.

In the case of the young woman just described there was no recollection during her waking state of these reënactments of former experiences; nor was there any recollection of the original experiences themselves. Thus we see that there must have been a complete separation (dissociation) of these particular systems of thought, feeling, and action patterns from the rest of her mental constitution. And this being the case, when these reaction patterns became strongly activated all other reaction patterns became automatically suppressed for the time being.

In other cases dissociation involves not a system of motives and sentiments but simply some function. And where this is true there is no alternation of dominance of the bodily mechanisms of the individual by the dissociated system (function) and the personality integration. The dissociated function either occurs automatically with little or no infringement upon the conscious intents and purposes of the individual or the function remains in abeyance. In certain instances, at least, of this type of dissociation there appears to be some question as to whether the dissociation is preceded by repression. Note the following case cited by McDougall.[1]

CASE 10. A sergeant, fighting on Gallipoli, stooped to pick up a bomb which a Turk had hurled at him, intending to hurl it back at the enemy. As he reached for the bomb it exploded. He was not wounded or stunned; but he opened his mouth widely (without doubt as the first step in the natural fear reaction of uttering a cry), and then found that he could not close his mouth or withdraw his tongue, which remained protruding. After some hours his tongue gradually withdrew and his mouth closed; but he was then completely mute; he

[1] *Op. cit.*, p. 237.

could not utter a sound. He remained mute for months, and proved to be a most obstinate case of mutism, defying all my efforts, and only very gradually learning to speak again.

In regard to this case McDougall concludes that dissociation occurred in the absence of repression, inasmuch as it appeared spontaneously. It is not unreasonable to suppose, however, that this soldier already had repressed fear and that the emotional shock occasioned by the exploding bomb effected a dissociation on the basis of an already existing repression. If he actually uttered a cry, thereby giving vent to his sudden fear, dissociation should not have followed; and if he did not utter a cry, then there must have been some existing barrier to his giving expression to his fear. But the point is of little more than theoretical interest and we still may say that dissociation usually, at least, is preceded by conflict and repression.

Interpretation of Repression. Why does one repress? Why do we not simply inhibit our unacceptable impulses and emotions? What sort of person (personality) is most likely to resort to repression?

We recall that repression is not only a rejection of a motive to action but is a denial of the existence of the motive. Obviously repression is a reaction which is in the service of the maintenance of the integrity of individuality, of self-regard. Among persons who are prone to repress their objectionable impulses, then, we may cite at least two classes: Those who have an inadequate sense of moral fortitude in relation to the strength of their self-damaging proclivities, and those who are egoistically unusually devoted to ideals of personal uprightness. A certain young woman is intelligent and fairly educated, but she failed to develop adequate reaction patterns to other persons, particularly to members of the opposite sex. Literally, she does not know what to do when alone with a man; she feels unorientated. This tends to leave her so dependent upon and readily compliant with any suggestion

or wish which the man might express that would appeal to her racial (non-ego) proclivities that she hastens to deny to herself all feeling, emotion, impulse in such situations. In other words she denies (represses) in order to secure herself against possible damage to her moral integrity, sense of individuality. She suffers from a lack of strong positive ego-identifications with specific ideas of the woman's role in man-woman relationships; to her such relationships are an unexplored, unknown, and untried world.

Some persons are so strongly identified with ideas of personal integrity and strength of character that they are intolerant of any fact which tends to defile their unblemished pictures of themselves. They therefore do not wait to examine and then simply to reject a motive or impulse which is antagonistic to their ego-identifications; they denounce and deny such a motive or impulse outright, as in the case of the young man who was discussing with his psychotherapist a dream which he had. Without preliminaries his psychotherapist asked him what his mother made him think of. Before the young man could catch himself he replied, "A witch." Whereupon he immediately leaped from his chair and violently disclaimed any such thought or feeling toward his mother. Some time was required to quiet him and to induce him to examine frankly this thought which had come to his mind. He finally admitted that his mother had always exercised a witch-like influence over him. But that he was a man who actually could regard his mother as a witch was more than he had ever been able to tolerate. But self-frankness usually modifies one's opinion of himself.

The extraverted person appears to be more inclined to repress his undesirable motives and thoughts than the introverted person. In the present writer's opinion this results from the extraverted person's more shallow consciousness. He is far less familiar from childhood on with the world of personal thoughts and feelings and impulses and is therefore left freer to construct an ideal set of ego-identifications. His objective orientation enables him to elect a fairly definite

line of conduct in relation to his environment. He tends to deal in the same manner with inner interferences with this elected line of behavior that he deals with external interferences; he seeks to eliminate or to ignore them. If necessary he denies their existence. And he is enabled to react in this manner because of the shallowness of the consciousness of his activities. He is not acutely enough aware of his own impulses to be forced to attend to them; he is able to ignore them, even to deny them.

Self-repudiating Reactions. There is a certain class of reactions, as yet too little noticed by writers in abnormal psychology and psychiatry, which stand in sharp contradistinction in a fundamental respect to most of the modes of reaction which we have discussed. The reader has perhaps had but little difficulty in recognizing that most of the reactions mentioned are motivated for the most part by the individual's desire to secure and to further enhance his own personal existence, his personal identity, his sense of individuality. The individual compensates in order to achieve an equality with others or to arrive at a position of superiority; he rationalizes in order to gain an added sense of importance while maintaining what he has; he perseveres in order to reach some goal of personal value; he reacts negativistically and does nothing rather than to take a loss at the hands of the influence of another; he regresses in order to escape some situation which he feels is about to efface him as an autonomous and free entity; he represses in order to maintain his choice ego-identifications. But there are individuals among us who do none of these things nearly to the extent and with the intensity that they repudiate themselves—their worth to others, their value to themselves, even their right to live. Why does a person refute his own existence? Why does this woman sit in the wards of the hospital and plead with others to put her to death because she is utterly worthless, a danger to others, and should not be permitted to live? One might answer: "Because she has a sense of guilt." But what is the psychological meaning or significance of a sense of guilt in

a person who has never harmed another person, who has been a faithful wife and mother?

We have observed that there are many different forms of reaction which are in the service of individuality, egoism. Are there no reactions characteristic of the human individual which are opposed to egoism, opposed to the goal of self-aggrandizement? There are many such reactions but for the most part their significance has been overlooked. Perhaps we do not like to study the ways in which we choke our own efforts and ambitions, once our ambitions have become too exalted and have laid claim to too much of our energy. We are all aware that the group devises ways and means of checking exaggeratedly selfish tendencies in the individual; but we have failed to see clearly that the individual himself reacts against his own selfishness, and this not merely as a result of his moral training but because of some egoistic-racial coördinating principle within his own inherent constitution.

The old gentleman, previously mentioned, who yearned to have New York City turn out in a parade for him, complained that he could not practice at a piano even when alone, for every time he attempted to play, his hands trembled so violently that he was unable to execute even the simplest tune. He wondered why this was. *It was because he had become slavishly devoted to the single end of his own renown.* A very ambitious young man went to New York to win his fame and fortune. He admitted that he had no friends and said he wanted none till he had won success. He regarded women as stumbling blocks to one's success, carefully to be avoided. He was selected by a large organization to be trained, with pay, for a permanent position. Everything went nicely till a week before his final examinations, when he began to fail in his work. He said there was something uncanny about the persistence with which he made mistakes, that he was not nervous, that he seemed to make the mistakes deliberately. With the approach of his final examinations and a permanent position he was becoming

engulfed in his self-glorifying phantasies. His mind reacted against his *exalted* aspirations to personal attainment. The reader may recall the old sandwich man who suddenly believed he was God upon the occasion of a bit of good fortune. And he may recall the story in Scriptures wherein God changed the languages of the men who were building a tower to Heaven, because it was wicked (unpardonably selfish) for them to ignore racial claims to their energies and to aspire to only personal salvation. Where reality or the group fails to provide sufficient restraints upon the individual's egoistic aspirations, the individual himself may be forced to do so. Observe carefully the following case.

CASE 11. Philip T. was the eldest of three children by immigrant parents. He was born and reared in New York City's lower East Side. He was intelligent, rather strongly introverted, and had received a grade school education. When Philip was ten years old his father died and Philip thereupon voluntarily assumed additional responsibilities in relation to his mother and siblings. He always gave whatever money he earned to his mother, of whom he was very fond. He passed his examinations and joined the police force at the earliest age at which applicants are accepted. Shortly thereafter he became one of the best marksmen of the entire force.

Philip had his first heterosexual experience when he was seventeen years old. Thereafter he associated freely with women, gambled and drank, and enjoyed a high degree of self-satisfaction. At the age of twenty-three he met and became enamored of a young woman of his own age. He could not bring himself to propose marriage to her, however, for he could not give up his easy "come hither go thither" personal freedom and autonomy. For although he was fond of the young woman he was profoundly self-centered. The woman grew weary of his half-hearted attentions and married. This proved to be a severe blow to Philip's sensitive ego. He re-

nounced all women except as means of personal gratification and took more heavily than before to gambling, drinking, and associating with immoral women. And then, much to his chagrin, he began to suffer from sexual impotence, which fact one day occasioned an offensive and disparaging remark by a woman acquaintance of low moral caliber. Almost immediately Philip began to suffer daily from a painful self-consciousness and self-repudiating thoughts. He came to believe that men regarded him as being effeminate in appearance. He was scarcely able to patrol his beat, or to meet the glance even of a perfect stranger. Then suddenly, *the idea that his genitalia were atrophying* took possession of him. He stoutly contended that such actually was true and he complained that there never was a moment of his waking life that the conviction was not with him.[1]

At first glance it may seem that Philip became the victim of suggestion, that the woman acquaintance's remark took an unbreakable hold upon him. But upon second thought such could not possibly have been true. He already had become (functionally) impotent, and as other facts clearly revealed, *he took possession* of the idea which the remark suggested to him. But why?

Interpretation of Self-repudiating Reactions. After two months of psychotherapeutic treatment Philip had lost his painful belief, he again was able to meet the glances of friends or strangers, and he walked without concern past the house where his former sweetheart lived. He was strongly advised to continue the treatment for another two months. This, however, he refused to do, arguing that there was no longer anything wrong with him. *And then, six months later Philip was an incurable paranoiac, boasting that there was something about him which rendered him infallible and unconquerable.* Nothing, he said, could stand in the way of his gaining whatever ends he might aspire to. Now perhaps we are in a position

[1] Adapted from *Auto-Correctivism.*

to comprehend the significance of Philip's previous self-bombardment with the idea that he was losing his manhood, that he was far less a man than the most inefficient street sweeper. *Obviously the idea stood between him and the insanity which he later developed;* it was an idea which he utilized to hold in check his pathologically exaggerated aspirations to God-likeness.

Like a tree the human mind strives toward balance and coördination—balance of effort toward racial and egoistic ends and coördination of its energies toward multi-meaningful objectives. *If too much of the individual's energy becomes egoistically orientated, his mind tends to react against continuation of effort along this single line of endeavor.* The ancient conception of the Devil against whom all are supposed to fight is nothing more than an abstraction of human selfishness.

Self-repudiating reactions may occur on the motor, sensory, or ideational level. In subsequent chapters we shall have occasion to examine instances belonging to each category.[1]

Projection. Projection is a distinctly maladjustive and abnormal mode of reaction and consists of the individual's localizing in another person some intolerable motive, desire, wish, which is active in himself. Often it is a tendency to self-repudiation that is projected. An individual is strongly inclined to self-reproach and self-disparagement because of an exaggerated egoistic thirst, or because of past acts or present wishes which are egoistically intolerable to him. Now if he is to project he must be conscious of this tendency or of its feeling or emotional tone. But because of his refusal to accept the tendency or feeling as his own, one might say that he is simply conscious of a feeling of reproach; "reproach is in the air" and since it originates within him, he perceives it as directed toward him. He thereupon localizes it in some other person who directs it to him.

Projection is usually if not always preceded by unsuccessful or incomplete repression. If the individual could have suc-

[1] A more complete analysis of self-repudiating reactions will be found in the author's book, *Auto-Correctivism*, Caxton Printers, Ltd.

ceeded in repressing his tendencies, in shunting them into egoistically harmless avenues of discharge, he would not have been annoyed by the tormenting impulse or feeling and therefore would not have been forced to a further conscious concern about them.

The reader must be careful to distinguish between projection and identification and between projection and rationalization. In the case of identification, even over-identification, the individual is seeking to incorporate within himself, within his personal meaning in life, some fact of significance; whereas in the case of projection the individual is seeking to rid himself of some egoistically (personally) disturbing fact. Thus one identifies with the important, the superior, while one projects the undesirable.

In the case of rationalization one attributes another and false meaning to his motive or inclination. He accepts the inclination as his own but conveys to it a meaning or aim which is wholly acceptable to himself. In the case of projection he denies the motive or inclination and attributes it to someone else.

A careful study of the following case of projection will render these distinctions more clear.

> CASE 12. Oscar T. was a young man of twenty-two, a college student of superior standing. He lived with his widowed mother; there were no siblings.
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> Oscar complained that men spat at him as he passed them on the street. On one occasion he decided to test the accuracy of his observations. He planted himself in a doorway and carefully noted the reactions to himself of each man who passed. He declared that without exception each man who passed him spat at him.

Oscar was not rationalizing, and of course he was not identifying himself with the men he believed were spitting at him. And since no one actually was spitting at him, obviously he "was spitting at himself." In other words he unknowingly felt that he was the sort of person whom others

might readily treat with contempt. He felt that he should be spat upon, but did not recognize this feeling as originating within himself. There was something about himself which he could not accept; but he was unable to admit this something as belonging to him. And since he could not ignore it (repress it completely) he localized it as an attitude or feeling of others toward him.

Interpretation of Projection. Why does an individual project his impulses on to another person? That projection is an egoistically perpetrated activity there can be no doubt. First of all one projects only those motives which to him are reprehensible. He projects a sense of guilt, a sense of moral uncleanliness, or a sense of inadequacy. In short, he projects only that which is egoistically damaging or intolerable. But projection is often a secondary reaction to a difficulty. The first reaction may be either repression or a self-repudiating reaction. Where the initial reaction is repression, the reaction is unsuccessful from a subjective point of view. Through the act of repression the issue is obscured but the affect, the emotional element, remains conscious. Under the weight of the unpleasant affect, and because its ideational content has been more or less obliterated through repression, the individual projects or attributes his distress to inclinations in others.

Where the initial reaction is a self-repudiating reaction—and it is probable though not certain that all instances of projection proceed from such a source—we are introduced to one of the most intricate of all activities of the human mind. Because of exaggerated egoistic strivings, which if unchecked would endanger the mental integrity of the individual, a self-repudiating or self-disparaging reaction is made. But this reaction meets with an unadulterated egoistic personality constituent, a rigid intolerance of the self-disparaging motive. In other words *egoistic bias wins over balance* with the result that the individual frees himself of his feelings of disparagement. Egoism is set free. This is the road to paranoid insanity.

Undoing. Still another mode of reaction to difficulties and one which is distinguishable, at least descriptively, from

those we have mentioned has been termed "undoing." Undoing is a repentance-absolution procedure carried out symbolically and without the individual's knowledge of the significance of his acts. Many persons repent for past "sins" and become absolved with a clear idea of the intent and purpose of their acts. But in the case of undoing, the individual's acts are of a compulsive nature and he is quite in the dark as to their meaning. He does, however, frequently rationalize his acts, that is, he invents a reason for his acts. The reason which he invents is never, of course, the true reason.

The following case, cited after Frink,[1] is an excellent example of undoing. In a subsequent chapter we shall mention other cases.

> CASE 13. A young unmarried professional man of high morals and good education began quite suddenly to suffer from compulsive acts and self-reproaches. He purchased a hat one day but had hardly left the store before he was assailed with doubts and scruples as to whether he should have bought the hat. He started to return the hat but before he had reached the store a strong feeling that it would be wrong to do so came over him. He thereupon decided to keep the hat but was again assailed with the feeling that such a thing would be wrong. In the end he returned the hat. Another time he went to the bank for a check book. No sooner had he left than he felt that he had done wrong to get the book, that he must return it. One day a friend suggested that he join a certain regiment. Without thinking about it seriously, he replied: "Well, perhaps I will join before long." Soon after leaving his friend the thought came to him that he should not have said what he did to his friend. He could not rest until he had got in communication with his friend and retracted his words. Then it occurred to him that he should not have retracted his words, that he should after all join the regiment. In two or

[1] Frink, H. W., *Morbid Fears and Compulsions*, pp. 172-176, Moffat, Yard.

three days he got in touch with his friend and communicated to him his change of mind. Then the former set of reproaches returned so that still later he had to retract this decision, etc.

Although this young man was strongly devoted to his family at the time of these compulsions, an analysis revealed that when he was a small boy he had been subject to unusual fits of anger and rage, was jealous of his brother—whom he wished dead and once nearly killed in a fit of anger—and was inclined to be cruel toward other children. These tendencies had been strongly repressed because of the extreme disfavor with which they were viewed by his parents. Just previous to the beginning of his compulsions he had had an unhappy love affair which aroused considerable resentment not only toward his sweetheart but also toward his father. Thus the tendencies which had been repressed since childhood were aroused; he wanted revenge, he wanted to murder someone. Now his compulsive acts and self-reproaches take on a very interesting and plausible significance. The hat had a bow of red ribbon in the inner band; the bank book was red; in connection with his contemplation of joining the regiment, the thought passed consciously through his mind: "Suppose I join the regiment and there is a strike or a riot, for which the militia are called out. *Then I might kill someone.*" [1]

In this case a conflict of opposing forces is obvious. If we assume with Dr. Frink that red symbolized blood and that the acquisition of the hat, or of the check book represented the consummation of a revenge motive, then the returning of the hat or of the book unquestionably was an act of repentance (undoing). The possession of the object infringed upon ego-values of a moral nature and constituted a loss of moral uprightness. And since returning the object was an act of atonement or absolution, the individual was

[1] The italics are Dr. Frink's.

again in a position to become obsessed by his revenge motive.

Interpretation of Undoing. Undoing also is usually if not always preceded by incomplete repression. Through repression the true nature or significance of the conflict becomes obscured. The individual experiences a distressing feeling or emotion upon the performance of any act which symbolically can represent the fulfillment of the repressed motive. And this distressing affect compels the individual to the act of undoing. Activity of this type in an unsymbolized form is common to everyday life. The person who apologizes for his unkind remark is undoing what he did in the sense that he withdraws the intent to wound and substitutes for it a neutral if not friendly attitude toward the other person.

In the case of undoing which we gave, the conflict, interestingly enough, was between ego-motives; it was between the ego-tendency of revenge and ego-values of a moral nature. And we might here point out again that although the major conflicts of the human mind usually are between egoistic and racial motives, conflicts within the individual's organization of ego-tendencies and values frequently occur. Since not all of the egoistic tendencies which are inherent in the human mind always become equally elevated through their becoming directed (conditioned) to socially valuable ends, conflicts may occur between the different levels of egoistic incentive.

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CHAPTER IX

THE PSYCHONEUROSES

NEURASTHENIA

Major Classes of Personality Disorders. There are two large groups of personality disorders, with subdivisions in each group. The psychoneuroses, often improperly called the neuroses, comprise the less serious, non-institutional, human ills of psychogenic origin. The principal syndromes in this group are neurasthenia, anxiety neurosis, phobias, obsessions and compulsions, hysteria, and most sexual perversions. The second major class of personality disorders is the psychoses or insanities. Of these there are two general causative or etiological varieties: The functional psychoses or those of psychogenic origin and the organic psychoses in which the chief causative factor is organic or physical. In the present book we shall discuss the principal types of functional psychoses and a few of those which are organic.

In addition to these two main groups of personality disorders there is a number of mental distortions, aberrations, perversions, etc., which do not belong properly to either division. There are the neurotic personality, the psychopathic personality or constitutional inferior, the hermit, the miser, and other queer folk, some of whom stand between normality and psychoneurosis and others of whom fall between psychoneurosis and insanity. We shall later devote a chapter to a discussion of some of these conditions.

It is not easy to state clearly the differences between a psychoneurosis and a psychosis and the distinctions which we are going to mention at this point should be accepted by the reader more or less tentatively and generally. After he has become more familiar with the various types of disorder he will be in a better position to make the proper distinction.

(a) In a psychosis there is a much greater change in the bearing and demeanor of the patient toward other persons than in the case of a psychoneurosis. (b) In a psychosis there is usually a lack of *insight;* the individual is not aware that there is something wrong with his mind. The psychoneurotic usually possesses insight, although he frequently believes his difficulty to be physical rather than mental. (c) The psychotic patient is often *disorientated*, he may be unable to give place, time, or personal identity. The psychoneurotic is rarely disorientated, although in certain instances of hysterical amnesia there is a loss of personal identity. (d) The psychotic patient may suffer from *illusions*, *hallucinations*, or *delusions*. Such symptoms are rare among psychoneurotics. (e) The intellective functions are more severely disturbed or distorted in psychosis than in psychoneurosis. (f) The psychotic patient is far less in contact with reality and is far less observant of it than the psychoneurotic.

Personality Disorders Defined. A personality disorder must always be regarded or evaluated from at least two points of view: Objectively and subjectively. Objectively, a personality disorder is a highly systematized pattern of maladjustive activity, or persistent unsystematized, maladjustive sequences of acts in the absence of amentia, or a pathological paucity of overt activity. Or we might simply say with Hamilton [1] that from an objective point of view, a *personality disorder is persistent, non-adjustive, affective reactions to baffled major strivings (difficulties)*.

But it is not sufficient merely to observe the abnormal person from the standpoint of what he does (overtly) and says. If one would pay me sufficiently I might behave quite insanely or in a psychoneurotic manner for six months or a year. I could always walk in a circle or describe a figure eight or sit day after day smiling and talking to an imaginary person or swear that I was the King of England or complain that I had lost my heart or lungs or talk endlessly about my aches or pains or always go upstairs three steps at a time. But such be-

[1] *Op. cit.*

havior in itself would not constitute a personality disorder because I would have a personally and socially approvable motive for behaving in such a manner. If one would understand a personality disorder he must view it not only in terms of the individual's overt activity but also in terms of the individual's motive organization, in terms of motivation.

From a subjective or strictly psychological point of view a personality disorder, whether it be a psychoneurosis or a psychosis, is intrinsically always one of three conditions: (1) It is either a matter of regression with energy expenditure on infantile levels of thought, feeling, and interests, or (2) it is a substitution of ideas for objective facts giving rise to a world of phantasy which supplants the world of objective reality, or (3) it is a condition of quantitative motive unbalance.

In the case of the first, the individual may be well enough balanced in his interests and activities, but these interests and activities are those of the child instead of the adult. In the case of the second, the individual may again be well enough balanced in his interests but he has substituted implicit activity where overt activity is necessary to adjustment. In his day-dreams or autistic thinking he is playing, perhaps, a well-balanced role; he is reacting to other imaginary persons and he may be doing so on a truly high level of social intercourse, but he is only doing it in phantasy. In the case of the third, the individual suffers from a condition of quantitative unbalance of his basic motives. To this third category belong most psychoneurotics while the first two categories are emphasized, though by no means exclusively, in the insanities.

If one would understand a personality disorder then, he must see it in the light of that complexity of factors which constitute and shape the personality of the individual. He must be particularly sure to take into consideration the dynamics of the personality. And he must have regard for the direction of the individual's attention and interest, and for the relative strength of the person's ego- and racial motives.

And he must take into consideration the individual's ego-identifications and their consonance or dissonance with the environmental demands on the individual. The writer believes that it will be worthwhile to pause long enough to bring a summary of the points made in the preceding chapters into relation with the personality disorders which we are going to discuss.

Some Factors and Criteria of Personality Disorders. We can best summarize those points which we have discussed and which have a bearing on personality adjustment by means of a question outline. Assuming we were endeavoring to understand a given personality disorder, we would ask ourselves the following questions:

(1) What appears to be the motive arrangement of the individual? How much of his time and energy are expended in truly racial or unselfish activities and how much in egoistic activities? What exaggerated motives does he have? What motives are undeveloped or repressed?

(2) What is the level of the individual's interests and activities? Is he infantile? Are his different motives on the same level or is he infantile in certain respects but not in others?

(3) What are the individual's ego-identifications? What does he aspire to as an individual? Does he have strong identifications with negative or self-effacing meanings? Are his ego-identifications consonant with the demands upon him of his environment?

(4) What is the direction of the individual's attention and interest? Is he orientated toward the future, the present, or the past? What appears to have been his orientation before his "nervous breakdown"? Was he too much orientated in one direction?

(5) What is the individual's daily feeling tone? Is he more happy and self-satisfied than circumstances warrant? Is he more unhappy and dissatisfied than he should be under the circumstances?

(6) What estimate do others make of the individual's attitudes and activities? Do they think he is well adjusted

despite the fact that he complains that he is not? Do they think him queer or maladjusted despite the fact that he says he has nothing to complain of?

(7) What is the individual's attitude toward marriage and family? Is he afraid of emotional involvement with the opposite sex? Does he shun family (biological) responsibilities?

(8) What appears to be the personality make-up of the individual? Is he strongly introverted and given to seclusiveness? Is his introversion isolating him too much from others? Does he have any understanding of his own particular personality trends? Is he too extraverted? Does he fail to perceive himself as others see him? Is he of a cyclothymic or schizoid make-up?

(9) Does our individual appear to be either over-motivated or lacking in drive? If he is one way or the other, is it because of his inherent constitution or is he being over- or understimulated by his environmental circumstances or by some disquieting subjective factor?

(10) What is the individual's mode of reacting to his difficulty? Does he compensate, is he negativistic, does he rationalize his motives; or is he over-introspective? Is he regressive in his reactions, does he repress impulses instead of inhibiting them, or is he projecting his inclinations on to others?

These ten questions must be asked and answered before one may assume to have even a tentative understanding of the maladjusted personality. It will always be well for the student of personality problems to remember that he is confronted in any given instance with far more than a mechanical arrangement of parts and functions; to bear in mind that he is dealing with a human being with all that a human being may connote in the way of incentives, aspirations, values, and ways of going about seeking his ends.

Neurasthenia Our Most Common Psychoneurosis. Neurasthenia is by far the most common of all personality disorders. A conservative estimate of its frequency would be 7 or 8% of the total adult population. One authority [1] states that

[1] Myerson, A., *The Psychology of Mental Disorders*, p. 59, Macmillan.

we all pass through neurasthenic phases at one time or another; but it is necessary, of course, to distinguish between the individual who is occasionally neurasthenic and the one who is more or less permanently so. Only the latter belongs to the psychoneurotic group.

Not only is neurasthenia the most common of personality disorders but it holds the enviable distinction of being the least removed from normality. As Pressey [1] and others point out, it is really a borderline condition between normality and abnormality.

Symptoms of Neurasthenia. The chief symptom of neurasthenia and the one from which the name derives is a *sensation of fatigue.* The term neurasthenia literally means diminished nervous energy, nervous exhaustion. The fatigue of the neurasthenic differs, however, from the fatigue of a normal person. In the case of the neurasthenic the fatigue is often reported to be greater in the morning than at night; rest has little or no effect on it; the fatigue tends to be fairly constant throughout the individual's waking hours; if we give the patient's reports a literal interpretation, his fatigue is much more intense or exaggerated than that of the tired normal person. By means of a specially devised instrument, Hartenberg [2] endeavored to determine the basis of the neurasthenic's fatigue. He was able to prove, at least to his own satisfaction, that it is not peripheral nerves which can be correlated with it.

A second symptom, almost as characteristic of this disorder as fatigue, is *headache*, frequently associated with eyestrain and blurred vision. Like the fatigue, the headache tends to be fairly constant, or at least of frequent periodic occurrence, and undoubtedly often becomes very intense. The patient usually goes from one physician to another and, failing to obtain relief, finally resorts to patent medicines. One such patient of the writer's acquaintance consumed a stock

[1] Pressey, S. L and L. C., *Mental Abnormality and Deficiency*, Macmillan.

[2] Hartenberg, Paul, *Treatment of Neurasthenia*, Chap. 3, Frowde, Hodder, and Stoughton.

bottle of bromo seltzer weekly. Incidentally, she suffered considerably from gastric disturbances!

The neurasthenic is often troubled, not only with headaches but with *aches and pains in every part of his body, particularly in the back.* He perhaps comes to believe that he has a floating kidney and is surprised that his physicians do not recognize the fact. Or he may tell you that he inherited the condition, that his mother was the same way. Occasionally the pains closely resemble rheumatic disturbances, localized in the joints and extremities.

Most patients of this class suffer more or less from *digestive disorders* which may take any one of many forms. Many are frequently nauseated and have spells of vomiting before as well as after eating. Others suffer from gastric pains and abdominal cramps. One woman was placed on an egg and milk diet for a number of years and finally reached the point where she could not take even milk without suffering considerable pain. *Constipation*, also, is a frequent condition in neurasthenia.

The neurasthenic is troubled not only with digestive disorders but usually with *loss of appetite*. It is frequently observed that he is unduly skeptical concerning food. He may erect a rigorous classification of foods: Some he must not eat under any circumstance, others occasion him only a certain amount of discomfort, to a third class he is quite indifferent, while still others agree with him unusually well. In addition to this he may tell you that he can eat only certain combinations of foods.

Insomnia is a very common neurasthenic symptom. It may take any one of several forms, but usually it consists of an inability to fall asleep upon retiring. According to the reports of these patients they lie awake for hours, sometimes till morning, before they are able to sleep. And when they do finally fall asleep they are likely to be disturbed by unpleasant dreams. Others report that they have very little difficulty in going to sleep but that after an hour or two they awake and find it impossible to sleep again. Still others

complain of fitful sleep, sleeping for only a few minutes or possibly for an hour in between much longer periods of wakefulness. It is highly probable, however, that every genuine neurasthenic is inclined to exaggerate the extent of his insomnia.

Some neurasthenics complain of various *peculiar subjective sensations* (paresthesias). Common among these are ringing and buzzing sounds (akoasms) which the patient localizes in the ears. Such sensations are invariably very persistent and possess an unusually high value for attracting and holding the patient's attention. In other words, the patient is unable to ignore them as the normal individual is a continuous sound. One patient, shortly to be mentioned in some detail, held a man's watch to her ear, even while riding on the subway train, in order to drown her akoasms.

The remaining neurasthenic symptoms to be mentioned are of a somewhat more general character than those which we have given. The first of these is a *general hyperesthesia*, an extreme degree of sensitiveness to sensory stimulation. This is particularly marked, however, with respect to light and noises. The slightest sound is likely to be an irritant to the patient. It is perhaps largely this matter of hypersensitivity which has given rise to the popular notion that neurasthenia is primarily a matter of "nerves." For the patient constantly complains of the noises on the street, the radio next door, the creaking of the floor, the running water in the next room, the bright light, the glare of the sun. There is no positive evidence, however, that the neurasthenic actually possesses a hyperacuity of vision or audition, that he can actually hear better or see better than the normal person. Rather it is a matter of increased distractability; these patients find it extremely difficult to concentrate their attention and correspondingly difficult to ignore relatively insignificant stimuli.

Along with the neurasthenic's distractability there is invariably found extreme *irritability*, *depression*, *pessimism*, and *hypochondria*. The patient is irritable not only with respect to distracting stimuli but in relation to everything with which

he is concerned. Any change in the household routine irritates him as does any unexpected event or change, new customs, new styles, changes in the weather, etc. He is also subject to depression a good part of his time and customarily views life through dark glasses. Many of these patients become excessively concerned about their own health, mental or physical, and then we speak of them as being *hypochondriacal*. One patient told the writer that she sincerely believed herself to be the most nervous, miserable, and unfortunate person in the world. And yet this patient was young, fairly attractive, financially independent, and had no physical defects or organic disorders.

The symptoms which we have mentioned are the principal non-adjustive reactions of the neurasthenic patient. And, given a patient in whom all these various symptoms were present, we should then have a fairly complete non-adjustive reaction-picture or syndrome of neurasthenia. While most neurasthenic patients do not manifest all of these different symptoms, there are a few who closely approximate the total picture The following example is a case in point.

CASE 14. Lucille H , an unmarried woman, age 26, complained to the writer of the following symptoms: She suffered extreme fatigue, particularly in the morning, and found it quite impossible to sustain effort in a given direction for any length of time. She complained of being frequently nauseated in the morning, of a poor and very irregular appetite, of indigestion ("sour stomach," "gas," gastric and abdominal pains), and constipation. She was troubled by frequent headaches; and eye-strain and blurred vision prevented her reading even the headlines in the newspapers. Severe pains in the back and legs made it impossible for her to sit, lie, or stand in comfort. She had "ringings" and "buzzings" in her ears and in order to drown these distracting and highly unpleasant noises she carried a man's watch which she held to her left ear. She complained of being ex-

tremely nervous and distractable and was very irritable, becoming immediately exasperated at the sound of a slamming door, footsteps in the hallway, and even the noises on the street. Finally this patient was in a constant state of hypochondria; and she was unduly concerned about her physical appearance. And, as is usually the case, she stated that she was unable to sleep on account of her illness. She explained that her aches and pains and akoasms kept her from getting any rest and that the need of rest kept her from regaining her health and left her in a continuous state of fatigue.

So far we have sketched the more common non-adjustive reactions of the neurasthenic individual. We have yet to discover the nature of the difficulty to which the patient is making these reactions and then to identify the reactions with some one or several of the different modes of reaction to difficulties discussed in the previous chapters. But before doing this it is essential that we make brief note of the general personality make-up of this type of patient.

Personality Variants and Neurasthenia. The consensus of opinion is coming more and more to be that neurasthenia develops usually, if not always, in the more introverted type of personality. We at least can say that along with a condition of neurasthenia we always have a strongly introverted trend. In other words, we find that the neurasthenic is always extremely subjectively orientated. It might seem to the reader that this would necessarily be the case; that an individual who has aches and pains, is unable to sleep, has very little appetite, is tired, etc., will inevitably pay a great deal of attention to these facts. But we shall later show that the neurasthenic's symptoms are reactions to some difficulty rather than *the* difficulty, that they are of a psychological rather than a physical origin. Moreover, we shall learn in a later chapter that an individual may have very severe symptoms and yet be quite unconcerned about them. These facts tend to indicate that in neurasthenia we are dealing first of

all with a strongly introverted trend as a necessary basis for the particular symptoms (reactions) manifested, inasmuch as it predisposes the individual to a subjective orientation.

As a result of the introverted person's tendency to draw a hard and fast distinction between himself and the objective world, including other individuals, and as a result of his proneness to self-reflection, he tends to be unduly concerned about the motives of others; he is antagonistic to any influence which another person may have upon him; he offers definite resistance to the commands and suggestions of others; and he has a proneness to react in a very personal manner to other individuals. In the normally introverted persons these tendencies become expressed in a bluntness of speech and manner, an inconsiderateness of others' feelings, radicalism in views concerning politics, morals, religion, etc. In the neurasthenic these same tendencies may manifest themselves in a more pronounced and distinctly maladjustive manner, as may be illustrated by reference to the case cited. This young woman was openly suspicious and antagonistic (negativistic) from the very beginning of her consultations. Any remark of the writer which could possibly be misconstrued in such a manner as to reflect unfavorably upon her was so interpreted. This tendency was carried to an extreme. On one occasion, for instance, she was requested to sit in a chair which was four or five feet removed from the one she was occupying. She immediately demanded to know the reason for the request, and when it was given, it did not satisfy her. She became quite suspicious and subjected the writer to a rigorous cross-examination before finally yielding, with very poor grace. Although strongly denying it, she was constantly on the alert to catch the writer contradicting himself, whereupon she would immediately endeavor to gain an admission from him that he had been wrong. At such times, particularly when the writer was "reluctantly" admitting an error or misstatement, she would seemingly forget all about her symptoms, discard her watch, and assume an expression of animation which was in striking contrast to her customary pained

and dejected bearing. But whenever the argument would take a sudden turn in favor of her "opponent" she would at once retrench, begin to complain of her terrible aches and pains, of her fatigue, the awful noises in her ears; and snatching up the watch, she would sink back dejectedly into her chair. An attitude of antagonism and envy toward some individual or toward mankind in general is always to be found in the neurasthenic patient.

Another aspect of the neurasthenic's introverted trend is the tendency to talk to excess about his symptoms, his troubles. He will talk for hours without cessation about his ills to any sympathetic listener, and the more sympathetic and mystified the listener, the more the patient will talk. Then, upon a second occasion, the patient will say the same thing all over again, and the same the third time, and so on without end. In fact, many of these patients make no objection to paying for treatment as long as they are permitted to do most of the talking and to talk about themselves; but if requested to talk less and listen more they may readily become skeptical of any benefit to be derived. Not only are they inclined to talk a great deal about their symptoms but they often resort to all kinds of means in order to impress their listener with the seriousness of their troubles. The patient referred to above asked upon her first consultation if she were not the "worst case of nervousness" the writer had ever seen. When assured that she was not, she became obviously offended and continued unusually antagonistic to the end of the consultation. This tendency of the patient to try to impress his psychologist or physician with the unusual seriousness of his case, together with the resistance which he so often manifests to treatment, has led many writers to declare that the neurasthenic does not want to give up his symptoms. In a certain sense this is true. We might say that the patient both does and does not want to give up his symptoms. Reasons for such a view will be given shortly.

The Nature of the Difficulties to Which the Neurasthenic Is Reacting. If the neurasthenic's symptoms are non-adjustive

reactions to difficulties, we can hope to understand their true significance only by discovering and understanding these difficulties, and the discovering of these difficulties is equivalent to discovering the causes of the symptoms. To the extent to which we are able to do this the neurasthenic's non-adjustive reactions should take on a specific meaning, and if all of his symptoms are reactions to the same difficulty or to the same class of difficulties we should be able to discern some definite relationship existing among them, which should result in our obtaining a more or less unified non-adjustive reaction-picture, a symptom-complex or mental syndrome.

As in all cases of personality disorder we must identify two types of difficulty in the case of the neurasthenic, *primary* and *secondary*, or to speak in terms of causes we should call them, as is customary, *predisposing* and *exciting*. We shall discuss these separately and in the order mentioned.

We have already pointed out that we always have in the neurasthenic an introverted trend, and we have further assumed that neurasthenia develops only in the individual who is more or less introverted at the time. But introversion in itself is not the predisposing cause of neurasthenia. The predisposing cause is *strong negative ego-identifications, an inferiority complex, or strong, narrowly confined over-identifications*, accompanied, usually, by exaggerated racial motives. The individual's introverted personality only determines the mode of reaction to the difficulty, to the feelings of personal deficiency and inferiority.

We have discussed in some detail in an earlier chapter the inferiority complex and in general the way in which it incapacitates the individual in adjusting to his environment. Let us analyze it anew in the light of the neurasthenic picture. The concept of the inferiority complex would have no significance whatever were it not for our assumption of egoistic motives, that in every individual there is a strong innate disposition which inclines him to self-assertive activity, to strive for security, equality and superiority, recognition and esteem of other individuals and of himself. Note the boy who throws a stone farther than his companion is able to or who

climbs higher in a tree. He not only immediately manifests pleasure and satisfaction at his accomplishment but he calls the attention of others to it; he wants them also to recognize the fact of his achievement. A large part of the average individual's everyday activity is fundamentally similar to the aggressive, competitive activity of the two boys. A unit of such activity, assuming success on the part of the individual, might be briefly illustrated as follows:

Difficulty—arousal of egoistic motives—trial and error activity—success—increased self-confidence and self-esteem, satisfaction.

On the other hand if the individual fails in his aggressive and competitive activity, feelings of inferiority and incompetency result, partly from the fact of his inherent displeasure at failure and partly from the fact that failure never calls forth the favorable recognition of other individuals. Indeed it frequently arouses in other individuals an attitude of superiority which, if directed toward the individual who has failed, is taken by him to imply his own inferiority. We may illustrate a unit of aggressive or competitive activity, assuming failure on the part of the individual, as follows:

Difficulty—arousal of egoistic motives—trial and error activity—failure—loss of self-esteem and self-confidence, feelings of inferiority, dissatisfaction.

Now if during the earlier years of life the individual's environment is such as to cause him repeatedly to fail in his competitive activities, then there slowly occurs exactly what apparently happens in all so-called habit formation, namely, the intermediate steps in the individual's sequence of reactions to difficulties drop out and the end-reaction is the first and only one made. In other words, a definite sentiment or ego-identification is developed in relation to the class of difficulties in which he has repeatedly failed; and this sentiment (inferiority complex) is like any other sentiment in that it immediately determines the nature of the individual's reac-

tions to those situations to which it relates. Hence with the development of the inferiority complex, trial and error reactions become eliminated and the only reactions made are the feelings of inferiority, incompetency, dissatisfaction, etc. Upon the individual's encountering the type of situation with relation to which his inferiority complex has been developed, we have:

$$\text{Difficulty} \begin{cases} \text{arousal of egoistic motives} \\ \text{arousal of inferiority complex} \end{cases} \Big\} \text{feelings of inferiority.}$$

The feelings of inferiority which result from the arousal of the complex are definitely incompatible with any expression of the self-assertive disposition with the result that the latter is blocked. This disparity between these two dispositions constitutes a mental conflict which may be expressed as a conflict between the desire to succeed and a sense of defeat. To the extent that the sense of defeat (which may always be expressed as feelings of inferiority, lack of self-confidence and self-esteem, etc.) becomes strong, to a corresponding extent will the individual refuse or be disinclined to attempt to attack his difficulties in a direct and aggressive manner. Rather, the greater part of his activity will be devoted to the ends of maintaining what he has and of avoiding all risk of a loss to his already inadequate sense of ego-security.

It should now be clear why the neurasthenic individual tends to react in a very personal manner to the remarks and actions of those about him. His first and greatest concern being to keep himself at all times from appearing inferior, from appearing as a failure both in his own eyes and the eyes of others, he cannot help but search the remarks and actions of others for possible reflections upon himself. Hence in his general attitudes and reactions he is on the defensive rather than the offensive. He is like the invading army which, upon encountering a greater force than it expected and receiving a severe blow to its self-confidence (morale), turns all its efforts in the direction of keeping from being overcome rather than in overcoming its adversary.

The inferiority complex of the neurasthenic accounts, we believe, not only for his guarded attitude, his antagonism, suspicion, and resistance to the influence of others but also for the constant highly emotional state which characterizes him. Over and over his self-assertive disposition (ego-motives) is being aroused and just as often blocked by his feelings of inferiority and incompetency. Thus there is present an almost continuous condition of mental (emotional) conflict, which frequently becomes so intense and causes the patient such keen distress as to result in his withdrawal from the scene of activity to seclude himself in his room and there fret day after day over his symptoms. Many writers point out that the neurasthenic reacts more emotionally than other individuals. In a sense this is undoubtedly true. He reacts more emotionally in a subjective sense; that is, he feels more deeply about those things which have a personal significance. But this is partly the result of his emotions finding no adequate outlet in overt activity. The neurasthenic, or the strongly introverted individual with an inferiority complex, is literally afraid to give way to his emotions and impulses simply because to do so would be to risk his already shattered sense of equality and autonomy. This type of individual is always afraid that he might "make a fool of himself," or be too much influenced by the other person.

This inferiority complex together with its inevitable consequences always constitutes the background of the neurasthenic picture. Aside from his specific symptoms we always have in the neurasthenic an individual who is more afraid of failure than he is desirous of further success; an individual who is therefore unduly sensitive to the actions of others, who maintains at almost any cost a carefully guarded attitude toward others lest they should perceive the deeply felt incompetency and lack of self-confidence within; an individual who views life as an uphill struggle and who as a result of failure or threatened failure has come to assume a defensive and resentful attitude toward his environment. And these basic aspects of the neurasthenic's personality which we have

sketched we look upon as the primary difficulty to which his symptoms are but attempts to adjust.

An inferiority complex, we have seen, leads to compensatory activity. And compensatory activity is always of a kind different from that which the individual would have tended to engage in had it not been for failure, or imagined or threatened failure, and the consequent development of an inferiority complex. Now if an individual is reasonably successful in compensating for his incompetencies, he may have little difficulty in making a satisfactory adjustment to life's problems. He avoids certain types of situations and activities but enters successfully into others. But, given the type of individual which we have sketched in the preceding paragraphs, if something arises which either makes his present compensatory activity impossible or renders it useless or highly unsatisfactory, the individual may readily develop any one or several of the different neurasthenic symptoms which we have mentioned. For example: We have a young woman who is strongly introverted and who has a strong inferiority complex with respect, let us say, to life-situations in general. She meets and marries a man who is self-confident, is aggressive, and who is making a success of his life. She compensates largely for her own feelings of inadequacy and lack of self-confidence by leaning heavily upon her husband for moral support. Then her husband dies, at the end of ten or fifteen years of married life. The woman is left without her customary means of compensation and develops neurasthenic symptoms. We may speak of *her husband's death as the exciting cause of her neurasthenia* or we may speak of her *strongly aroused feelings of incompetency to face life alone as the exciting factor to which she shortly comes to react in a neurasthenic manner*. Another example: A man who as a boy developed a strong inferiority complex with respect to competitive situations of a physical nature became, upon reaching maturity, a bookkeeper. He tended to compensate for his feelings of inferiority by an over-conscientiousness in his work; he prided himself upon the extreme care and exactness with which he discharged

his duties. After holding the position for fifteen years he lost it to a more aggressive individual. This incident aroused his feelings of inferiority so strongly that any further self-assertive (aggressive) activity along the same line was completely blocked; he could not summon up sufficient courage even to apply for another position. Definite neurasthenic symptoms soon developed.

In the following case the individual was characterized by excessively strong, narrow over-identifications. His over-identifications with his relationship to his father followed the advent of his siblings into his family and the loss of a large part of his mother's attention. His over-identifications were the principal predisposing factor and the blow to these cherished personal values was the exciting factor. With these points in mind the case should be self-explanatory.

CASE 15. Michael Y. was thirty-nine years old, six feet tall, and weighed one hundred and eighty pounds. He was ruddy complexioned, well-proportioned, and except for his nervousness he never had been seriously ill in his life. He had two siblings, a brother and a sister, both of whom were several years his junior. Michael was unmarried and in fact never had had an intimate relationship of any kind with a member of the opposite sex.

As a boy Michael lived in a small western city where he attended the public schools and helped his father who was the editor and owner of the town's sole newspaper. He was very fond of his father; and he was keenly jealous of the fact that he was his father's only assistant. By the age of twelve he not only was setting most of the type for the weekly edition of the paper but he willingly worked overtime in the collecting of news items and the soliciting of advertisements and subscriptions. It appears, however, that his father was neither very industrious in his work nor solicitous of the needs of his family. Nevertheless he had led Michael to be-

lieve that his help was highly appreciated and that in time he would be rewarded with sufficient money for a college education. And it further appears, from Michael's case history, that the father unhesitatingly dangled whatever allurements before the eyes of his son that were likely to stimulate an added bit of effort or loyalty. But it was quite unnecessary to employ extra inducements, for the combination of Michael's strong selfless attachment to his father and his close identification with the idea of his being first assistant to the editor of the town's only newspaper firmly bound him to his duties.

When Michael was thirteen he overheard his mother ask his father where he expected to get the money with which to send Michael to college. And he overheard his father reply that he had no intention ever to send his son to college. Michael was so shocked and distraught at his father's hypocrisy that he became quite ill and was sent to the country to rest and recuperate. He recalled that during most of the two weeks while he was in the country he lay on his bed weeping and repeatedly rehearsing in his mind his past relationship with his father, memories of the hours they had worked together in the printing shop, the flattery and compliments his father had paid him, the envy of his schoolmates, his past dreams of his going to college, etc., etc. When he returned home he no longer was interested in his father's newspaper and his helping in the shop became an increasing ordeal. When he was sixteen he left home permanently and wandered from city to city, never remaining long in one place. Between the ages of twenty and twenty-one he began to suffer from sensations of fatigue and pains in his back. He came to the conclusion that he had been lead-poisoned in his father's shop. During the next eighteen or nineteen years he visited one medical specialist after another and tried nearly every kind of treatment that was suggested to him. But his symptoms continued unabated. He finally ar-

rived in New York City and obtained work setting type for one of the City's leading newspapers. He was unusually proficient in his work and largely because of this fact his employers permitted him to work only three days each week, in compliance with his expressed wishes. He declared that he did not dare to work more than three days each week lest he might exhaust himself.

At the age of thirty-nine Michael still held strongly to his conviction that he had been poisoned in his father's shop, despite the assurance to the contrary of all of the specialists whom he had visited. And although he was an excellent picture of health, he stated that he tended to become tired very easily and that he was forced to spend much of his time in bed or sitting quietly in his room. And his favorite topic of conversation was the injustice which his father had done him. He intensely resented a psychological appraisal of his condition.[1]

The Origin and Significance of the Neurasthenic's Symptoms. We have concluded that in the case of the neurasthenic we are always dealing with an individual who was already predisposed to develop neurasthenic reactions upon the occurrence of an exciting cause. And we have indicated that the exciting cause is always of such a nature as to rob the individual of his previous mode of compensating for feelings of inferiority and inadequacy or to severely damage strong over-identifications. Hence with the occurrence of the exciting cause the individual is thrown into an intensified state of emotional conflict. He worries and frets, and since he cannot rid himself of the general feeling that he has failed or that he is incompetent and incapable of meeting the problems of life, he naturally becomes greatly concerned about himself. Along with this concern he is on the alert for any fact which might be legitimately interpreted as a cause of his lack of success and adopted as a reason for not making further effort. Being introverted and therefore having his

[1] From *Auto-Correctivism.*

attention largely upon subjective factors, he is not likely to find any excuse for his failure in his objective environment; moreover his feelings of inadequacy incline him to look for the reason in himself. His constant worry and depression begin to affect his digestion and he is soon troubled with gastric and abdominal pains. His everlasting state of mental conflict brings about a feeling of exhaustion; as a result of his emotional disturbance he is unable to sleep, his appetite becomes poor and erratic, he grows irritable as he sees the time passing and his troubles becoming daily worse. He slowly becomes more resigned to his lack of success or to the event which precipitated his general emotional distress, but along with this he gradually becomes more and more concerned about his aches and pains, his insomnia, his fatigue, his loss of appetite, etc. These ills are gradually coming to have a very definite meaning for him; he succeeds in forgetting that they followed upon some failure or disappointment or else he fails to see any causal connection between the two, *and so he now begins to attribute to his symptoms his inability to meet the problems of life.*

Having reached this point, our individual has become a neurasthenic. His symptoms now have a very definite value for him; they provide him with a new means of compensating or of erecting a new and egoistically safe set of identifications. We may simply point out that the individual who is ill does not feel called upon to take an active part in life's affairs. But if the neurasthenic's symptoms are to provide him with a legitimate excuse for not attacking new problems and thereby proving his competency, *if he is not going to come into disrepute among others and be lowered in his own eyes, he must make the most of his ills.* Consequently we find him greatly exaggerating his aches and pains, his insomnia, and all the rest. In order to impress upon others the seriousness of his condition he feels the need of talking incessantly about his troubles. Also, when we view his symptoms primarily as compensatory devices or as safeguarding ego-identifications we are in a position to understand his resistance to treatment and his

antagonism toward anyone who presumes to belittle his sufferings. Likewise it becomes understandable that the patient should want both himself and others to believe that he is the greatest sufferer in the world. In the first place this would put him in a position of some distinction (to be the most unfortunate person living), and secondly, the more seriously he and others take his ills the better his "excuse" for not assuming obligations and a competitive part in life.

But the neurasthenic becomes to a large extent the victim of his own utilization of his symptoms. The reader must not suppose for a moment that the patient has no ills, that he merely pretends to have them. From a psychological point of view at least, his ills are just as serious as he contends they are. We have said that there is an initial physical basis for his aches, pains, indigestion, fatigue, etc., as a result of his general emotional disturbances. The patient then becomes over-concerned about his ills and this very concern results in an exaggeration of them. As they become more pronounced the patient's concern is naturally increased and so we get what is appropriately known as the "vicious circle of neurasthenia."

But although there is a physiological disturbance in the beginning which serves as a starting point for most of the neurasthenic's symptoms, the reader should bear in mind that the view which is here being offered is that the symptoms become really serious only because they provide the individual with a seemingly legitimate reason for not coping with the difficulties of his social environment. There are various facts which lend considerable support to such a view. Many neurasthenics lose their symptoms upon reaching a fairly advanced age. Since it is then too late to take an active part in life and attempt to prove his worth, the individual no longer has any need of his symptoms. Again quite a number of women develop neurasthenia following the marriage and departure of their last child. This leaves them without their customary means of expressing their ego-identifications, of achieving a feeling of worthwhileness. Finally, subjective sen-

sations such as akoasms are understandable only as compensatory reactions, protests against the assumption of obligations or as anxiety equivalents, since invariably no organic basis for them can be discovered.

Summary. Let us now summarize the features of a typical case of neurasthenia in terms of those ten sets of questions which we asked on an earlier page.

The racial capacities of the pre-neurasthenic are usually, perhaps always, over-developed. The individual tends to go to excess in his sympathetic and affectionate responses, and even in his suggestible and sexual responses. In other words he *tends* to over-respond to other persons. The neurasthenic reactions themselves are in large part defenses against the individual's capacity for, and liability to, unselfish responses.

The neurasthenic usually is on a fairly adult level of interest; he is not particularly infantile although to be sure his squeamishness may impress one as being childish.

The neurasthenic lacks adequate positive ego-identifications. Frequently it will be found that he is over-identified with his family, that during his development he acquired a perspective on himself as merely an integer of the family group. Usually the neurasthenic will be found to possess negative ego-identifications, an inferiority complex.

The pre-neurasthenic always is over-orientated toward future ends. He is one of those persons who tends to take accomplishment too seriously and to feel that it is incumbent upon him to achieve certain results. With the advent of neurasthenia the individual becomes a slave to the present, although even here he will be found to be reaching forward in his phantasies.

The neurasthenic is unhappy; he feels cornered and tied down by his symptoms. He is always far more miserable than the other person would judge circumstances to warrant.

The neurasthenic is the "nervous" person. Others regard him as maladjusted but usually attribute his complaints to his imagination; they tend to minimize the seriousness of his

problems and believe he could be happy and adjusted if he would "only make up his mind to do so."

The neurasthenic is afraid of marriage and its responsibilities. His fear arises as a result of his tendency to take such matters with extreme seriousness.

The neurasthenic is of an introverted personality and, to the extent of the writer's knowledge, he is always a strongly motivated person. His feelings and emotions are very intense and from this fact arise many of his problems. He is not typically lacking in a sense of humor, however, despite the seriousness with which he takes the problems of life.

The neurasthenic's intensity is a fact of his inherent constitution.

The modes of reaction to difficulties which are most involved in the neurasthenic's symptoms are compensation, negativism, introspection, and rationalization. He tends to compensate because he is too inclined to yield to the wishes and influence of the other person. He introspects endlessly in a search for the causes of his difficulties. He rationalizes in order to keep himself from seeing that he is striving to retain and to aggravate his own symptoms.

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CHAPTER X

THE PSYCHONEUROSES (*Continued*)

ANXIETY NEUROSIS

Anxiety a Derivative of Fear. Inasmuch as anxiety is essentially a form or variety of fear, it will repay us to subsume some of the more pertinent facts regarding the latter at this point. Generally speaking, gross misconceptions exist concerning fear in the life of modern man. We tend to think of fear as something which arises in time of war or upon the occurrence of an automobile accident or when a desperate man points a gun at another. The fact is, however, that in one form or another fear is a constituent in the affective tone of the daily life of millions of persons. Man has not lost fear since he arrived from the darkness and uncertainty of jungle life. He no longer fears spirits and angry gods or ferocious animals and electric storms, but in their place many though more subtle features of his existence arouse and often maintain a constant state of mild fear. Perhaps the fact which is most commonly feared by civilized man is *loss of personal values, ego-identifications, sense of individuality*.

Many persons regard fear, except in the most unusual circumstances, as indicating cowardice. During the past World War thousands of soldiers suffered from a torturous degree of shame and humiliation because they could not help being afraid. They felt that to be afraid was *prima facie* evidence that they were cowardly, and to be cowardly was to lose self-respect and self-esteem. Courage is not an absence of, or an inability to experience, fear; courage is control of fear, the ability to inhibit it to a reasonable degree. The person who does not become afraid in a genuinely dangerous situation, wherein he has no one to consider but himself, is either abnormal or he has become negatively adapted to such type of situation. *It is normal to fear the dangerous.*

Fear is an emergency motive, and throughout man's long past it has had inestimable value. When danger arises which threatens the security and welfare of the individual, all other matters must be forgotten and safety secured if the individual is to react adjustively. And the conscious element in the fear motive is but the individual's experiencing a powerful tendency or inclination to react in such a manner. That many persons react with fear to non-dangerous situations is, of course, another matter. But for primitive man to have calmly continued eating berries while the tiger approached or the wind tumbled trees about him would have been unfortunate for the race.

As the reader knows there are certain stimuli or situations which arouse fear in the absence of previous conditioning. With time the individual becomes negatively adapted to loud sounds to a considerable extent, and with most of us the loss of moral support (personal values) becomes a more frequent consideration than the loss of physical support. And the reader is familiar with the psychology of conditioning and the ease with which fear may become conditioned in the small child to non-dangerous facts. The development of intelligence and the acquisition of knowledge gradually obliterate many of the "acquired fears" and the child comes to reason himself into accepting the dark and the bad man and the barking dog as harmless facts. Few persons go about their daily lives in a state of acute fear, but many go from day to day in a state of mild fear in the form of one of its derivatives. Anxiety, worry, apprehension, or uneasiness is a daily accompaniment of the lives of many.

And fear is the great inhibitor. When one becomes afraid all other motives and interests tend to be suppressed, unless the fear is aroused on behalf of another as in the case of a parent's fearing for his child's safety. Possibly the motives

curiosity, and with any egoistic motive which inclines the individual toward any goal but that of safety.

Normal Anxiety. Not all anxiety is abnormal or neurotic. Anxiety derives from fear and the chief distinction between the two is that fear pertains to some present fact whereas anxiety is occasioned by some anticipated or future fact.[1] If one's friend or child is seriously ill one normally and naturally becomes anxious. The student who thinks it probable that he will fail the final examination despite the fact he has been working conscientiously should experience anxiety. The office seeker who believes his opponent has a better chance of winning than he, should not deny his anxiety, at least not to himself.

Anxiety is a mood. The writer has defined a mood as a relatively enduring feeling-emotion state which does not incline the individual toward any recognizable goal, or feasible line of activity, whereby he might rid himself of the tension.[2] Among the more common moods are anxiety, despondency, apathy, elation, and irritability. Harris[3] says that anxiety is a reaction to an unsolved conflict which results from any kind of inadequacy; elation is a reaction to a solved conflict; depression (despondency) to an unsolvable conflict; and apathy to the completest solution of a conflict. Our present interest is in anxiety only, and in this connection we might point out that whereas neurotic anxiety, which Harris had in mind, is a reaction to an unsolved conflict, normal anxiety is frequently aroused by the anticipation of some external event. Thus one becomes anxious when he learns that he and his family are in the path of an approaching tornado.

When we regard normal anxiety as a reaction, which, of course, it is, we can say that it is a reaction to an *unapproachable difficulty* which the individual is unable to avoid. The

[1] McDougall, *op. cit.*, p. 317.

[2] Fisher, V. E., and Marrow, Alfred J., "Experimental Study of Moods," *Character and Personality*, Vol. II, No. 3, pp. 201–208.

[3] Harris, Henry, "Anxiety. Its Nature and Treatment," *Jour. of Ment. Science*, Vol. 80, 1934, pp. 482–512.

parent of the sick child would not become anxious if he were able to do something about the matter; the farmer would not grow anxious at the approach of the hail storm if he were able to do something about it; the young woman would not become anxious as a result of her friend's waning interest did she not feel helpless in the situation. When some older friend hears of her plight and offers her some sound advice as to how to retrieve the lost interest, she tends to lose her anxiety for she then has an orientation, a feasible plan for approaching the difficulty.

Anxiety is a complex response; it has its overt as well as its implicit features. The musculature and the viscera are involved. In a state of acute anxiety the pulse increases, circulatory and glandular changes occur, and there is an innervation of the striped muscles throughout the body. The anxious person is prepared for action but he has no guide to action for his problem is unapproachable. Thus he is left in a state of enduring psychophysical tension. If the cause of his anxiety tends to be continuous from day to day, as in the case of neurotic anxiety, the purely mental or conscious element of his total reaction may become *displaced* to one of the motor or visceral aspects, thereby resulting in an *anxiety equivalent*. The individual no longer suffers from conscious anxiety, or only to a diminished degree, but is troubled by a distressing symptom of a physical nature. We shall discuss some of the more common anxiety equivalents shortly.

Neurotic Anxiety. It is of extreme importance that one distinguish between normal and neurotic anxiety in any given case. The conscientious man who does not know where or how he is going to secure the next meal for his family should be anxious; he would not be a person of normal feeling and emotional sensitivity if he were not. But the man who is not troubled with financial worries, whose family and self are in good health and who has reasonable opportunities, and yet suffers from anxiety is abnormal, maladjusted. Perhaps the principal distinction to be made between normal and neurotic anxiety is that whereas the first is typically a reaction to

environmental or objective difficulties the second is a reaction to inner or subjective difficulties. However, no sharp line can be drawn on this basis and before one may ever say whether a given person's anxiety is normal or neurotic he must make a thorough study and investigation both of the individual's environmental situation and of his personality. For if we were to study cases of anxiety which are occasioned by environmental difficulties alone we should find a wide variation among individuals with respect to the readiness with which they become anxious. At the one extreme we would have persons who scarcely ever experience anxiety whatever their circumstances, while at the other extreme we would have persons who become anxious upon the slightest provocation. The individuals comprising this latter division of our distribution would not constitute genuine cases of anxiety neurosis, but at the same time we could not regard their reactions as definitely normal. In the present chapter we are interested, however, not with those persons who are unusually prone to react with anxiety to minor uncertainties in their environmental situations, but with those individuals who suffer from anxiety quite regardless of their external circumstances. These are our true anxiety neurotics. Descriptively or symptomatically it is customary to distinguish two forms of neurotic anxiety. The first is called "free-floating." The individual is anxious but he has no idea of the unapproachable inner difficulty to which he is reacting in this manner. He suffers from waves of anxiety without apparent cause, or he is tormented with vague forebodings of some impending disaster. In the second form the anxiety becomes attached to some fact which the individual regards as the cause. In one case the individual will attribute his daily anxiety to his "poor health," which gives us a condition of hypochondria; in another instance his anxiety he thinks is due to financial matters. Neurotic anxiety in a mother often becomes attached to her children; she is daily distressed by thoughts of all the various catastrophes that might befall her family. She is unable to permit her little

boy of six out of her sight; there are many things that might happen to him: He might be run over, a mad dog might bite him, he might get wet and catch cold, he might undertake to climb a tree and fall, he might be struck in the eye by a rock thrown by another boy, he might contract some disease from his playmates.

Attached anxiety follows a sort of rationalization process. The individual is unaware of the cause of his anxiety but is inclined to account for it. He casts about for a possible explanation and sooner or later hits upon a probable cause. Thereafter his anxiety and its rationalized cause become more and more associated in his thinking. As time goes on he gradually magnifies the importance of the "cause" till it is brought into consonance with his degree of anxiety. Thus the mother who is anxious about her children devotes much of her time to inventing new possible catastrophes. She finally reaches the point when it seems to her definitely unsafe to let her children out of her sight. The intensity of her anxiety is now more or less in harmony with the number of different things which she is able to relate as likely to occur. It will now be difficult to convince her that the uncertainty of her children's welfare is not the actual cause of her anxiety.

The following case of neurotic anxiety might be classed as "free-floating."

> CASE 16. Lorella T. suffered from anxiety and despondency when her sweetheart declared his intentions not to see her again. Lorella was married in her early twenties but lost her husband a few years later. Soon after the death of her husband she met and became interested in a man somewhat older than herself. For the next fifteen years they were close friends and lovers, the understanding between them being that they would be married just as soon as business conditions improved. From year to year the man renewed his promise of marriage and Lorella accepted his protestations of undying affection in the best of faith. Then during a temporary

separation, the man seemingly changed his mind and communicated his intentions of dissolving the relationship.

Lorella did not become angry and violent and heap abuse upon the head of her inconsiderate lover, as many women would have done. She had no thought of suing him for breach of promise. Rather she became helpless, anxious, and despondent. At times she was afraid to be alone and it seemed to her as if the "skies were falling about her head."

It may seem to the reader that the cause of Lorella's anxiety was self-evident. But the fact of her lover's departure from her life was merely the precipitating cause and not the predisposing factor which, as we have said, is the genuinely important causative factor in personality disorders. We shall consider the nature of the latter cause later in the chapter.

The next case is one in which the anxiety had become attached through rationalization to an irrelevant factor.

Case 17. Fred L., a young man of twenty-six had suffered for years from anxiety lest his heart might stop when no physician was within call. In order to guard himself against such a possible calamity he never went more than a few steps from his residence or place of work except in the company of a physician or of a certain psychologist. It did not seem peculiar to him that he was able to go out in the company of the psychologist quite as easily as with a physician.

Fred had been assured by various physicians that his heart was perfectly sound and that there was not the slightest likelihood of its stopping suddenly. But this did not allay his anxiety or detach it from the idea of his heart's stopping. Fred did various things which he knew were not conducive to normal heart functioning. He imbibed rather freely and in fact never left his rooms without a bottle of liquor in his pocket. He explained that a few drinks tended to deaden his anxiety. He

smoked heavily, ate glutonously at times, and was irregular in most of his habits. He continued underweight, not as a result of his anxiety but as a result of his careless and irregular habits. But despite his anxiety and his habits he succeeded in retaining his position which, however, did not require any outside work.

Anxiety Equivalents. We have already called attention to the viscero-motor aspects of anxiety, normal or neurotic. And we have said that in some instances the mental or conscious element in the total anxiety pattern becomes displaced to one of these features, or, in some cases, to some other function which is not normally activated during anxiety. When this displacement occurs, the function affected usually becomes the focus of the individual's attention. He no longer suffers from anxiety as such, or only to a slight or secondary degree, but he suffers from the aggravation of the function.

The mechanism of displacement is not entirely understood. We are perhaps safe in assuming, however, that in a typical instance repression of the conscious element occurs and that through some sort of drainage process the energy which this element would represent is added by way of innervation to the function to which the displacement has occurred. But although something of this sort appears to account satisfactorily for the typical anxiety equivalent, there are three distinguishable types of equivalents: (1) The type which we have just described, (2) the type in which there is loss or under-activation or "inhibition" of a function instead of over-activation, and (3) the type in which anxiety manifests itself through some new or unusual function.

In the case of any anxiety equivalent there is perhaps more or less subconscious or marginally conscious implicit activity. In any case if one can succeed in radically altering the symptomatic function, in depressing it or in activating it, as the case may be, conscious anxiety usually appears. We have in mind, of course, altering the function without bringing about an adjustment of the individual. And this indicates that if

there is not subconscious mental activity, there is an already established connection between the affected function and conscious anxiety.

A discussion of some of the more common anxiety equivalents will help to make these points clear.

Functional Tachycardia. Tachycardia is excessive rapidity of the heart beat. In different instances it is due to different causes, but there is one type which is purely functional in the sense that the heart beat increases at times when the individual would normally be experiencing anxiety or excitement. In cases of functional tachycardia it is not uncommon for the heart beat to reach 140 or more while the patient sits perfectly quiet, observing the fact of the rapid beat of his heart and wondering what causes it. It is little wonder that many of these patients become convinced that they have a diseased or pathological heart despite the assurance of their physicians to the contrary.

Typically the patient who suffers from functional tachycardia suffers from little or no anxiety. Frequently, however, the patient does become anxiously concerned about his heart, but in this case we are dealing with a secondary anxiety and not with the neurotic anxiety of which his tachycardia is the equivalent.

The following case is fairly typical of this type of anxiety equivalent.

> CASE 18. Helen Y., a healthy woman of thirty-six, had suffered from tachycardia for years. She married when she was sixteen. Six months later she gave birth to a baby girl which a stupidly prudish mother and selfish and unfeeling husband connived to take from her a few hours after its birth. The baby was adopted and the mother was kept in ignorance of the identity of the foster parents. She never saw her child again. A year later a second child was born, a boy, and inasmuch as it had been conceived in wedlock Helen's mother did not interfere.

Helen's husband drank, gambled, and became brutal toward his wife. For fifteen years she endured a tortuous home life and then she obtained a divorce. Following her divorce her tachycardia, which had commenced shortly after the birth of her second child, became very severe. She soon married a conscientious and kindly man but this did not allay her nervousness. Finally she consulted a psychotherapist to whom she reported that thoughts of the child which she had never seen but once had become increasingly obsessive. The therapist was the first person to whom she had ever mentioned the matter of her child's being taken from her; she had never discussed the matter even with her first husband or mother, and her second husband was wholly ignorant of the fact that his wife had borne two children.

Helen's tachycardia had become so severe that she had given up essentially all activity except reading. She complained that she was unable to do even light housework. Her second husband provided her with a maid and a car and except for occasional short drives Helen sat in a comfortable chair reading most of her time. Her heart beat would frequently rise above 140 when she was sitting perfectly still. Despite careful examinations by different physicians and their assurance that her heart was thoroughly sound, she had become convinced that she suffered from an affected heart. But a short psychological analysis removed her difficulty.

The precipitating factor in the case of Helen's tachycardia was the brutal treatment which she received at the hands of her first husband and her mother. The loss of her child erected an unapproachable difficulty. She was timid and ignorant—though not unintelligent—and she simply did not know what to do, which way to turn. The uncertainty surrounding the whereabouts and welfare of her child was the immediate cause of her anxiety, but the predisposing

cause existed in Helen's personality deficiencies, the nature of which we shall discuss in more detail later. Another woman would have reacted quite differently; she would not have sat down with her anxiety as Helen did and she would not have developed tachycardia.

Perhaps we should caution the reader against confusing a case of this sort with a condition such as was illustrated in Case 17. The one was an instance of conscious anxiety which had become attached to the irrelevant idea of a weak heart while the other was a matter of accelerated heart beat due to displaced or converted anxiety. Helen's anxiety about her heart was secondary anxiety and was not the cause of the tachycardia. In the other case there was no acceleration of heart beat.

Neurotic Dizziness. A second quite common anxiety equivalent is neurotic dizziness. The sensation of dizziness is purely subjective; there usually are no overt manifestations of it. The individual complains that he feels dizzy, that he feels as if he were swaying as he walks, sometimes as if he would fall. But he actually sways but little if any; there is no marked loss of motor coördination. It perhaps would be more accurate to say that the individual has an idea of being dizzy rather than that he has a sensation of dizziness.

In many cases neurotic dizziness alternates with attacks of anxiety or with a sense of helplessness and uncertainty bordering on disorientation. And the dizziness itself fluctuates more or less with changes in the individual's objective situation. It tends to be less severe if the individual is free to move about, and to increase if the individual is forced to remain quiet and to devote himself to any sort of tedious work. Vision may be affected. Objects may seem blurred or out of proportion.

The following case of neurotic dizziness is an adaptation of a case report in *Auto-Correctivism.*

CASE 19. Irving O. was the second member and the only boy in a family of three children. One sister was

three years his senior while the other, who died in infancy, was several years his junior. Irving was a young man of unusual physical attractiveness, intelligent, and a college graduate. His dizziness commenced when he was thirteen and from that time on it had been an accompaniment of his daily life. Although he was of an extraverted personality, he had no close friends and paid but scant attention to outdoor activities or physical sports.

Irving was an unusually fluent speaker for one of his age. At twenty-two he could address an audience containing physicians, lawyers, judges, professors, etc., with the greatest of ease. He reported that while on the platform addressing an audience he suffered little or not at all from dizziness, but that the moment he stepped down and mingled with the members of the audience he became dizzy. He could hitch-hike alone across the country and suffer less from his symptom than sitting at his desk in his office. It seemed to him at times that he would fall to the ground, that he was swaying, and that the ground dropped away from him as he walked. At times he suffered from an acute sense of helplessness and from a sense of being at a distance from the world of reality. At other times he would be overcome by attacks of weeping which he was unable to control. Frequently his visual field seemed blurred and indistinct.

The precipitating factor in Irving's case was the event of certain ceremonies conducted by his religious group for the purpose of rendering the youth aware of his approaching manhood and forthcoming responsibilities. As with all the cases in the present chapter a discussion of the predisposing factor will be left till later.

Neurotic Perspiring. Everyone knows of the "cold sweat" of fear, and similarly perspiring is a normal aspect of an acute anxiety reaction in some persons. But occasionally excessive perspiring occurs not as an aspect of a conscious anxiety but

as an anxiety equivalent. And as in the case of the other anxiety equivalents, the individual's attention becomes focused upon the conversion symptom and he is inclined to become anxious in turn about it. The following case is typical.

CASE 20. Israel B. was a teacher in a denominational school. But his teaching was a matter of daily agony for him. He perspired profusely whenever his plans miscarried slightly or whenever a pupil giggled or whenever he could not immediately recall the word he wished to use. At such times he would suffer from an intensity of anxiety that bordered on terror *lest one of the pupils should observe that he was perspiring.* He also blushed profusely, and his blushing occasioned the same sickening dread. And finally, Israel always suffered when rain fell; for he could not encounter a puddle of water in his path without experiencing a strong impulsion to jump the puddle. But he was always afraid that he would fall over backwards into the puddle and thereby make himself ridiculous in the eyes of the passers-by.

When Israel was fifteen he read a German book on the disastrous consequences of self-indulgence. The book stated in the strongest and most unequivocal terms that horrible effects would inevitably result from this practice. At first nocturnal emissions would occur, followed sooner or later by diurnal emissions. Thereafter the individual would lose his hair, then his teeth, and from then on he would slowly disintegrate mentally and physically. Israel already had been guilty of the practice and therefore he could hold out but little hope for himself. His reading the book quite naturally resulted in an intense preoccupation with matters of sex. He soon began to observe and to worry intensely about nocturnal emissions, the occurrence of which was, of course, quite normal. In the course of a few years diurnal emissions occasionally occurred. And then exactly as if the book

had been true, his hair began to fall out before he reached twenty and he soon became quite bald. He kept his teeth.

The precipitating factor of Israel's anxiety was his reading the book on the consequences of auto-erotic practices. He happened to be an individual who blushed and perspired very readily and thus his anxiety became displaced to these two functions. In his particular case it seemed very probable that a part of his anxiety about blushing and perspiring was primary and not secondary.

Stuttering. Stuttering is a true personality disorder, a true psychoneurosis of the conversion anxiety or anxiety equivalent type. It varies more or less in its symptomatic features but very little in its etiology. It is not due to a lack of effective dominance by the right or the left hemisphere of the cerebrum, or to repressed oral eroticism or to an anal-sadistic fixation of libido. And it is not entirely a matter of "inhibition" of the speech mechanism by converted anxiety. Negativism is a particularly prominent feature in the disorder. Nevertheless it comes more nearly within the category of anxiety neurosis than in any other.

Many different facts concerning stuttering reveal clearly its psychogenic origin. The stutterer usually has little or no difficulty talking when alone, provided he talks volitionally and of his own accord and not at the request or command of someone else. He usually has much less difficulty in singing or reading than in talking. He talks more easily to some persons than to others. If he consciously desires to stutter he may be unable to do so. If coaxed to talk without stuttering, he stutters worse. In a situation in which it is of great egoistic importance to him not to stutter, he may be able to talk without difficulty. Stuttering can be cured by proper psychological methods.

The pattern of stuttering varies more or less from individual to individual but fundamentally it is always a matter of involuntary inhibition or blockage of speech. One individual can usually commence a word but is unable to finish it; an-

other is wholly unable to utter a sound at all for seconds or minutes at a time; a third starts off well but soon runs into difficulty, etc. The case given below is fairly representative of this type of personality disorder.

> CASE 21. Glenwood R., a college student of average ability, had stuttered since he was five years old—about the usual age for the commencement of stuttering. At times he had very much difficulty and at other times he did very well. Around his mother, who was belligerently intolerant of his stuttering, he stuttered very little. In fact his mother stoutly declared that although her son stuttered when he was younger he had lost the habit. Glenwood did very poorly in his French and he believed it was on account of his stuttering. When called upon in class he usually shook his head to indicate that he was not prepared to recite, rather than to try to talk. He obtained a conference with his French instructor to argue with her about his grade and to explain his handicap. He argued so well and spoke so fluently that he was unable to convince her that he was a stutterer.
>
> When Glenwood was five he was playing one day on the streets in a poorer section of New York. Two men commenced to quarrel and then fought. One man cut an ear off the other. This frightened Glenwood badly and he rushed home to tell his mother. When he commenced to speak to her he stuttered.

The precipitating factor in the case of Glenwood obviously was the incident of the fight between the two men, and his intense inclination to report it to his mother.

Akoasms. We have mentioned akoasms already in connection with neurasthenic disorders. To refer to them again as an anxiety equivalent is not a classificatory contradiction. Rather it simply implies the impossibility of drawing too sharp lines between the different psychoneuroses. Most personality disorders are more or less mixed or impure examples

from the standpoint of any classification. Anxiety is perhaps the most common of all psychoneurotic symptoms. Thus one may have a fairly typical instance of neurasthenia with akoasms. All neurasthenics suffer from anxiety or anxiety equivalents to some degree. We speak of anxiety neurosis when the anxiety or its equivalent is the predominant feature of the symptom-complex.

Akoasms are ringing or buzzing sounds which the patient localizes in one or both ears. Again, as in the case of dizziness, the patient very probably suffers from an intensified idea of akoasms rather than from actual sensations. At least we can say that the patient's attention to his symptom accounts for its persistence. The young woman, previously mentioned (Case 14), borrowed her akoasms from the incident of an infected ear. In other cases the origin is not so clear but a precipitating factor usually can be discovered. One young woman commenced to suffer from akoasms in connection with teaching in a grade school. She heartily detested her work and gradually the din of the school room became displaced and subjectively localized. Needless to say she suffered from anxiety not only in connection with her work but during most of her waking life. In the following case there was ample provocation for the development of akoasms.

Case 22. Oswald P. grew up in close bondage to a widowed mother and an older sister. His mother divorced his father shortly after the birth of her second child and thereafter stolidly turned her back on the opposite sex. She openly expressed her hatred of men and caused her son to feel that he might better have belonged to the sex of his mother. The sister followed closely in the footsteps of her mother, became hard and bitter without experience, and regarded men, marriage, and sex with the greatest contempt.

Oswald always continued obedient to the views and wishes of his mother and sister till he was in his early twenties. He then met and became genuinely fond of a

young woman of good morals and culture. For months he worried about the inevitable meeting sooner or later between his mother and sister and the young woman whom he intended to marry. He began to suffer from akoasms. Finally he summoned up sufficient courage to inform his mother and sister of the young woman's existence and of his feelings and plans in connection with her. His mother heaped reproaches upon him for his disloyalty and angrily refused to permit him to bring his sweetheart home for a visit. She and his sister furthermore declared they would disown him and refuse to see him again if he did not break off relations with the girl completely. In addition to all this his mother had an attack of "hysteria." Oswald's akoasms became more severe and he was forced to seek therapeutic aid.

The precipitating factor in this case was the conflict of feelings and interests which falling in love brought into Oswald's life. Had his subservient attachment to mother and sister been less strong he perhaps would have escaped psychoneurotic troubles.

Sexual Impotence. Functional sexual impotence or psychical impotence which afflicts an unknown but unquestionably large number of men under the age of fifty is usually though not always an anxiety equivalent. Impotence may in any given instance be the result of any one of various sexually inhibiting motives or feelings. Anger, resentment, disgust, indifference toward the object all have an inhibitory effect upon the sexual function. In speaking of psychical impotence, however, we have in mind those cases wherein the man is unable to achieve a sexual response although consciously desirous of doing so and while kindly or affectionately disposed toward the partner. Anger, resentment, or disgust may be repressed and subconsciously operative; but in the great majority of instances the impotence is due not to one of these factors but is the expression of repressed anxiety. Render the impotent man suddenly potent by means of suggestion or

persuasion and he almost certainly will experience anxiety in the sexual situation or immediately develop some other symptom which precludes sexual intercourse.

The most significant fact concerning impotence is that the man is most incapable with the woman to whom he is most devoted, and *vice versa*. The notion, generally held, that impotence in a given case is equally pronounced in all situations is entirely erroneous. Normal competence may pertain in respect to one partner and complete incompetence in regard to another.

Sexual impotence may affect any of the different components of the total genital pattern of activity, or the entire pattern. The following case is typical.

> CASE 23. Maynard H. had always been quite shy of the opposite sex. That is he was shy when it came to a matter of emotional involvement with one of them. In short he was afraid to fall in love and to become emotionally enmeshed in a close relationship with a woman. Until he was nearly forty he successfully managed to keep at a safe distance from women, emotionally. Up to this time he had experienced no difficulty in respect to sexual competence. But he had been a most careful chooser, always letting the woman do the choosing in fact, and keeping his relationships with the opposite sex on a casual plane.
>
> When he was nearly forty Maynard met and became strongly enamored of an attractive but very selfish woman. For a year prior to their marriage they were physically intimate, and Maynard experienced no difficulty. But on the night of their marriage his wife wept and reproached him bitterly for his inconsiderateness of her feelings and wishes. She accused him of caring for only his own pleasure and of ignoring hers. From then on for five years Maynard suffered from complete impotence, finally recovering his capacity only with expert psychological help.

The man who develops impotence was already over-sensitized to woman's emotional reactions to him. The precipitating cause of Maynard's impotence was the occasion of his wife's reproaches (demands).

Sexual Frigidity. Sexual impotence and sexual frigidity or sexual anaesthesia are frequently major factors in marital discord and disrupted homes. They are conditions which every young man and woman should know and understand. If there existed a fuller and more widespread understanding of these conditions and of other psychological factors which enter into man-woman relationships, the divorce rate would materially decline. Sexual frigidity is very common, and there are different causes of it. One of the most frequent etiological factors is repressed anxiety which exerts an inhibitory effect upon the sexual function. As this inhibitory effect becomes established conscious anxiety disappears. Apparently the anxiety simply serves to bring about a dissociation of the function and somehow to maintain this dissociation. For if sexual responsiveness, including, of course a response of the physiological mechanism, can be suddenly induced through suggestion then anxiety appears.

If the reader will refer back to Case 8 he will recognize certain anxiety equivalents in addition to the sexual anaesthesia, and he will furthermore easily discern that the anxiety which originally brought about the dissociation of sexual interest and sexual responsiveness was occasioned by a sudden threat to the integrity of ego-identifications. In most cases of frigidity in which anxiety is a factor the same holds true, namely, anxiety is aroused as a result of an inner incompatibility between sexual activity, frequently even sexual thoughts, and ego-identifications in the form of ideals of chastity, self-sufficiency, etc.

The following case is in line with what we have said.

CASE 24. Maxine T., a young married woman of twenty-five, declared she loved her husband because he never bothered her. She had married him in order to escape

from unpleasant home surroundings and had never been sexually responsive. She felt that sex was a degrading activity and that if one would keep his self-respect and personal integrity and completeness he would avoid it altogether. At the same time she suffered from persistent thoughts about death and from a sense of emptiness and occasional despondency. She was seriously considering divorcing her husband, not because she did not love him she insisted, but in order to be free to go forth and seek something in life worth living for. Her dreams were mostly of a sexual nature and she frequently awakened from them very much frightened.

Interpretation of Neurotic Anxiety. In our discussion of the different varieties of anxiety neurosis we have indicated the nature of the precipitating or exciting cause. We have yet to speak of the fundamental or predisposing cause.

The predisposition to anxiety neurosis resides for the most part in three sets of factors: (1) A lack of adequate positive ego-identifications, (2) inverted ego-identifications, and (3) fear and anxiety during childhood. Over and over it will be found that the man who develops an anxiety neurosis arrived at maturity (pubescence) strongly identified with the opposite sex. In every case of anxiety neurosis the individual *might have become homosexual.* Instead, however, with the advent of adulthood he renounced his inverted identifications, and this left him without an adequate sense of individuality, without adequate positive ego-identifications. The anxiety neurotic is partially disorientated, or we might say that he is only intellectually orientated. He is uncertain of his direction and anything which aggravates this uncertainty precipitates a psychoneurosis. Nothing could attest more pointedly to the true status of the anxiety neurotic than the anxiety equivalent of dizziness. As one listens to such a person describe the way he feels one gets the impression not of dizziness but of a lack of a definite orientation. But whatever the anxiety neurotic's symptom, whether it be anxiety itself

or an equivalent, it serves the purpose either of keeping the individual at a distance from others and from serious undertakings or of keeping his attention on himself or both.

The anxiety neurotic's unapproachable difficulty then is his deficient personal identity. He literally does not feel that he is this or that or anything else. He has no niche in life; he grew up without acquiring an adequate, positive personal meaning and autonomy and a sense of a specific relatedness to his surroundings, and he developed under a banner which he later found it necessary to renounce. He usually was merely an integer of a family unit and he failed to draw a sufficiently distinct line between himself and this unity of individuals. His first and greatest concern in life is to preserve what little sense of identity he has and he is therefore ready to become anxious upon the slightest frustration or upon his being forced or induced to make definite decisions and undertake a specific line of activity.

It will usually be found that the anxiety neurotic suffered from fear and anxiety during childhood; and it seems probable that this fact rendered him particularly liable to react to difficulties with anxiety in adult life. We will now endeavor to evaluate our anxiety neurotic in terms of those ten points or sets of questions which we raised in the last chapter, and this should give us a fairly clear conception of the personality and motive arrangement of this particular type.

Summary. The individual lacks adequate positive ego-identifications. He tends to be subservient toward others not so much because his racial motives are over-developed but because he lacks any definite guide or orientation. Most of his energy is devoted to the end of maintenance. He cannot help being a genuinely selfish person.

He is not particularly infantile. Because of his lack of a definite orientation toward life and its problems it is equally easy for him to entertain adult or childish interests. He is unable to maintain an interest in anything for long.

His ego-identifications with the opposite sex have been renounced and he now simply lacks identifications.

The direction of the individual's attention and interest is predominantly toward the present. Even prior to his "nervous breakdown" he had no definite orientation toward the future.

The anxiety neurotic is daily unhappy, but not as unhappy as he contends. He actually comes to utilize his anxiety to keep his attention on himself and to keep himself at a safe distance from undertakings of all sorts but particularly emotional involvements.

He often appears to be well enough adjusted to others. Usually he performs his routine tasks without apparent difficulty.

He is extremely shy of marriage and its responsibilities. Not infrequently marriage or becoming enamored of a member of the opposite sex acts as a precipitating cause of his psychoneurosis.

Usually he is neither strongly introverted nor strongly extraverted.

He is not strongly motivated as a rule, but there are exceptions.

An anxiety neurosis is persistent non-adjustive activity; repression leading to functional dissociation is often involved. Essentially, of course, it comprises a fear reaction to difficulties.

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CHAPTER XI

THE PSYCHONEUROSES (*Continued*)

PHOBIAS

Phobias and Abnormally Strong Fears. Many persons lead fearful lives; they are abnormally timid and cautious toward many different aspects of their environment. They become uneasy in crossing water, in climbing steep mountains, around a barking dog, when sitting on a spirited horse. Some of them are afraid to milk a cow or to ride a large calf or to spend the night alone in an isolated spot. But such fears do not constitute phobias. *A phobia is a morbid or pathological fear.* It differs from a strongly conditioned fear in several fundamental respects: (a) It is more intense and paralyzing; (b) the stimulus or situation which arouses the phobia is not usually an adequate or normal fear-exciting fact; (c) the individual who suffers from a phobia regards his fear as absurd and unjustified whereas the timid person is inclined to justify his fears, at least to himself; (d) the individual is able to exert but little if any control over his phobia; and (e) true phobias are not susceptible of unconditioning in the usual sense.

A Classification of Phobias. Phobias may be classified from different points of view. In the first place we may distinguish them with respect to the nature of the fact which arouses the fear. Such a classification would be extremely lengthy. It will suffice to mention a few of the more common types.

Fear of high places—Acrophobia
Fear of open places—Agoraphobia
Fear of closed places—Claustrophobia
Fear of blood—Hematophobia
Fear of contamination—Misophobia
Fear of crowds—Ochlophobia
Fear of disease—Pathophobia

Fear of poisoning—Toxophobia
Fear of animals—Zoophobia

We could go on with fears (phobias) of dirt, germs, electric storms, snakes, worms, guns, knives, death, etc., almost without end. But such a classification has only a purely descriptive value. It will be sufficient if the reader will bear in mind that phobias may exist in regard to any perceptible if not any conceptual aspect of one's relationship to his environment. The classification which we shall now give is from a more dynamic or genetic point of view and provides us with a means of distinguishing between phobias of different etiologies.

From a psychogenic point of view we may distinguish three classes of phobias:

(1) Simple Concrete Phobias
(2) Symbolic Concrete Phobias
(3) Symbolic Abstract Phobias

In the case of the simple concrete phobia some concrete fact is feared and this fact has for the individual only its literal meaning. In the case of the symbolic concrete phobia the fact, which again is of a concrete nature, has a special meaning or significance for the individual in addition to its literal meaning, although he is not fully cognizant of this secondary or symbolic significance. Abstract phobias have an abstract meaning. We shall discuss and interpret these three different types of phobia in turn.

Simple Concrete Phobias. Usually if not always the simple concrete phobia has its origin in some actual fear experience involving the fact to which the phobia relates. A careful reading of the two following cases, adaptations of case reports by Bagby,[1] will render more specific this type of fear reaction.

CASE 25. A young woman of twenty had suffered from a severe phobia of running and splashing water since she was seven years old. Indeed her fear of running or

[1] Bagby, E., "The Etiology of Phobias," *Jour. of Abnor. Psychol.*, 1922, Vol. 17; also *The Psychology of Personality* by the same author, pp. 44–48, Holt.

splashing water was so intense that during the early years of the disorder it sometimes required the combined efforts of three members of the family to give her a bath. On one occasion she fainted at school because of the sound of the drinking fountain, and in riding on trains she found it necessary to keep the window curtain down lest she should see the streams of running water over which the train passed. She was wholly unable to account for her peculiar fear.

We are told that the phobia had its inception in an incident which occurred when the patient was seven years old. She, her mother, and an aunt went for a picnic. When the mother decided to return home, the little girl (patient) begged to be permitted to remain longer in the care of the aunt, whom she promised to obey. The two went for a walk in the woods and the little girl, forgetting her promise of obedience, ran away alone. Later the aunt found her wedged in between two rocks of a small stream with water falling and splashing over her head. She was badly frightened. After being extricated she expressed anxiety lest her mother should punish her for her disobedience; whereupon the aunt promised, "I will never tell." The aunt left the next morning and soon thereafter the phobia developed, continuing for thirteen years, when the aunt revisited the family. Upon hearing of the young woman's phobia, the aunt recounted the incident and, with the recall of it by the patient, the fear disappeared.

CASE 26. A man of fifty-five had been troubled since he was a boy by a strong fear of being grasped from behind. When on the street he felt impelled to glance over his shoulder to see if he was being followed; he was always careful to have his chair placed against the wall at social gatherings; he was unable to enter theaters or crowded places. He could not recall the origin of his fear and had no idea of its cause.

In his fifty-fifth year he returned to the town where he spent his boyhood. In looking up his childhood friends he discovered that one of them was still at the corner grocery. During their reminiscing the friend recalled how the patient had been in the habit of taking a handful of peanuts from a barrel in front of the store whenever he would pass that way; and how one day, seeing him coming, he hid behind the barrel and jumped out and grabbed him from behind just as the other reached into the barrel. The patient had screamed and fallen in a faint to the sidewalk. The patient succeeded in recalling the episode, following which the phobia disappeared, "after a brief period of readjustment."

Interpretation of Simple Concrete Phobias. These two cases should give the reader a fairly clear idea of this type of phobia. In order to understand fully their origin and significance let us analyze briefly the more pertinent facts regarding the circumstances of their inception and of their genesis. First, we may be reasonably certain that such a phobia always originates in connection with, or as a result of, some fear experience. Secondly, we observe that although the fear remains conscious in the sense that it is experienced anew upon each succeeding occurrence of the stimulus and that the stimulus or situation which arouses it remains essentially the same, there is no recollection of the initial experience. Thus in Case 25 fear was originally aroused, at least in part, by the fact of running or splashing water, and the phobia which developed was excited by the same sort of stimulus, but the original experience had been forgotten. Thirdly, we observe that the individual is unable to control his fear or to reason himself out of it. Hence we obviously are dealing with something which is quite different from a typical conditioned fear. Fourthly, a moment's reflection will convince us that the forgetting of the original experience was not an instance of normal forgetting. This indicates, fifthly, that an act of repression occurs in the development

of a phobia of this type. Sixthly, as Bagby[1] points out, not only fear but apparently a sense of guilt or self-reproach is always involved in the original experience.

These appear to be the essential factors in the origin and genesis of a simple phobia. What can we make of them? The original fear experience must be regarded as the precipitating factor in the simple phobia, but what is the predisposing factor? *A simple phobia is a special form of self-repudiating reaction.* In order to understand the origin of the phobia one must study not only the nature of the situation which occasioned the original fear experience but also the motivation of the individual at that time. The individual was selfishly motivated; in his own feelings he was taking unfair advantage of some other person. He is an individual who is characterized by an exaggerated or unmodified egoistic component, drive toward complete personal freedom and independence of others. And like the thief who is unable to repent till he is caught and humiliated, our patient suddenly denounces himself once his too self-satisfying egoistic propensity is checked by fear. This self-denunciation or repudiation is his sense of guilt. But once out of the fear-exciting situation the individual's vainness again asserts itself and the sense of guilt becomes egoistically intolerable. An attempt at repression, denial of the guilt is made. The repression is only partially successful, resulting in amnesia for the experience and a consolidation of the guilt and fear. The fear-guilt complex becomes firmly established as a repudiation of the individual's craving for self-sufficiency. It stands as an ever-ready reminder to the individual, often long after it is needed, of his obligations to and dependence upon others. The self-repudiating nature of certain types of phobias will become more clear with our discussion of symbolic abstract phobias.

Symbolic Concrete Phobias. In the case of this second type of phobia the individual fears some concrete fact such as a knife, dirt, worms, but his fear is aroused not because of the literal meaning or significance of the fact but because

[1] *Ibid.*

the fact has acquired a subconscious and symbolic meaning. This symbolic meaning is seen to be dangerous to the individual once we understand his particular motive arrangement and the basic orientation of his interests. It is unsafe to generalize in the field of abnormal psychology; however, we can say that in all cases of genuine phobias the fear conceals a positive and exaggerated inclination which one may speak of as a wish or desire. In some phobias this desire is egoistic, in others it is racial, and in still others it appears to be an integration of egoistic and racial incentives which, however, are out of alignment with the proper development and functioning of the individual. In the following case, borrowed from *Auto-Correctivism*,[1] the hidden wish was rendered obvious, largely, perhaps, because of the death of the young woman's father.

CASE 27. Anna P. was a young college woman of very good intelligence and a friendly disposition. She was the youngest member in a family of three children, the other two of whom were boys. She had always been extremely fond of her father, who had been deceased several years at the time of her analysis, and still dreamed of him almost nightly. During one of her visits she declared that she believed she would be happy for the remainder of her life if she could sit on her father's lap just once more. Her feelings toward her mother appeared to be an admixture of fear, jealousy, and sympathy.

For several years Anna had been suffering from an intense and morbid fear that her mother would stab her with a certain knife which was kept in the kitchen. She stated that her fear was so intense that she could never fall asleep at night till she was quite certain that her mother was asleep. And although she fully appreciated the absurdity of her fear, particularly during the day-time, she never could bring herself to touch this

[1] *Auto-Correctivism*, Caxton Printers, Ltd.

particular knife. She was aware at times that she not only was afraid of the knife but that she was also strongly fascinated by it. It is most significant that the thought of having the knife destroyed never occurred to her.

Interpretation of Symbolic Concrete Phobias. We can shed considerable light on this type of phobia by explaining Anna's fear of being stabbed. Until Anna was six or seven she slept in a small bed by the side of the bed of her parents. She was able to recall that often of a morning she would climb into her parent's bed and play with her father while her mother prepared breakfast. Her intense fondness for her father early became the dominant influence in her life, and as stated, it still was fully present at the time of her analysis. She was unable to recall ever having witnessed any acts of physical intimacy between her parents, although she very probably had but had been unable to discern the exact nature of such acts. But she clearly recalled that when she was about ten one of her brothers made nightly attempts to be intimate with her. She stated that her brother's actions had caused her intense mental anguish but despite this fact she had refrained from telling her parents.

From her experience with her brother Anna was able to gather further information concerning the nature of sexual intimacy and therefore she was able retrospectively to sketch in greater detail the father-mother relationship. Her fondness for her father consisted in part of a desire to be physically close to him and therefore the idea of the sexual act itself inevitably became added to her longed-for relationship to him. With the advent of pubescence and its added weight to her already over-developed affectionate and sexual proclivities, Anna gradually reached the point where it became imperative that she erect defenses against her attachment to her father. She was becoming too completely lost in her thoughts, feelings, and phantasies about her father. The goal of personal integrity and her ego-values were threatened.

Because of the element of mental pain—and perhaps physical pain as well—in connection with her experiences with her brother, Anna was able to borrow from these experiences the idea of being stabbed and to substitute this idea for the idea of sexual intercourse. And from the fact that her father "belonged to her mother" and not to herself she was able to achieve a guilt-complex in relation to her mother. And since the idea of being stabbed and the guilt-complex derived from the same basic source of interest and emotional disturbance, they naturally assumed a logical or causal relationship to each other and thus became welded into the idea of being stabbed by her mother. And we further note that by virtue of its symbolic meaning this idea of her being stabbed by her mother became placed directly in the path of Anna's interest in her father. Therefore the more intense her proclivities toward her father became, the more obsessive became the idea of her being stabbed and the fear which it engendered. Hence we see that Anna's arrangement of interests and defenses assured the arousal of fear upon the arousal of her interest in her father.

It is necessary to add two or three further observations to complete our interpretation of this case. The particular knife which Anna feared bore a certain definite likeness to a penis. And it was her strong positive attachment to the symbolic meaning of the knife which precluded any idea of having it destroyed. Although Anna's phobia came on gradually the death of her father was unquestionably the precipitating cause of it. For with his death all possibility was removed of her committing any act in keeping with her attachment to him that might disturb the peace of the family or her own conscience, ego-identifications of a moral nature. She was inclined therefore to give free rein to her inclinations to dream about him and to indulge in unrestrained phantasies. And it was the relinquishing of the restraint which she theretofore had exercised over herself that permitted the diversion of so much of her energy toward this one interest as to occasion symptomatic formations. The

mind always reacts or tends to react against any exaggerated proclivity either of an unselfish or of an egoistical nature. The predisposing cause in Anna's case was her exaggeratedly strong attachment to her father.

Although all symbolic concrete phobias would not follow the exact pattern of the one just described, to the extent of the writer's experience they are always defense measures against exaggerated racial motives—sex, affection, suggestibility, sympathy. Thus they are not self-repudiating reactions and in that respect they differ from the other two types. The mode of reactions to difficulties most involved is repression of the exaggerated interest followed by displacement of the interest to some symbolical fact. The exaggerated underlying interest in this symbolic fact still constitutes a threat to the individual's ego-identifications and therefore arouses fear. The fear tends to turn the individual's attention from the fact of his interest. Thus the woman who has repressed abnormally strong sexual interest in some particular man may develop a phobia of men of similar type. Were it not for her exaggerated but repressed interest there would, of course, be no occasion for her fear. Fear is aroused because the strength of her sexual proclivities constitutes a threat to her personal autonomy and individuality.

Lest the interpretation which we have given of Anna's phobia appear somewhat far-fetched, we might add that her dreams were all of her father and were frequently glaringly sexual in content. Also that with the disappearance of her phobia she became friendly toward her mother, unafraid of being alone with her brothers, ceased thinking of her father, and made a happy marriage.

Symbolic Abstract Phobias. The symbolic abstract phobia is one of the most involved and interesting of all personality disorders. The agoraphobia is perhaps the best example although phobias of high places, closed places, of death, and of fear also belong to this category. But it is not of the external fact that the patient is afraid. An open place after all is no place at all; it is a lack of specificity. Essentially

the same holds true of a high place or of a closed place. Death is an abstraction, something which is unknown to human experience, while a fear of fear is again simply a fear of the intangible and undefinable.

The person who suffers from a symbolic abstract phobia is afraid, strictly speaking, not of something in his environment, not even of some hidden symbolic meaning of a tangible fact; he is afraid of an inner aspiration, an inner proclivity not in relation to his environment or any fact therein but in relation to himself. Careful study will always reveal in the mind of a person who has such a phobia a raw, undiluted egoistic aspiration to self-sufficiency, an egoistic component which exists like a foreigner among his other values and interests, a thirst which is utterly devoid of an unselfish touch, a lone and solitary addict to the exaltation of "I-ness." It is this "maverick" among his egoistic interests that occasions his phobia. But let us examine a case carefully before continuing with our analysis, lest the analysis become meaningless for lack of specific application.

CASE 28. Lucy H. was next to the youngest in a family of five children. She had one younger brother, two older, and an older sister. Her mother was a very dynamic woman with high ambitions for herself and children while the father was somewhat inferior and more easy-going. The family was in poor economic circumstances and the home life was characterized by many worries and the incessant activity of the mother and older sister. Being many years removed from her mother and older sister and knowing little in her home except worry and hard work, Lucy might have developed a painful sense of personal inadequacy. But being strongly motivated, not particularly introverted, and of a keen and quick mind, she reacted instead by developing an early subservient and obedient attitude toward the other members of her family and *by making certain implicit reservations*. She did not try to like her uncomfortable and "pinched"

home life; she submitted to it with good grace but at an early age she developed a forward-looking attitude to something radically different and personally satisfying. To begin with she had no clear conception of her future goal; it constituted during her formative period little more than an obstinate refusal to try to be satisfied with her position. Outside her home she saw evidence of wealth, happiness, and personal freedom. Some day she would have the good things of life. Her mother's ambitious strivings encouraged the development of such an outlook. Let us make note that this looking forward to something infinitely better was an egoistic reservation and made it possible for Lucy to submit to the exacting demands of her home life and economic situation. And let us further note the fact that this reservation conduced to a dual development. Her egoistic motives never became fully invested in her daily life; to an extent they simply persisted as an unmodified and unmixed aspiration to personal enhancement. It is this sort of undifferentiated and undefined egoistic longing that we speak of as an undiluted egoistic component.

Upon the completion of her high school and business college training Lucy acquired a good position. She still lived at home but went to a public bath several times each week inasmuch as her home provided only a laundry tub and a gas stove. She wore nice clothes, was physically attractive, and received her full share of attentions from members of the opposite sex. Her home life had branded her with a permanent distaste for poverty and when she met a man who wanted to marry her and who enjoyed a good income she married. For the first two years things went along very nicely. Then the economic depression struck and her husband failed in his business. Lucy entered into a small business of her own in order to support the family budget. For several more years everything was fairly satisfactory. Then she contracted a venereal disease from her husband. It slowly dawned on

her that her husband had been unfaithful to her. Then one day she discovered that he was forging checks. Lucy's life began to grow increasingly uncertain and in no direction could she find anything to cling to.

She became enamored of her physician and shortly submitted to his advances. Business conditions with her husband went from bad to worse. Lucy was being forced into a position of intolerable poverty, disgrace, and personal oblivion. Her husband continued to consort with other women and economic conditions became increasingly bad. Then Lucy completely switched her attention and interest. She lost all interest in her husband and his affairs, all but disclaimed any obligation to her child—the existence of which we failed to mention—accepted her home merely as a place in which to live, and commenced to lay plans to marry her physician. *She had renounced all of her previous guides and values and had aligned her thinking, feeling, and efforts with her fully revivified and strongly activated old undifferentiated egoistic component.* To be the physician's wife would be to become a queen; from social obscurity and poverty in a dark corner of New York to the wife of a prominent physician on one of the City's choice streets. In her daydreams Lucy pictured to herself the physician's family quickly rising to their feet as she swept through the door. Even the physician's mother would show her due homage.

Then Lucy began to become nervous, and in a few months she was unable to go across the street alone. For the next five years she was utterly incapable of going out by herself. Upon making an attempt to do so she would feel tremulous and weak and thoughts of insanity, death, and fainting would obsess her mind.

Interpretation of Symbolic Abstract Phobias. The principal predisposing factor in this type of phobia is the undifferentiated and undiluted egoistic component of which we have

spoken. We have pointed out in previous chapters that mental balance and stability rest upon an integration of the racial and ego-motives; and we have said that such integration takes place only when both types of motives become invested in the same activities and incline the individual toward the same multi-meaningful objectives. In the case of the person who develops an abstract phobia, as is also true of most persons who commit suicide or develop paranoia, a reservation is made fairly early in childhood and the individual fails at that time to enter wholeheartedly into his activities, to invest his efforts and energies fully in his childhood situations. Usually it will be found that the individual lived in a home in which one parent, frequently the mother, was in daily and obvious conflict with her environment. This parent's daily disparagement of her (or his) environmental situation, together with other factors encourages the child to develop a reserve, a restraint, to enter into his activities more or less mechanically and without zest; and at the same time to cast about for something more personally satisfying or to develop an attitude early of looking forward to a better opportunity for personal (egoistic) gratification, of patiently awaiting the future.

The individual arrives at maturity with this uninvested egoistic reservation. It constitutes an autonomous entity in his mind. It does not enter, or only slightly, into his daily activities and interests. If upon his arriving at adulthood his social-economic situation has materially improved, he may make a satisfactory adjustment; in which case his undifferentiated egoistic component remains dormant. It exists simply as an already effected, unused, but utilizable pattern for thought, feeling, and action. This is the predisposing factor in the abstract phobia.

Now if the individual meets with too much frustration in his daily efforts or if he meets with too much success, he is prone to the development of a phobia of high places or open places or of death or of fear. For too much frustration will encourage him to renounce effort on the level of

adjustive effort and to revive his old reservation, his old tendency to look to the heights of personal attainment, to aspire to the opposite of what is; while too much success tends to stimulate through juxtaposition his old undifferentiated egoistic component which has known no limitations. Many of our unhappy cases of suicide are of the latter mode; cases such as the one we have just described are of the former.

We now come to the fact of which the type of patient under discussion is afraid. He (or she) is afraid of the intensified, undiluted egoistic component which we have mentioned. The fear is aroused by the fact that once the individual's energy becomes diverted to the end of unexcelled personal attainment, he is drawn away from all his other values and relationships into the isolation of self-sufficiency. Even his own children tend to be forgotten or disowned. *He becomes afraid because his ego-thrust threatens to annihilate his mental integrity.*

But if the person who suffers from such a phobia is characterized by a diversion or a tendency to a diversion of his energies into a single channel of personal aggrandizement, surely such a fact should be apparent in the individual's conscious aspirations. The fact is apparent but easily overlooked. Had Lucy not been induced to divulge the content of her day-dreams in connection with the physician, her attachment might readily have passed for an ordinary love interest. But the content of her day-dreams fully revealed the nature and intensity of her attachment. She saw herself as receiving homage even from the man's mother; she saw herself literally as a queen. To be his wife had become invested by her with the significance of the ultimate in personal attainment, nothing less. Her attachment was egoistic; he was simply a means to her aspired-to personal achievement. She came to recognize this fact during her analysis. For five years she had been almost oblivious not only of her husband but of her child and her friends. Alone in her apartment she lived (implicitly) in a world of self-fulfillment that was farther removed from the world of reality and from her

actual situation in life than the normal person can easily conceive.

To go out alone was symbolical of self-sufficiency; it was subconsciously indicative of such an attainment. It meant a complete divorcement of herself from all her previous values and interests, from the world of reality itself. She therefore was afraid, just as the religious man would become afraid if he suddenly experienced an intense desire to usurp the position of his God; a fear that is occasioned in any individual in whom an intense desire arises to supersede the race, of which he can be but an integral part.[1]

Summary. As we have seen, different types of phobias do not present the same psychogenesis. It will not be easy therefore to give the usual summary in terms of the ten points introduced in Chapter IX. Nevertheless it may be worthwhile to try. For this purpose we shall designate our three classes as I, II, and III, letting these numerals correspond to the order of presentation in the chapter.

There is usually an over-development of racial motives in II and an undifferentiated egoistic component in III.

Persons suffering from phobias are not characterized by infantilism. The abnormally timorous person is likely to be infantile.

The individual's ego-identifications are usually with positive and adequate values except for the incomplete ego-investments of III.

Persons suffering from phobias usually are adequately orientated toward future objectives. One might say that III is excessively orientated toward the future.

The daily feeling tone is usually pleasant enough except when inclinations or circumstances arouse the fear. When this occurs the individual may experience an intensity of fear that borders on terror.

The person who suffers from a phobia appears well enough adjusted to others except when his fear is aroused. One

[1] For a discussion and interpretation of another interesting case of agoraphobia see *Auto-Correctivism.*

woman who had suffered from an intense agoraphobia for twelve years successfully kept the matter of her fear a secret even from her husband for five years.

Marriage and its responsibilities are not particularly shunned, although they may be taken somewhat too seriously by II and too lightly by III.

Persons who develop phobias do not favor the extremes in any personality variant.

Persons with phobias are usually if not always strongly motivated. It is questionable if unusually phlegmatic persons ever develop genuine phobias.

Repression enters more or less into the development of phobias. In addition to this we may regard I and III as constituting self-repudiating reactions.

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CHAPTER XII

THE PSYCHONEUROSES (*Continued*)

OBSESSIONS; COMPULSIONS; MOTOR AGITATIONS; DOUBTS AND SCRUPLES; FEELINGS OF UNREALITY AND DEPERSONALIZATION

Obsessions Defined. An attempt has been made recently by no less an authority than Pavlov to give a physiological interpretation of obsessions.[1] The reader may rest assured, however, that an obsessional neurosis is a true personality disorder and that only a psychological approach to an understanding of it is possible at the present level of our knowledge of psychology and physiology. Speaking in terms of "pathological inertness" of this or that area of the cortex does not help us to understand the meaning or significance which the patient's obsessive ideas have for him.

An obsession may be defined as mental or implicit activity of a fairly specific nature which the individual recognizes to be irrational but over which he has little or no control. The psychological dictionary defines an obsession as "the presence, pathologically, in an individual of a persistent and irresistible idea, emotion or urge." Many normal persons have experienced at times an irresistible tendency to persist in thinking about something or to repeat over and over to themselves the words or melody of a song. This sort of thing, greatly intensified, is of the nature of an obsession. Obsessions, compulsions, certain types of motor agitations, doubts and scruples, feelings of depersonalization and unreality constitute the principal categories of the psychasthenic syndrome.

The classification of obsessions given by the late Morton

[1] Pavlov, I. P., "An Attempt at a Physiological Interpretation of Obsessional Neurosis and Paranoia," *Jour. of Ment. Science*, Vol. 80, 1934, pp. 187–197.

Prince[1] is worthy of mention although as the reader will readily note Prince used the term in a much broader sense than the restricted meaning which we have given to it. His classification is four-fold: (a) Those cases in which there is some manifestation of emotion, often vague and poorly defined, without the individual's experiencing emotion. An example of this class would be the "hysterical" laughing or crying of adolescent girls. In such instances the individual laughs or cries without experiencing elation or depression and consequently without knowing why she laughs or cries. This class of phenomena properly belongs to the field of hysterical disorders. (b) The second category includes those cases in which the individual both experiences and manifests emotion but without any perception or recognition of the cause of the emotion. He feels happy or sad without knowing why. When the emotion is fear or anxiety, we speak of the condition as an anxiety neurosis, that is, free-floating anxiety. (c) In the third class of obsessions Prince places the true phobias and certain other personality disorders which in certain respects are similar. In this type of "obsession," as we have seen, the individual is aware of the emotion, expresses it in his actions, and is cognizant of the stimulus or situation which arouses it. The stimulus is not a rationally adequate cause, however, of the emotion. (d) The fourth order of obsessions includes those cases in which the emotion is experienced, expressed and is in harmony with the *apparent* stimulus or situation which arouses it. A certain woman, for instance, is extremely depressed because, she says, she is going insane. Now if a person is convinced that he is going insane, despondency is a quite natural reaction to the belief. Obsessions of this kind are abnormal in that the cause which the patient assigns for his distress has no basis in reality. In other words, such a patient believes without adequate, rational cause that she is going insane. The reader may safely infer that in such cases we are always dealing with a displacement of affect or emotion; the patient is depressed not be-

[1] Prince, Morton, *The Unconscious*, Chaps. XI and XII, Macmillan.

cause of the belief that she is going to become insane but because of some other reason of which she is not aware. She believes she is doomed to insanity because she is so depressed; but not knowing the reason for her depression she rationalizes as does the patient in the mental hospital who weeps because she caused the World War.

Prince's classification is of value in the suggestion which it gives of the relatedness of the different forms of personality disorders and in its pointed references to the disparities which may exist within a human mind in respect to cause, interpretation, and attempted solution. But we are going to study obsessions from a somewhat different and more narrow point of view. In the first place we shall distinguish them from those conditions in which fear is the dominant factor; secondly, from affective or emotional states in which there is no definite cognitive or intellective content; and, thirdly, from compulsions.

Some Examples of Obsessions. The first two cases are adaptations of case reports by Ross.[1]

> CASE 29. A patient was obsessed . . . by the number thirteen. If he heard the word he felt a shock which was followed by a period of misery; he stayed in bed on the thirteenth day of the month and on the twenty-seventh, because the word "twenty-seventh" has thirteen letters in it. Everybody seemed to be saying thirteen at him in one way or another; thus they would say, "Oh, good morning," and with, as it seemed to him, a most perverse ingenuity, they would later in the day say only "Good afternoon." He worked near Oxford Circus, and lost time by not going through it because the words "Peter Robinson" were displayed prominently. On going up-stairs he would hop over the thirteenth step. Wherever he went, whatever he did, he was compelled to count the letters in short phrases people used, to count the words in their sentences, to count his steps,

[1] Ross, T. A., *The Common Neuroses*, Chap. XIV, Arnold, London.

the number of streets he passed, and so on. He gave so much time to the avoidance of the number that he had become totally unfit to do anything else, and his condition was truly one of great misery. He dreaded the number much as another might dread the street or a closed room.

The case just described might be classed as a phobia as far as the emotional content was concerned, for certainly fear was a prominent element. It differed, however, from a typical phobia in that in the case of a phobia fear arises only when the individual is confronted by the stimulus or situation whereas in the obsession the individual *involuntarily seeks the stimulus*. This man did not wait for the number thirteen to be thrust upon his attention; he was constantly thinking about the number and looking for it. In other words he was obsessed by thoughts relevant to the number thirteen.

In the next case to follow we again have an instance of personality disorder, the chief characteristic of which was the individual's obsessive preoccupation with certain thoughts. Fear or anxiety was present here too, but the irresistible tendency to think about a certain fact was the outstanding feature.

CASE 30. An ex-soldier was obsessed with a fear of tabes, which merely means that he believed he had syphilis. No amount of reassurance to the contrary had any effect. A study of his history showed that the occasion when syphilis might have been contracted synchronized with an act on his part "which could only be called one of cowardice." Although, to quote Dr. Ross, "It is not clear that he had altogether driven the memory of his military failing into the unconscious, i.e. below a barrier from under which it was incapable of recall," . . . "by dwelling on the disease his mind had been fully occupied, and he had been saved thinking of the other." When the patient was induced to face the real issue,

the true cause of his depression and obsessive thoughts, there resulted a keen sense of shame, on account of his act of cowardice, but a disruption of the obsession.

The next case is an adaptation of a case report from the author's book *Auto-Correctivism*.

CASE 31. Hazel O. was the first in a family of five children. She had two brothers who were younger than she by three and six years respectively and two sisters who were still further removed. At the time of her treatment Hazel was twenty-two years old. She was of somewhat shallow consciousness, and definitely inclined to be extraverted but at the same time she was vain and noticeably ego-centric. Her ego-centricity tended to give the misleading impression of her being introverted.

Hazel's parents had enjoyed good economic circumstances and Hazel had been humored a great deal during her childhood. She became strongly identified with her mother and affectionately attached to her father. At some time during her childhood she reacted against her attachment to her father, developing a marked aversion to him and a seemingly great fondness for her mother. The father had a defective eye and this became a matter of horror and disgust with the daughter. When Hazel was twenty-one she accompanied her father on a two-weeks visit to some relatives of his and during this time she felt it incumbent upon her to pay the father considerable attention on account of his defective vision. After they had returned home Hazel felt despondent and nervous. She hardly could tolerate her father's presence and on the other hand went to unusual pains to please her mother. In a few weeks she began to become distressingly preoccupied with her eye-glasses, although she had worn glasses since she was twelve. Her concern about her glasses became so intense that she was painfully and constantly aware of a whitish ring around the

edge of her glasses; she could not help feeling that there was something immoral about her glasses and she was unable to look anyone in the face. She had her glasses changed several times but this did not alleviate her distress.

Interpretation of Obsessions. Again, we may not generalize too readily but we can point out certain basic similarities among different obsessional neurotics. In the cases which we have cited the precipitating causes have been made self-apparent. We are interested now in any similarities in the symptom-complexes of different obsessions and in personality similarities of different individuals who develop this type of personality disorder. Let us subsume the essential points in the three cases given.

In Case 29 the patient volunteered the following explanation of his obsession. When he was a youth of sixteen or so he knew a young woman who was superstitious. She was superstitious regarding the number thirteen. He had been closely associated with this girl and being at a very impressionable age she had unduly impressed some of her beliefs upon him. But an analysis brought out the fact that he had been sexually intimate with the young woman, apparently at her instigation. But he had been a very moral young man in regard to sexual matters and he had regretted his transgression. Then he repressed all recollection of the sexual episode and at the age of sixty or so he was very proud of the "fact" that he had always preserved his chastity. Here we obviously have a case of unusually strong ego-identifications with ideas of chastity. And we can see that his thinking about the number thirteen must have been in part sexually motivated and that thirteen was a substitute fact or symbol for what the young woman had meant to him in a sexual sense. In other words living an abstentious life and therefore tending more or less to become preoccupied with thoughts of sex he became preoccupied with the number instead.

In the next case we again have an individual who had com-

mitted an act which infringed upon his ego-identifications. He succeeded in keeping the unpleasant fact from his thoughts by thinking of an associated fact. In this case too we feel safe in inferring that the two facts were definitely related or connected. Now in the instance of the first case we discussed, the individual tended to think of some fact which had been pleasurable but humiliating; and we see that the same holds true of the present case if we regard the man's sexual experience and his neglect of duty as two aspects of the same fact or experience. Nothing could have been more effective in keeping him from a repetition of the same total experience than a belief that he had contracted syphilis. We are forced to conclude that his sexual proclivities had been at least partially instrumental in occasioning his neglect of duty, in his committing the cowardly act.

In the third case we had a young woman who was abnormally attached to her father. The writer might add that she became definitely cognizant of this fact during her analysis and with the disappearance of her obsession. And again we have an instance of preoccupation with a substitute or symbolic fact as a means of avoiding recognition of and attention to a fact (inclination) which would have been egoistically painful and self-negating. Her father's visual infirmity, involving glasses, and the fact of her mother's always having worn glasses, taken together with the fact of her own glasses, supplied her with an idea which could sketchily and symbolically express her feeling relationship to her parents. But in order to keep herself from recognizing this relationship in its true light it was necessary for her to disparage the fact which she entertained or to somehow subjugate herself to it. It was not difficult to do this inasmuch as no young woman likes to wear eye-glasses.

Now what conclusions can we draw from these three cases? An obsession is a symptomatic structure which is brought about by, and which represents a compromise of, egoistic and racial interests. Thus the symptom is always expressive of an egoistically engendered resistance and of sexual, affec-

tionate, or sympathetic interest. In the first case which we mentioned thinking about the number thirteen was a substitutive activity for thinking about a sexual experience and of sex. And it was this racial (sexual) motivation which kept the individual on the alert for the number thirteen. Finding the number brought about an egoistic renunciation of the sexual interest in the form of mental distress, conscience. In the second case the egoistic resistance existed in the form of incessant preoccupation with ideas of syphilis (tabes). The belief that he had syphilis tended to preclude and to turn him against participation in sexual activity. But one cannot think about a sexual disorder without implicitly participating in sexual activity, and therein was expressed the sexual interest. And in the third case the preoccupation with eye-glasses constituted a symbolical expression of identification with the mother and interest in the father, while the self-disparaging element expressed egoistic resistance to her interest in her father.

And from these observations we may conclude that a person who suffers from an obsession is one who has strong ego-identifications and strong racial interests centering about the same inadequate or inappropriate fact or situation, or whose ego- and racial interests lack integration. Thus the individual who has become over-sensitized sexually due to early influences and who therefore has acquired strong ego-identifications with sexual chastity or negative identifications with sexual activity has the basis for the development of an obsession or a compulsion. In addition to this relationship of racial and ego-values, personality and temperamental factors, of course, play a role. We will evaluate these secondary factors in our summary at the end of the chapter.

The person who is positively inclined through racial proclivities and negatively inclined through ego-identifications toward the same fact is in the position of having to "strike a compromise." And he can do this only through substitutive or symbolical activity; otherwise either ego-identifications or racial interests would tend to dominate at the moment,

which actually does occur in certain cases even where the activity is symbolical, as we shall see in connection with compulsions. The compromise effects a certain degree of mental balance; the individual becomes the victim of two opposing pulls but is saved from complete domination by either line of motivation.

Compulsions Defined. *A compulsion may be defined as overt activity of a persistent and fairly specific character which the individual recognizes to be irrational and incongruous with the situation in which it occurs but over which he has little or no control.* We have in mind, of course, an internal compulsion (impulsion). There is no fundamental difference between obsessions and compulsions except that the former are predominantly implicit activity while the latter are overt activity. Obsessions sometimes become supplanted by compulsions.

The following cases of compulsions are fairly typical.

> CASE 32. Felix A., a young man of twenty, came to the writer complaining of a number of symptoms. Among these was the impulsion to wash his hands many times during the day. Associated with this compulsion (impulsion) was a feeling that his hands were unclean. The compulsive habit was easily traced to masturbation, which always gave him a feeling of uncleanliness and shame. He endeavored not to think of his masturbatory practices, to forget them; in fact to pretend that he was not guilty of them. After he had admitted the practice and clearly recognized its relation to his hand-washing compulsion, the latter disappeared.

The next example, adapted from Burt,[1] is a case of fetichism involving kleptomania. We might state here that compulsions include the entire list of non-psychotic manias.

> CASE 33. A fifteen-year-old boy was taken to task for stealing a watch and some money. When he was asked why he took the watch he replied: "I suppose it was

[1] Burt, Cyril, *The Young Delinquent*, pp. 175–177, Appleton.

the glass. I put my pen through it, and then smashed the works." When questioned as to the use he had made of the money, he said he wanted to pay for some glasses he had ordered. Further investigation disclosed the fact that he had collected fifty-four pairs of glasses. Some of the glasses he had found; others he had stolen. It appears that he was having a rather difficult time with his studies in school. This situation made him envious of those who were doing good work, several of whom wore glasses. He endeavored to compensate for his failure by a child-like attempt to identify himself with those who were successful. One way of doing this was to possess glasses, the more the better. His collection of glasses symbolized to him the acquisition of the mental ability of his superiors.

The following case is given by Stekel.[1]

CASE 34. Mrs. W. C., a 49-year-old mother of five children, is seized every morning by a torturing restlessness which impels her to talk without pause for an hour or two at a time. The flow of her talk is incessant. As her husband did not want to hear her out and she was afraid of appearing ridiculous in her servants' eyes, a relation of her housekeeper's, a young woman, was engaged for the sole purpose of serving as a lightning-rod-conductor for these daily morning storms. Regularly at half-past eight in the morning she rushes into the girl's room and begins to storm about her household troubles, her cares on account of the children, about her husband, the bad times, and keeps this up until she tires herself out in a two hours' harangue. Once she was ill with laryngitis and her physician forbade her to talk. She was compelled to run out of the house and roam for a couple of hours. Then she came home very much calmed. When the war affected adversely their financial condition, she agreed with her husband that the girl

[1] Stekel, W., *Peculiarities of Behavior*, Vol. 1, p. 191, Boni and Liveright.

ought to be dismissed. At the prospect of having no one to listen to her mornings, the woman was disconsolate. Finally she prevailed upon her husband to have the girl retained after all. It is interesting that the daughter, too, got into this bad habit and tried to compel her mother to listen to her. The reason for the daughter's parapathy was her jealousy of the girl.

Stekel finds the explanation of this compulsion (talking) in the following facts brought out by an analysis. The woman's sexual life was unsatisfactory, her husband leaving her unsatisfied; she experienced an impulse to glance at the genital region of men and believed this caused them to laugh at her; she had a further impulse to reach out and touch the genitals of men. These abnormal tendencies induced a feeling of guilt and shame and were therefore inhibited or repressed. A normal or adequate resolution of the feeling of guilt and shame which these tendencies occasioned would have been a frank confession of them, at least to herself—"Confession is good for the soul." Her incessant talk was thus a first step in this direction, and occasionally she did make abortive confessions. Hence her talking was motivated directly by feelings of guilt and indirectly by the impulses referred to.

The next case, borrowed from *Auto-Correctivism*, is unusually interesting and sheds considerable light upon the conflict arrangement underlying this class of personality disorders.

CASE 35. Irving F. was a college student of twenty-two, of fair personal appearance and above average intelligence. He was the eldest in a family of five. He had one brother who was two years his junior and three sisters who ranged in age from ten to eighteen. His parents were poor and uneducated and the family always had lived in cramped quarters.

Irving was characterized neither by a highly saturated consciousness nor by a definite shallowness. His attention and interest were mainly extraverted but at the same

time he could become intensely preoccupied with an idea. Yet the idea always tended to become translated into action sooner or later.

Since the age of twenty Irving had been disturbed by peculiar compulsions. These compulsions changed from time to time and with each change in the type of act which he was compelled to perform there was an increase of intensity and the fact to which his compulsive tendency was directed was of a more personal nature. To begin with he became obsessively preoccupied with a certain rug at his home. The presence of the rug occasioned him such acute distress that he insisted that his mother should sell it or throw it away. Then he became concerned about his overcoat. He found relief only when he had procured a new coat. Next he became obsessively concerned with mufflers or scarfs. He felt a compulsive desire to wear a scarf and purchased one. He had had it only for a few hours when, noticing a small check in the pattern, he became obsessed by the desire to be rid of it. He surreptitiously cast the scarf out of a window in the office where he worked and immediately experienced the most intense relief. But soon his obsession to possess himself of a scarf returned. This time he thought to play safe and therefore bought one of pure white which had no pattern of any kind. Then the thought occurred to him that white scarfs are worn mostly with evening dress. And although he reasoned that neither he nor his friends affected such niceties of discrimination in matters of dress he was unable to rid himself of his compelling desire to remove the scarf from his sight. He accordingly also threw this scarf through a window. He finally "undid" his scarf obsession by the simple act of giving the third scarf which his obsession had forced him to buy to his brother. But Irving did not enjoy for long the freedom from his obsessions. One day while working at his desk the thought occurred to him that he would appear more dig-

nified and mature if he wore eye-glasses. He endeavored to his utmost to refute this new idea but the longer he argued with himself the more compelling the idea became. As in the past his compulsion won and he appeared next morning uncomfortably bespectacled. It seemed to him that a glance from a young woman where he worked indicated disfavor with his changed appearance. He immediately became obsessed with a desire to be rid of his glasses, with the result that the glasses followed in the wake of the first two scarfs. Under the influence of his obsessions and compulsions he purchased and discarded three more pairs of glasses during the next few days. He bought a fifth pair but wisely decided to wear them in his pocket instead of on his face and was greatly relieved to find that the matter of the glasses no longer disturbed him. He was just in the act of congratulating himself on his having "outwitted" his compulsion when his attention became obsessively fixated on the hair on the back of his hands. He was aware, of course, that the hair was entirely natural but he also realized that his compulsion again "had him" and thoroughly disheartened, he submissively went to a drug store for a dissolvent and dissolved the hair on his hands. When the hair began to reappear and he felt compelled to apply the dissolvent again, he gave up and sought help.

Interpretation of Compulsions. The interpretation which we gave of obsessions holds true of compulsions in all essential respects. In the case of compulsions we are perhaps usually dealing with an individual who is more inclined to motor activity. The differentiating factor often appears to reside, however, in the opportunity or lack of opportunity for the overt expression of the conflict. There was no very specific manner in which the young woman who was obsessed by thoughts of her eye-glasses could overtly express her intense preoccupation. She was forced to wear glasses because of defective vision; hence she could only think in-

cessantly about her glasses. But the young man whom we just cited did not need glasses and therefore he was able to express his disturbing preoccupation with them by throwing them through a window and acquiring another pair.

We may call the reader's attention to this last case as an excellent example of the phenomenon of undoing. The precipitating cause of his psychoneurosis was discovered in a sexual misdemeanor which he had committed several years earlier. Through repression he had quite forgotten about the incident; and he was extremely shy of girls and intolerant of sexual thoughts or acts. His acquiring a personal effect, a scarf or glasses, became symbolically loaded with the significance of committing a sexual act. This occasioned a sense of intense uneasiness and guilt and hence he "undid" the morally (egoistically) reprehensible act by disposing of the object which he had acquired. His egoistic aversion to sex was so strong that in the beginning only the most far-fetched symbolic expressions of sexual activity were possible. Gradually, however, he was coming nearer in his symptomatic behavior to a true sexual situation. The hair on the backs of his hands reminded him of pubic hair, and this is perhaps the reason why he became so alarmed and felt so helpless as to seek help despite the fact that to discuss his problems even with a professional person was very humiliating to him. He lost his compulsions with a revelation of the precipitating factor and its relation to his compulsive acts.

Motor Agitations (*Tics and Tremors*). Not all motor agitations are of a psychasthenic nature or even of a functional nature. Hence, those to be discussed here constitute only a special group. *A psychasthenic tic is a more or less persistent contraction (twitching) of some muscle or muscle-group; it is but slightly if at all subject to the control of the individual and usually occasions a considerable degree of mental distress.*

Motor agitations may involve any muscle-group of the body, but they most frequently involve the muscles of the face, eyes, mouth, and neck. One example will be sufficient to make clear the general nature of psychasthenic tics.

CASE 36. A young man of twenty, of unusually high intelligence and good physique, came to the writer because of a twitching of one side of his face whenever he was in the presence of girls. The twitching caused him considerable mental distress and threatened to exclude him from even the most casual associations with the opposite sex. It had been present for nearly four years.

The patient clearly recalled the beginning of the tic. When he was sixteen he was one day shyly talking to a girl acquaintance. During the conversation she noticed a school pin which he was wearing and in a playful manner snatched it from him. Naturally enough he entered into the spirit of the occasion and attempted to recover the pin. But just when he was on the point of succeeding, the girl dropped the pin into the bosom of her dress and mutely challenged him to get it. He started to retrieve it, suddenly became very much embarrassed and overcome with excitement and noticed for the first time that his face was twitching on one side.

A few remarks will be sufficient to make this case clear. This young man had grown up under the dominance of his mother and a younger sister. When he and his sister were small the mother always placed his sister in charge of him when the two of them left the house even though his sister was the younger. Hence he developed an unusual degree of subservience toward members of the opposite sex. He also developed rather strong inverted ego-identifications. Upon his approaching maturity he undertook to free himself of this subservience. The little girl's challenge upon the occasion of the incident which we have mentioned called forth his recently acquired and insecure identifications with masculinity. He could not let a girl get the better of him. But his old subservience and excitability were still with him with the result that he suddenly became excited, felt helpless and inadequate and lost control of his facial muscles, any activity of which he had been trying very hard to in-

hibit. He felt his face twitching and his attention immediately became fixated on this fact. During the following years he retained this tic, or an idea of it, as a means of maintaining a distance between himself and members of the opposite sex. He reasoned that until he could be rid of the tic he could not engage in activities of any sort with girls. Ridding him of the tic necessitated, of course, ridding him of his sense of inadequacy and of modifying his exaggerated subservient tendencies.

Doubts and Scruples. Doubts and scruples constitute a fourth class of psychasthenic symptoms. "Perhaps the worst feature of this psychoneurosis," says Myerson, "is the classical 'folie de doute,' which is fundamentally a mental struggle over each decision, no matter how trivial, a prolonged debate over whether or not to cross the street, how to put on the shoes, whether the gas is to be shut off one way or another." [1] The first thing to be noted concerning the doubts and scruples of the psychasthenic person is that they, like his other symptoms, are of the nature of compulsions; to him it seems that they are forced upon him. Observe the following case which is quoted from Frink.[2]

> Case 37. A boy in high school was supplied with some second-hand books. He began to doubt the accuracy of them, for, as they were not new, he thought they might be out of date, and what he read might not be the truth. Before long he would not read a book unless he could satisfy himself that it was new and the writer of it an authority. Even then he was assailed with doubts. For he felt uncertain as to whether he understood what he read. If for example he came across a word of which he was not sure of the exact meaning, he could not go on until he had looked up the word in a dictionary. But as likely as not in the definition of the word there would be some other word with which he was not

[1] Myerson, A., *The Psychology of Mental Disorders*, p. 62, Macmillan.
[2] *Op. cit.*, pp. 164–165.

> entirely familiar and he would have to look *that* up, so that at times half an hour or more would be taken up in reading a single page, and even then he would feel doubtful as to whether he had gotten the exact truth (Compulsive doubt).

This boy did not doubt because he consciously wished to but because he was powerless to help his doubting.

The second feature of the psychasthenic doubt is that the affect is out of proportion to the significance and seriousness of the situation or fact to which it has become attached. Again, we have noticed this to be the case in regard to other psychasthenic symptoms. In the case of the obsession, for instance, the intensity of the feeling is out of all proportion to the fact to which it relates. We could go ahead and point out that everything that we have said about the obsession, the compulsion, and the motor agitation is in general true of the doubt or scruple. Consequently we should expect to explain doubts and scruples in the same general manner that we have explained the psychasthenic's other symptoms. Namely, some motive, a natural manifestation of which would be, or is, objectionable to the individual's ego-identifications has been aroused. Because of its objectionable nature the motive meets with egoistically engendered resistance. Repression occurs followed by a displacement of affect to irrelevant facts and actions. The displaced affect causes the individual to hesitate, and vacillate. The trivial act which he is about to perform suddenly assumes a great importance.

Feelings of Unreality and Depersonalization. It needs the fifth and last group of psychasthenic symptoms really to complete the picture. Feelings of unreality and depersonalization always present rather conclusive evidence of a psychasthenic condition. Such a patient will usually describe his feelings somewhat as follows:

There is a feeling of unreality about things; although I recognize my customary surroundings, nevertheless there is a feeling of strangeness associated with them; they just don't

appear natural. Often when I wake up or when I come in from the street my room appears strange; I see my chair and bed, know they are mine, and yet it seems that I am seeing them for the first time. Also there frequently seems to be two of me instead of one; I seem to be standing off looking at myself, watching and conjecturing about everything I do. At times I actually become embarrassed, so strongly do I feel that I am in the presence of a stranger who, however, is somehow a part of me. Finally, I am frequently distressed by a peculiar feeling that something about me is missing, that I have lost a part of myself, that I am incomplete.

Janet,[1] has contended that psychasthenia results from the lowering of the psychological tension. He assumes that a certain amount of energy is necessary for the maintenance of the mental synthesis or integration which constitutes the personality. If the energy is inadequate, a state of partial dissociation or disintegration results; hence the feeling of strangeness or unreality arises as a result of inadequate perception and apprehension. The feelings of depersonalization and inadequacy also result directly from the lack of proper integration of the different mental systems comprising the personality. This concept which Janet offers of psychasthenia was at one time quite widely accepted. It will be noticed, however, that it does not explain this partial dissociation. Freud went a step further and offered an explanation of the psychasthenic condition.[2] He believes that the state of partial dissociation results from the repression of sexual wishes or motives. The truth of the matter appears to be that so much of the individual's mental energy is consumed by his internal conflict of inclinations that he has an inadequate supply of energy for fully encompassing and adjusting to his actual situations.

Summary. The person who develops psychasthenic disorders does not stand forth as a unique personality. Never-

[1] Janet, P., *Les Obsessions et la Psychasthenie*, Vol. I, Part 2, Alcan.

[2] See especially Hitschmann, *Freud's Theories of the Neuroses*, pp. 164–188, Moffat, Yard.

theless he is certainly distinguishable from the intense, "tender-minded," strongly introverted person who tends toward neurasthenic disorders, from the extremely extraverted person, from the individual of noticeable cyclothymic disposition or of schizoid disposition and from the insufficiently orientated person who tends toward anxiety states. Perhaps an attempt at our usual summary will lend some degree of specificity to his mental organization.

There are usually rather strong but narrowly developed racial motives and egoistic interests.

The individual is not particularly infantile.

The individual's ego-identifications are usually over-invested in his family, some member of it, or in values intimately pertaining to his family relationship. Over and over it will be found that the obsessional or compulsion neurotic has become over-devoted to a family member and that because of and in relation to this fact he has developed iron-clad ego-identifications of chastity, propriety, etc. Generally speaking, we can say that his world of interests is abnormally narrow.

He is usually active and enterprising and would be adequately orientated toward future objectives were it not for the weight of his conflict. He is a partially free individual; he tends to experience his obsession or compulsion as an influence foreign to his conscious interests and intents.

The daily feeling tone is unpleasant and distressing.

Persons suffering from psychasthenic disorders often appear well enough adjusted to others. It is much easier, of course, for an individual to conceal the fact of obsessive thinking than of compulsive acts. Severe cases become apparent even to a casual observer.

Psychasthenics tend to avoid marriage and its responsibilities because they already have an intense and unsolved conflict of racial and ego-motives which has become displaced to symbolic facts and actions and which therefore precludes the development and maintenance of a genuine interest in a member of the opposite sex.

As we have stated, psychasthenics do not favor the extreme in any personality variant. Usually they are ambiverted individuals. In the writer's opinion they tend to be of an "intellective-motor" make-up, what C. G. Jung would characterize as the thinking type.[1]

Psychasthenics are characterized by an average degree of intensity of strength of motivation (drive).

Early over-identifications, repression followed by displacement, undoing, and rationalization are the principal modes of reaction to difficulties.

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[1] Jung, C. G., *Psychological Types*, Harcourt, Brace.

CHAPTER XIII

THE PSYCHONEUROSES (*Concluded*)

HYSTERIA AND MULTIPLE PERSONALITY

Hysteria Defined. Charcot, Freud, Janet, and Morton Prince all became renowned largely through their studies of hysterical disorders. Hysteria is simulative and changes with human thought and beliefs. We no longer have our witches with their "Devil's Claws" but we have our spiritualistic mediums, our astrologers, our fortune tellers, and table rockers; and we have still, although perhaps less frequently, those persons who suffer from functional paralyses, anesthesias, contractures, and dual personalities.

The word "hysteria" comes from a Greek term meaning uterus. The belief originally was held that hysteria was due to the uterus' wandering about through the body, and that it was a disorder of women only. It has since been learned, of course, that there is no specific causal connection between the uterus and hysterical disorders and also that these conditions are common to men as well as to women.

It may be well to give the reader a certain degree of orientation with respect to the general nature of hysteria before taking up its specific manifestations (symptoms). This may be done briefly by saying that hysteria is a mental disorder which is characterized by mental dissociation. A hysterical condition is a dissociated condition of the personality; and hysterical symptoms or reactions are in part simply manifestations of this state of dissociation. The reader must be careful to bear in mind that we regard the individual as being an integration of mental systems and his personality as the expression of this integration. To the extent that the various mental systems are properly integrated, the individual's reactions will be properly synchronized with the situation of

the moment, other things being equal. We have already seen that dissociation may involve a complete mental disposition or that it may occur within a disposition. A study of hysteria will teach us that dissociation may involve almost any mental or physical function of the individual.

The Symptoms of Hysteria. The symptoms (non-adjustive reactions) of hysteria are frequently classified as physical and mental. There is little if any basis for such a classification and moreover it is likely to be misleading to the reader who is not familiar with the field of mental disorders. Whether a given hysteric symptom involves the memory (mental) or the muscles of the arm (physical) is of secondary significance to an adequate understanding of its true nature and cause. A classification, based largely upon the writings and views of Janet, has been made, dividing hysteric symptoms into two classes: *Stigmata*, which are more or less persistent; and *accidents*, which are intermittent and transitory. This general classification will be adequate for our purposes, the specific symptoms being designated by descriptive terms. Among the stigmata of hysteria are the following: Anesthesias, paralyses, tics and choreas, amnesia, increased suggestibility, ego-centricity and emotional instability, and alternation of personality.

The *anesthesias* constitute an important group of hysterical symptoms. Although these may involve, apparently, any sense, the visual and cutaneous senses are the ones most frequently concerned. Hysterical anesthesias are characterized by the following peculiarities:[1] (1) The anesthetic area does not conform to the anatomical distribution of nerves; (2) the anesthetic areas are movable; (3) the patient is often ignorant of his anesthesias; (4) the reflexes associated with the anesthetic area remain relatively intact. Thus, if the patient has an anesthetic hand, the insensitive area will likely be found to end abruptly at the wrist-joint, constituting what has been called "glove anesthesia." Or perhaps it will be an arm or both arms or the legs or one side of the

[1] Bridges, J. W., *Outline of Abnormal Psychology*, p. 203, Adams.

body or the front or back of the body that is anesthetic. In such cases the anesthetic area appears to conform to what a naïve patient might consider to be a distinct part of his body. Sometimes, however, the anesthetic area is irregular, has no definite form or "meaning," and is without significant localization. A patient may have either one or several different anesthetic areas and either one or several senses may be involved.

In the case of hysterial anesthesia of the visual sense, a number of different phenomena have been observed. The visual field may be restricted to a radius of twenty, ten, or even five degrees. In other words, such a patient is able to see only those objects which are directly in the focus of vision; any object which is slightly to the right or left or above or below his line of vision is not seen. Again, only one eye may be involved, in which case the individual may be able to see perfectly well with one eye but unable to see anything at all with the other. Occasionally cases have been observed in which the loss of vision involved one vertical half of the visual field of each eye, or of the right half of one eye and the left half of the other, and *vice versa*. Complete hysterical blindness, although quite rare, has been observed. Note the two following cases. The first is taken from Janet.[1]

> CASE 38. A man, thirty-eight years old, was busy cleaning a machine. A rag full of grease and petroleum caught in a gear and lashed him on the face. The face was only dirtied, and he did not trouble about the accident. He washed himself, but he had much difficulty in cleaning his skin and eyelids of these fatty substances. Remark that nothing penetrated into his eyes and that he felt no pain in them. However, after an hour, he seemed to see as it were a mist before him; this mist grew thicker and two hours later he could no longer see at all. His vision fluctuated a little on the morrow and

[1] Janet, P., *The Major Symptoms of Hysteria*, p. 186, Macmillan.

the following days. From time to time he could see a little, chiefly with his right eye. These fluctuations lasted for a month, then they disappeared absolutely, and for four years he remained quite blind.

The next case is equally interesting.

CASE 39. Mary J., a young college woman, was bathing at the beach. She swam out for a short distance and then turned and swam toward shore. Upon reaching shallow water she got to her feet and started walking from the water intending to go to her aunt who was sitting at a short distance ashore. But Mary's eyes suddenly became tightly shut and she was unable to open them. Both the young woman and her aunt were alarmed and went immediately to a hospital. There the young woman was incorrectly diagnosed as a case of multiple cerebral hemorrhage. For six days she tossed about restlessly in bed, utterly unable to open her eyes. Suddenly, her eyes opened, as if of their own accord, but she was totally blind; she could see nothing. She continued to toss about, worrying about the opening of the school year and wondering if she were going to be able to attend. On the eleventh day of her stay in the hospital she fell out of bed and her sight returned with the same unexpected suddenness with which her eyes had closed at the beach. Upon leaving the hospital she submitted herself for a short psychological analysis and five years later there had been no recurrence of her trouble.

Many other types of dissociation may occur within the complex function of vision. The individual may be blind to certain colors or to certain objects; there may be a restriction of the visual field of one eye to five or ten degrees and of the other eye not at all or only to twenty or thirty degrees; the visual field may be fairly symmetrical in contour or decidedly asymmetrical.

Thus far we have spoken as if hysterical anesthesia were in every sense true anesthesia. In a certain sense the anesthesia is genuine, in a certain other sense it is not. In other words the hysteric with an anesthetic hand both perceives and does not perceive tactual stimulations of his hand; he does not perceive them in a normally conscious manner; he does perceive them in a subconscious manner. In order to make clear the facts which we have in mind we can do no better than to quote again from Janet.[1] ". . . Hystericals, who have an exceedingly small visual field, run without in the least troubling themselves about it. This is a curious fact to which I remember having attracted the attention of Charcot, who had remarked it, and was very much surprised at it. I showed him two of our young patients playing very cleverly at ball in the courtyard of La Salpetrière. Then, having brought them before him, I remarked to him that their visual field was reduced to a point, and I asked him whether he would be capable of playing at ball, if he had before each eye a card merely pierced with a small hole. It is one of the finest examples that can be shown of the persistence of subconscious sensations in hysteria.

"Besides, I had shortly afterwards the opportunity of making a still more precise experiment on the same point. A young boy had violent crises of terror caused by a fire, and it was enough to show him a small flame for the fit to begin again. Now his visual field was reduced to 5° and he seemed to see absolutely nothing outside of it. I showed that I could provoke his fit by merely making him fix his eyes on the central point of the perimeter and then approaching a lighted match to the eightieth degree."

Other investigators, using various methods, have thoroughly substantiated these early experiments of Janet. It has been found, for instance, that if the patient who has hysterical blindness of one eye looks through a stereoscope, he will usually see all that a normal person would see, but if his good eye is covered up he will then report that he can

[1] *Ibid.*, p. 198.

see nothing. We can then say that he is able to see with the one eye only when he is using the other eye. In terms of our concept of dissociation we can describe this fact by saying that in some way the functioning of the "blind" eye has become dissociated from the mental integration which manifests itself in conscious reactions. Again, in the case of the naïve hysteric who has tactual anesthesia for some part of the body, the following experiment may sometimes be made successfully. The patient is blindfolded and then told to say "yes" every time he feels his skin touched and to say "no" when he does not feel his skin touched. Sensitive areas are then prodded and each time the patient says "yes"; then the anesthetic area is prodded and each time the patient says "no."

The reader may wonder if it is justifiable to speak of these phenomena as being in any sense true anesthesias. Is the patient in any true sense not-conscious of the stimuli which he reports he does not perceive, or is he only vaguely aware of them? Does he tend to neglect or overlook them? Can the patient be made conscious in a direct manner of the tactual stimulations of his anesthetic hand by having his attention drawn to his hand at the time? All the evidence appears to warrant the following answer to such questions. The patient simply does not possess the ability or capacity to perceive, in the conscious manner of the normal individual, the stimulations of his anesthetic organs, regardless of the intensity of the stimulus or the direction of his attention; but he does perceive these stimulations, and his perception is truly conscious in a certain sense, as the facts which we have recounted clearly show. Hence, with Janet and others, we may speak of subconscious perception and of subconscious reactions, implying when we do so that the perception or reaction belongs to a secondary mental system which, at least in certain respects, is dissociated from the main mental integration of the individual, the personality. Consequently, when we hereafter use the term "conscious" we shall mean it in the everyday sense of the word, and when we use the

term "subconscious" we shall mean to imply that the act is conscious not in the usual or normal or everyday sense of being conscious but in a secondary manner.

In leaving the matter of anesthesias the reader should bear in mind that we have merely spoken of a few examples belonging to only two of the sixteen or eighteen modal senses. It is an established fact that hysterical anesthesia may involve any one of most if not all of the different sensory modes. The hysteric who is anesthetic to pain in some part of his body does not consciously experience the slightest pain when that part of his body is injured.

A second common group of hysterical stigmata are the *functional paralyses*. Frequent examples of hysterical paralyses are those involving a single muscle-group or member of the body (monoplegia), one side of the body (hemiplegia), the lower limbs (paraplegia), and the whole body (diplegia). Hysterical paralysis may be distinguished from organic paralysis by certain more or less definite signs. The deep reflexes are usually not affected and reactions to electrical stimulation remain normal in the case of hysteria.[1] Moreover, if the patient is asked to move the paralyzed member in a given direction, a movement in this direction may be initiated, but it is soon stopped by the contraction of the opposing set of muscles, and a slight movement in the opposite direction may occur. Or, following the command to make a certain movement, both sets of muscles may contract simultaneously and with such relative force as to result in no discernible movement at all.

There is an interesting form of hysterical paralysis, known as *astasia-abasia*, in which the patient appears to have complete control of his legs while sitting or lying down, but is unable to walk or stand. Thus one of the writer's patients, a young girl of seventeen, was able to execute any movement of her legs that the writer desired as long as she was in a reclining position. When on her feet she would sway from side to side, forward and backward, and sooner or later fall

[1] Ross, T. A., *The Common Neuroses*, p. 197, Arnold.

unless given support. She was unable to walk across the room by herself.

The paralyzed limb may be blue and cold and have a clammy "feel." Atrophic changes sometimes occur, and even the fingernails have been known to waste away. These atrophic changes have often been attributed to disuse of the limb affected but the changes are frequently too rapid to be accounted for in this manner, and besides it has been demonstrated that the condition is amenable to psychological treatment just as other hysterical symptoms are. During the war it was noticed that atrophic changes occasionally occurred very rapidly in the case of wounded limbs, and in an effort to account for this the theory was advanced that both the paralysis and the atrophic changes were due to a more or less continuous action of nerve influence between the focus of the wound and the spinal center. This phenomenon was given the name of "Reflex Paralysis." The theory has been largely discredited, however, by the fact that these disorders proved to be susceptible to psychological treatment.

Hysterical paralysis is often found to have followed upon some emotional shock. The young girl just mentioned lost the use of her legs following an unhappy love affair. McDougall [1] gives the following interesting case of paralysis and anesthesia in a soldier.

> CASE 40. A youth of flabby moral texture was sent home from the Mediterranean with lower limbs paralysed and anaesthetic; a diagnosis of post-diphtheritic paralysis had been made. However, the signs were all in favor of a functional paralysis; and it appeared that, though he had suffered from a sore throat, the paralysis had set in just about the time that the transport on which he was going to the Gallipoli front had come within sound of the guns on that tragic grave of so many brave men. I tried hypnotic suggestion; but though he passed into phynosis, I could not fully control him;

[1] McDougall, Wm., *Outline of Abnormal Psychology*, p. 245, Scribner's.

when he was forced to move his legs, he fell into weeping and moaning. I therefore decided to proceed more slowly by waking suggestion. Following an explanation that the anaesthesia would recede day by day and that, when it was gone, he would have full use of his legs, I ostentatiously mapped the upper limit of the anaesthesia on both limbs each morning, and in this way drew off the anaesthesia like a pair of stockings, drawing it two or three inches lower each day.

Tics and *choreas* are common among hysterical patients. The hysteric tic presents certain differences from the psychasthenic tic, studied in the last chapter. Both are involuntary movements of some muscle or muscle-group and both may be more or less rhythmical, but here the basic similarities seem to end. The hysteric's tic is more or less inhibited by the patient's attention and effort to control it; the psychasthenic's is more likely to become exaggerated if his attention is called to it. Distractions favor the hysteric's tic, whereas in a state of distraction the psychasthenic's may disappear completely. In the former case the patient may be unaware of his tic, while in the latter the patient has extreme difficulty in keeping his attention from it. The hysteric's tic is often associated with anesthesia of the part of the body involved, whereas this is perhaps never the case in the psychasthenic. In short, the hysteric tic, like the other hysteric symptoms, has all the signs of dissociation, while the psychasthenic tic, like the other psychasthenic symptoms, appears to be a sign or manifestation, primarily, of repression.

The *hysteric tic* may involve apparently any muscle of the body, even those belonging to the visceral organs.[1] Thus we find tics not only of the muscles of the face, eyes, mouth, hands, arms, neck, etc., but also of the respiratory and digestive musculature. Depending upon the particular muscles involved, the tic may manifest itself in continual grunting,

[1] Since the tic seems to be distinguishable from the chores primarily upon the basis of the size and complexity of the muscular system involved in the movement, we may drop all distinctions between the two and speak only of tics.

or hiccoughing, or swallowing, or in facial contortions, such as wrinkling the forehead, pursing the lips, squinting the eyes, or in jerking movements of the head or in rotary movements of the head or in movements of the hands or fingers, etc. Sometimes the tic occurs with an almost unbelievable rapidity, as shown in a case cited by Ross [1] in which the head was rotated at about 250 revolutions a minute. Strangely enough this did not occasion the patient any discomfort or even cause dizziness.

Extreme suggestibility has long been attributed to hysterics. Suggestibility will be considered in some detail in a later chapter and therefore we shall not go into the nature of it here. Many hysterics are very suggestible; many are very negativistic. But in the negativistic patient there is an underlying exaggerated suggestibility. The frankly suggestible hysteric reminds one of the child who acts too readily upon the suggestions of the playful visitor. If a hysteric with a paralyzed arm is placed among a group of other hysterics they may all develop paralyzed arms in a few days. One patient known to the writer developed a drooping eyelid. Her mother had always had a drooping lid. Interestingly enough, this patient's right eye was affected while it was her mother's left one; but, the right eye of one individual is on the same side as the left eye of a second individual when the two are facing each other. Consequently, the patient had developed an affliction of what she naïvely (perhaps subconsciously) considered to be the corresponding eye.

The *ego-centricity* which usually characterizes the hysteric patient is one of his most interesting and at the same time most indefinable features. It seems quite obvious that he may tend to use his symptoms as a means of gaining attention and yet he has a very peculiar impersonal attitude toward his symptoms. They do not distress him as the neurasthenic's symptoms do; in the past, many hysterics have asked that their paralyzed limbs be amputated simply to get them out of their way. In his general attitude the hysteric is very

[1] *Op. cit.*, p. 200.

much like the child; he is open and frank in his bids for attention; the subtlety of the neurasthenic is largely lacking. His attitude is typically extraverted and consequently, since his symptoms are manifestations of dissociated mental systems, he is able to take a peculiarly impersonal attitude toward them. He impresses us when talking about his symptoms very much as does the small child who is seeking to impress the visitor by displaying his new toys.

Since hysteria is viewed as a condition of mental dissociation, we should expect to encounter considerable *emotional instability*. We have learned that emotional stability can result only when there is an integration of the various mental systems, resulting in mutually modifying influences. In the absence of such integration the opposite condition, emotional instability, naturally results.

We shall speak of *alternating personality* near the end of the chapter.

Hysterical attacks constitute chiefly the group of hysterical accidents. The "Grand Attack" (Charcot) is quite rare and will not be discussed here. The more usual phenomenon belonging to this class of symptoms is the abortive attack which may assume any one of many different forms. Common among these are attacks of nausea, anorexia (loss of appetite), vertigo, globus hystericus (a complex of sensations as if there were a lump in the throat), ecstasy, depression, catalepsy (a peculiar wax-like condition of the muscles), stuporous and trance states, extreme absent-mindedness, somnambulisms, and fugues. With the exception of the last two we shall mention these but briefly.

Janet tells of a case of a young woman who starved to death because of her dislike of turnips—she complained that everything smelled of turnips and thereupon refused to eat. A certain little girl of six vomited whenever her mother mentioned school. Her reaction was clearly of a hysterical type. A certain young woman was considerably worried and depressed and had a tendency to cry. In order to please her family she endeavored to restrain her crying and to for-

get her worries. The result was that although she no longer experienced a tendency to cry and less tendency to worry, she was troubled by a peculiar lumpy feeling (more correctly, sensations) in her throat (globus hystericus).

States of ecstasy are frequently of a hysterical nature. The adolescent girl who laughs and cries simply because she is so happy, without knowing why she is happy, is a common instance. The ecstatic states of the religious fanatic and of the martyr undoubtedly belong here. Catalepsy may frequently be observed in hysterics, particularly during periods of abstraction. The patient's arm, if raised to a horizontal position by a second individual, may remain in such position without any conscious effort or knowledge on the part of the patient. Perhaps those peculiar states experienced by some persons upon waking, in which they are unable to move, to turn their heads or even their eyes should be included under cataleptic attacks or crises. Periods of deep abstraction during which subconscious acts may be carried out are common. A certain high school teacher started one morning for his office. Some time later he "woke up," so to speak, in his office sorting his mail. He was unable to recall anything he had done since leaving his home; it was as if he had been asleep. Upon checking up his movements between the time when he left home and the time when he arrived at school, it was learned that he had called for his mail, had spoken to several people whom he knew, and in every way had behaved in a perfectly normal manner. Subconscious activity (automatic acts) such as automatic writing, crystal gazing, etc., may be quite easily induced in most hysteric individuals as well as in many "normal" individuals. We might say here that all the evidence seems to warrant the statement that *mediumship, spiritistic phenomena, communication with spirits of the dead, etc.*, belong, broadly speaking, to the psychology of hysteria, except, of course, those practices which are deliberately misleading.

Somnambulisms are peculiar hysteric crises which consist of a subconscious and usually very dramatic reënactment by the

patient of some past emotional experience. We can do no better here than to quote the classical case of Irene, studied and reported by Janet.[1]

> CASE 41. We come back to the common story of a young girl twenty years old, called Irene, whom despair, caused by her mother's death, has made ill. We must remember that this woman's death had been very moving and dramatic. The poor woman, who had reached the last stage of consumption, lived alone with her daughter in a poor garret. Death came slowly, with suffocation, blood-vomiting, and all its frightful procession of symptoms. The girl struggled hopelessly against the impossible. She watched her mother during sixty nights, working at her sewing-machine to earn a few pennies necessary to sustain their lives. After the mother's death she tried to revive the corpse, to call the breath back again; then, as she put the limbs upright, the body fell to the floor, and it took infinite exertion to lift it again into the bed. You may picture to yourself all that frightful scene. Some time after the funeral, curious and impressive symptoms began. It was one of the most splendid cases of somnambulism I ever saw.
>
> The crises last for hours, and they show a splendid dramatic performance, for no actress could rehearse those lugubrious scenes with such perfection. The young girl has the singular habit of acting again all the events that took place at her mother's death, without forgetting the least detail. Sometimes she only speaks, relating all that happened with great volubility, putting questions and answers in turn, or asking questions only, and seeming to listen for the answers; sometimes she only sees the sight, looking with frightened face and staring on the various scenes, and acting according to what she sees. At other times, she combines all hallucinations, words, and acts, and seems to play a very singular drama.

[1] *Op. cit.*, pp. 29–31.

> When, in her drama, death has taken place, she carries on the same idea, and makes everything ready for her own suicide. She discusses it aloud, seems to speak with her mother, to receive advice from her; she fancies she will try to be run over by a locomotive. That detail is also a recollection of a real event of her life. She fancies she is on the way, and stretches herself out on the floor of the room, waiting for death, with mingled dread and impatience. She poses, and wears on her face expressions really worthy of admiration, which remain fixed during several minutes. The train arrives before her staring eyes, she utters a terrible shriek, and falls back motionless, as if she were dead. She soon gets up and begins acting over again one of the preceding scenes. In fact, one of the characteristics of these somnambulisms is that they repeat themselves indefinitely. Not only the different attacks are always exactly alike, repeating the same movements, expressions, and words, but in the course of the same attack, when it has lasted a certain time, the same scene may be repeated again exactly in the same way five or ten times. At last, the agitation seems to wear out, the dream grows less clear, and, gradually or suddenly, according to the cases, the patient comes back to her normal consciousness, takes up her ordinary business, quite undisturbed by what has happened.

Irene had no memory of her periods of somnambulism nor did she have any memory of the period of her mother's illness and death. When she learned of her mother's death she was unable to grieve, although she thought it natural that she should. Moreover, during her somnambulisms she appeared entirely oblivious of her surroundings; all her energies became for the time being directed or concentrated toward one objective, namely, the reënactment of the scenes relating to her mother's death. Obviously enough, the case of Irene presents a clear-cut instance of dissociation; certain strong

sentiments toward a specific situation including her mother and herself, instead of becoming modified and properly integrated with her other experiences, became dissociated. This dissociated system was sufficiently strong to usurp, upon different occasions, the entire mechanisms of the individual, and consequently all the reactions of Irene at these times were manifestations of this dissociated system. Thus we see that whereas an anesthesia, a paralysis, a tic, a chorea, an abortive attack, is the expression of some desire or motive in such a manner as is not entirely incompatible with the continuity of the functioning of the main mental integration, a somnambulism is the expression of a secondary integration which can come to light only by the suppression of the main integration. Hence, during a somnambulism, the continuity of the individual's normal conscious life is disrupted.

The somnambulisms of Irene are examples of what Janet has termed the *monoideic* type, implying that all the actions of the patient during the somnambulism relate to a single idea. There are other types of somnambulism which he has called *polyideic*. An example of this type is the case, which he cites, of a young woman who took a position at a tavern. The keeper of the tavern brutally mistreated her. She became ill and somnambulisms began. She would perhaps start by reënacting a rape scene, then suddenly catch up a broom and vigorously sweep the floor. At one time during a somnambulic state she wheeled a wheelbarrow around the yard. Another case re-lives various experiences associated with her faithless lover. But apparently all cases of polyideic somnambulism possess a high degree of unity; however diverse the actions may be, they are all expressions of a single secondary mental system, i.e. a dissociated integration of sentiments.

Quite similar to the somnambulism but differing from it in certain essentials is the *fugue*. In the fugue the individual leaves his immediate surroundings. Both in a psychological and in a physical sense he becomes a fugitive from the normal conscious life which he has been living. The following two examples will make the nature of the fugue clear. The first,

cited by McDougall,[1] is an unusually transparent instance of this interesting phenomenon.

CASE 42. A colour-sergeant of long service was carrying a despatch from one part of the front to another, riding a motor-bicycle. He suddenly found himself, a few hours later, pushing his bicycle through the streets of a seaport town some hundred miles from the front. He was utterly bewildered and, in order to avoid suspicion of desertion, he surrendered himself to the military police. He remained unable to give any account of his long journey from a spot near the front to the seaport. After some stay in various hospitals he came under my care. He had no symptoms beyond his amnesia for this short period of some hours' duration, and a certain depression and lack of self-confidence, such as naturally resulted from the circumstances in a man of his good record and responsible position. Waking conversation having failed to overcome the amnesia, I tried hypnosis and at once the amnesia yielded; the dissociative barrier was overcome, and he continued in the waking state to be able to recollect and describe the whole incident; how a shell exploded near him, throwing him down; how he remounted his cycle and set off for the seaport; how he found his way by studying the signposts and asking questions, etc. It was clear that, though his actions had been conscious, intelligent, and purposive, yet his conscious activity was of a restricted kind; he seemed to have had no thought about the consequences of his action, but to have been driven on by the single strong impulse of fear, taking the form of a desire to get far away from the danger-zone.

The second case is cited by Janet.[2]

CASE 43. The subject is a boy of seventeen, Rou., son of a neuropathic mother, rather nervous himself, who

[1] *Op. cit.*, p. 258.

[2] *Op. cit.*, pp. 51–53.

already had, when he was ten years old, tics and contractures in the neck. . . . At thirteen he often went to a small public house, visited by old sailors. They would urge him to drink, and, when he was somewhat flustered, they would fill his imagination with beautiful tales in which deserts, palm trees, lions, camels, and negroes were pictured in a most wonderful and alluring way. The young boy was very much struck by those pictures, particularly as he was half tipsy. However, when his drunkenness was over, the stories seemed to be quite forgotten; he never spoke of travels, and, on the contrary, led a very sedentary life, for he had chosen the placid occupation of a grocer's boy, and he only sought to rise in that honorable career.

Now there come on quite unforeseen accidents, almost always on the occasion of some fatigue or a fit of drunkenness. He then felt transformed, forgot to return home, and thought no more of his family. He would leave Paris, walking straight ahead, and go to a more or less great distance through the forest of St. Germain, or as far as the department of the Orne. Sometimes he walked alone; at other times he rambled with some tramps, begging along the roads; he had but one idea left in his head; namely, to get to the sea, enlist in a ship, and sail away toward those enchanting countries of Africa. His journeys ended rather badly; he would awake suddenly, drenched, half starving, either on the highroad or in an asylum, without ever being able to understand what had happened, without any memory of his journey, and with the most ardent wish to go back to his family and his grocery.

The duration of fugues varies from a few hours to several months or even years. One of Rou.'s fugues lasted for three months. Frequently the termination of the fugue is brought about, at least in part, by some reference to the individual's past life, or to his real name, or to some other fact of a definite

personal significance. For instance, one of Rou.'s fugues came to an end very abruptly when a second person mentioned a certain date which happened to be the anniversary of Rou.'s mother's name-day and the feast of the Virgin Mary. Another individual came to himself suddenly when he noticed in a newspaper an account of his own disappearance.

Fugues appear to differ from somnambulisms in at least two respects. The activities of the individual during the fugue involve a greater part, so to speak, of the total mental integration (personality) than his activities during a somnambulism. In the second place, whereas the somnambulism is the re-living of some past experience, the fugue appears to be a realization of, or an attempt to realize, some strong motive which has not found overt expression in the individual's past activities but which has often been exercised implicitly. However, this last feature of the fugue has by no means always been obvious from the facts which have been gathered in each case. Rou. was undoubtedly endeavoring to realize a strong desire which had been aroused by certain experiences when he was a boy; and the soldier referred to (Case 42) was quite as obviously following out a desire to escape from the danger-zone. Although we cannot say with certainty that the sergeant's desire to escape from danger was ever aroused before this particular time, it seems fairly safe to assume that it was. Indeed, it seems quite probable that he had often dreamed (day-dreamed) of the time when the war would be over and he could lead a more peaceful and less dangerous existence. But the known facts do not warrant a sweeping generalization to the effect that in every case the fugue is an attempt to realize a re-awakened desire of the person's past life, although what evidence we have seems to support such an assumption.

Perhaps here is as good a place as any to insert a few remarks about a peculiar hysterical condition known as *hysterical anorexy*,[1] which usually occurs in girls between the ages of

[1] The condition is also called *anorexia nervosa*, *sitiophobia*, *sitieirgia*, and *hysterical inanition*.

sixteen and twenty-five.[1] The outstanding fact first to be observed in this peculiar disorder is that the patient refuses to eat. The disorder passes through three fairly distinct phases, and lasts not less than eighteen months and frequently for several years. The first phase, known as the *gastric period*, usually coincides with a slight affection of the stomach. Sometimes it follows upon strong emotional stress. During this phase the patient complains of vague sufferings which she associates with her digestion. She appears, however, to be in excellent health. During this period the patient is very docile, readily yielding to the prescriptions of her physician and to the entreaties of her family.

After some time the second phase, known as the *moral period*, begins. The patient now resists in every way she can the pleadings, arguments, and threats of her family and physician. She declares that she has no desire for food, that when she does she will eat, and that she can get along very well without eating. She is very active, takes long walks, and still appears to be in very good health. She may now eat nothing at all in the presence of others, or vomit immediately afterwards if she does eat. In some cases it appears quite certain that the patient eats, but surreptitiously, possibly subconsciously. But since she does not eat enough she loses in weight and gradually prepares the way for the third and last period, the *period of inanition*.

Now organic disturbances begin to appear. The breath is bad, the stomach and abdomen are contracted, the urine is extremely scanty, there is obstinate constipation, etc. The patient may now react in one of two ways: She either becomes frightened and accepts food, which may lead to her recovery if she has not waited too long, or else she clings obstinately to her determination not to eat, serious organic complications arise, and death is the inevitable result.

Multiple Personality. There seems to be no basic difference between this phenomenon and other hysterical disorders. As the term implies, there are cases in which the total mental

[1] Janet, P., *Major Symptoms of Hysteria*, p. 229.

integration has been dissociated in such a manner as to give rise to two personalities within the same individual. If the reader will accept this implication in a literal sense he will perhaps have less difficulty than is usually the case in grasping the facts of this relatively rare but thoroughly substantiated phenomenon. A single case of multiple personality, one that has been made famous by the study and writings of Dr. Morton Prince, will suffice to make clear to the reader the essential facts pertaining to the disorder. We might say here that multiple personality is to be considered in every sense as nothing more or less than a special form of hysteria. To give a detailed report of the following case would be impossible within the scope of this book; hence, we give Professor McDougall's [1] very clear and concise summary of it.

> CASE 44. The Beauchamp case involved, in addition to the normal personality (here called B), which existed before and after the long period of disorder, three distinct personalities called by Prince B 1, B 3, and B 4. B 3 was known also as Sally, and that name will be used here. It will conduce to clearness of this condensed statement if I describe first the personalities B 1 and B 4 and outline their history, leaving Sally for later description; but the reader must bear in mind that Sally complicated the picture throughout the history.
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> B was a nervous impressionable child, given to daydreaming. Her parents' marriage was unhappy, and her mother was harsh and indifferent to her; but B, nevertheless, was strongly attached to her mother, and when the latter died B, who was thirteen years of age, suffered much emotional disturbance. During the following three years she lived under the care of her father, and suffered many shocks of a minor kind. At sixteen she ran away from her unhappy home. Two years later (i.e. when eighteen) B had become a nurse in a hospital

[1] *Op. cit.*, pp. 497–501.

and had formed a strong idealistic attachment to a young man, G. One evening G appeared unexpectedly under dramatic circumstances, and approached her in such a way that her very sensitive nature received a severe emotional shock. One might fairly infer from the account given that G kissed her. B remained much agitated and, in the course of the next few days, manifested a marked change of character. "All her peculiarities became exaggerated. She became unstable and developed aboulia. She grew, too, abnormally religious." This shock initiated what may be called the second main period of the history.

This second period lasted six years, during which this new character continued to figure in her social circle as Miss B. In reality the new character was the personality B 1. She seems to have been formed by the exclusion, from the make-up of B, of certain character-elements which became the nucleus or foundation of the personality B 4. During these six years B 1 led an active life and became a college student; she was hampered by her poor health and the vagaries of Sally (to be described later). During these six years B 4 seems to have remained entirely latent. It was one year before the end of this period that the case came under the care of Prince.

A third period was initiated by another emotional shock related to that which had initiated the second period six years earlier. B 1 was much shaken; Dr. Prince was sent for and a sudden change took place in his presence. Much study was required to elucidate this change; the main facts only can be stated here. B 1 disappeared or became latent, giving place to B 4. This personality, B 4 which manifested herself at this moment for the first time, had no recollection of the events of the past six years, during which she had been latent. She could recollect the events of Miss B's life up to the time of the shock which initiated the second period

(shock 1); these events seemed to her to be her own remembered experiences; she took up conscious existence anew from this point of time (shock 2), as though the six years had not been. She thus had, in common with B 1, command of all memories up to the time of the first shock; but she was not identical with the B who suffered that shock. Just as B 1 differed from B in character, while retaining the memories of B, so also B 4 commanded the memories of B, but differed in character from B and also from B 1.

For nearly one year (the fourth period) B 1 and B 4 led the life of alternating personalities with reciprocal amnesia; and careful study of them during this time showed that they were complementary characters, each having command of the memories of the first period and of the memories of her own phases of dominance in the third period; while B 1 commanded also the memories of the second period. B 1 was a humble, weakly invalid, very suggestible, shy, retiring, studious, religious, always submissive, patient, amiable and altruistic, considerate of others and fond of children and old people. B 4 was very self-assertive, given to quick and violent anger, intolerant and quarrelsome, vain, sociable, irreligious, disliking children and old people. There were corresponding differences in tastes. Both were very emotional, but, whereas B 1 was wholly swayed by her emotions, B 4 fought them down. B 1 was easily tired and relatively inactive, though studious. B 4 was energetic and fond of bodily activity; she disliked most of the things that B 1 liked.

A fifth period was initiated by inducing deep hypnosis, when a personality appeared which commanded all the memories of both B 1 and B 4 and seemed to be, in respect of character also, a fusion of the two personalities B 1 and B 4. "She had lost the reserve, the depression, the emotionality, and the idealism of B 1; but she had lost also the quick temper, the lack of faith, the resentment, and the egoism of B 4. She was a person of even tempera-

ment, frank and open in address—one who seemed to be natural and simple in her modes of thought and manner. Yet she more closely resembled B 1, and might fairly be regarded as B 1 restored to a condition of healthy-mindedness." This personality, who seemed to be, and is regarded by Prince as being, essentially the normal personality B, restored to wholeness by synthesis of B 1 and B 4, her two halves, could not at first be maintained, owing in the main to the opposition of Sally and B 4. There were frequent alternations of B with B 1 and B 4. During this period both B 1 and B 4 were amnesic for B's phases; but B commanded the memories of the B 1 and B 4 phases. There occurred some give and take of knowledge and memories between B 1 and B 4, and perhaps of character-constituents; what was lost by the one being gained by the other. It was not until after the lapse of some years that this fifth period was terminated by the enduring dominance of the healthy, normal B.

The case, so far as described above was, then, one of alternating complementary personalities, B 1 and B 4, with reciprocal amnesia. It remains to add to the picture the history of Sally.

Sally was an impish, childish personality and showed remarkable consistency, without any clear indications of increasing maturity throughout the several (some six) years of her active career. Her existence was discovered by Prince shortly after the case came under his care, i.e. early in the last year of the six-year second period. She manifested herself when B 1 was in hypnosis, speaking of B 1 as "she" and of herself as "I," and claiming to be a personality as entirely distinct from B 1 as was possible under the circumstances, the circumstances, namely, that they inhabited and made use of the same bodily organism. The subsequent course of events went far to substantiate this claim. The new personality at first was nameless; but soon she spontaneously adopted the name Sally Beauchamp.

It must not be assumed that Sally was merely the hypnotic state of B 1. Prince brings out very clearly the fact that the hypnotic state of B 1 (which was called B 2) was very different from Sally, was in fact, as is usually the case, manifestly the normal personality in hypnosis; whereas Sally was extremely different; and sudden changes in hypnosis from B 2 to Sally, and back again, produced startling contrasts. There was not only extreme difference of character between Sally, on the one hand, and B 1 and B 2 on the other; there was also difference of memory and knowledge. This difference cannot be described by saying that the memory of either personality was more extensive or inclusive than that of the other. Sally claimed that, between the times of her appearance in hypnosis, she led a subconscious or coconscious existence; and that, during these periods of submerged existence, she could, if she so wished (and frequently she did so wish) know and afterwards remember what went on in the mind of B 1; but that at times, as when, for example, B 1 read books uninteresting to Sally, she (Sally) would pay no attention and would occupy herself with her own thoughts. Sally claimed not only to be entirely distinct from and independent of B 1, but also to dislike and despise her; and she manifested this attitude and supported her claims by forcing certain sensory and motor automatisms upon B 1, namely, visual hallucinations and impulsions to automatic speech and other actions, impulsions which B 1 found herself unable to resist, even when they led to actions that were very repugnant to her, such as telling lies.

Among these automatic actions was rubbing of the closed eyes, frequently repeated. This seemed to be an endeavour on Sally's part to get her eyes open. Hitherto, when Sally had been dominant, her eyes had always been closed. After many attempts the manoeuvre succeeded at a moment when B 1 was drowsily resting, and Sally for the first time was able to see and to dom-

inate practically the whole organism. From this time on Sally frequently alternated with B 1, not only in hypnosis as previously but at other times also; and, during the phases of dominance of B 1, Sally gave much evidence of continued existence as a coconscious personality. Sally could not always exclude B 1 and secure dominance at will; but she was able to achieve this when B 1 was tired or more "run down" than usual; and she monopolised the organism for considerable periods during which B 1 seemed entirely latent, and of which B 1 had no direct knowledge or memory. During this time Sally's activities largely took the form of teasing and hazing B 1, by writing to her impudent messages and playing upon her elaborate practical jokes; e.g. on one occasion Sally, while dominant, unravelled B 1's knitting and wound the thread all over the furniture of her room. Sally also during her subconscious phases would force inhibitions and automatisms upon the dominant B 1, much to the latter's annoyance. There was thus a struggle of two wills. "Such scenes as this were the outcome of a contest of wills, of Sally's will against Miss Beauchamp's will. . . . In these contests Sally usually won, and Miss Beauchamp's will (that of B 1) would be paralysed. The latter would not only find herself unable to will to do what she wished, but often was actually compelled to do something she did not wish to do."

Sally did not command all the accomplishments of the highly educated B 1; for example, she could not read French, a fact explained by her lack of interest in the more serious reading of B 1.

Prince summarizes the relations between B 1 and Sally as follows: "Sally is a distinct personality in the sense of having a character, trains of thought, memories, perceptions, acquisitions, and mental acquirements, different from those of B 1. Secondly, she is an alternating personality in that during the times when the primary self has vanished, Sally is for the time being the whole

conscious personality, having taken the place of the other. . . . At such times B 1 does not become a subconsciousness to Sally but as a personality is wiped out (or rather, is latent). Thirdly, Sally does not simply alternate with B 1. There are times when Sally manifests herself as an extra-consciousness, concomitant with the primary personality B 1." The only incompleteness of Sally during her periods of dominance was a rare form of anaesthesia, namely, complete anaesthesia of the skin senses and of the "muscular sense" when her eyes were closed, and a general and continued anaesthesia of the deep tissues.

After the appearance of B 4, Sally continued her pranks, but the conflict became more serious; because B 4, as soon as she learned of Sally's existence and nature, made a sustained effort to get the better of Sally and to suppress her. Like B 1, the new personality B 4 knew nothing directly of Sally or of the events of Sally's phases of dominance. Sally had not the power of sharing or reading the thoughts of B 4, as she read those of B 1; but she could and did force upon B 4 some inhibitions and automatisms; though less successfully than in the case of B 1, because B 4 resisted and fought against such influences from the coconscious Sally.

At this time Sally wrote her autobiography, claiming to remember her own existence as a subconscious and coconscious personality from the time when the child B began to walk, and to have had even at that time tastes and points of view very different from B's.

Towards the end of the fifth period, Sally, who had fought for her life valiantly and successfully, began to show signs of discouragement, under the combined efforts to suppress her of B 4 and of Dr. Prince. She described herself as feeling "squeezed" during her subconscious phases. When the normal personality was restored as a stable synthesis of B 1 and B 4, Sally seemed to be deprived of her power, both her power of controlling

the primary personality by inhibiting her actions or forcing upon her "automatic" actions and hallucinations, and also her power to secure dominance of the organism. Prince frequently refers to Sally as a group of conscious states or ideas split off from the main personality and synthesized to form a secondary personality; and in several passages he writes of the restored personality in terms which imply that Sally was included in the synthesis. But, whatever Sally's nature and origin, it must be insisted that Prince's account does not justify the view that Sally was in any sense synthesized with or incorporated into the restored personality B. He has told us that he had found it "easy to amalgamate Sally's with either." And he repeatedly states that the synthesis of B 1 with B 4 produced the normal whole personality B, while Sally became at such times "squeezed." Further, the restored personality did not command memories of the events of the phases of Sally's dominance. We are told "the real Miss Beauchamp is disintegrated into personalities B 1 and B 4, who, conversely, may be synthesized into real B." Further—"the resurrection of the real Miss B is through the death of Sally. . . . Of Sally, her life and her doings, she (the restored B) knows nothing, except indirectly. Of this part of her mental life she has no more memory than has B 1 or B 4." And of Sally we are told: "With the resurrection of the real self, she 'goes back to where she came from,' imprisoned, 'squeezed,' unable either to 'come' at will or to be brought at command. Automatic writing, speech, and such phenomena cease, and it has not been possible as yet to communicate with her, and determine what part if any she plays in Miss Beauchamp's subconsciousness, or whether as a subpersonality she exists at all. When, however, as a result of some mental catastrophe, she appeared again as an alternating personality, her language implied a persistent existence as a subconsciousness like that of her early youth, and as described in the autobiography."

This case illustrates both the *alternating* and *co-existing* types of multiple personality. It should not be difficult for the student to conceive of the phenomenon of an alternating personality: It is not at all inconceivable that environmental influences should effect two fairly separate mental integrations of the sum total of unit mental dispositions instead of a single integration. This same phenomenon is manifest to a lesser degree in many normal individuals. Take for instance the individual who devoutly upholds humility, honesty, generosity, etc., on Sunday, and does so in all sincerity, and who on the six remaining days appears to have no scruples whatever against the ruthless exploitation of others. Such contradictory activity becomes clear only when we view it as the expression of two more or less distinct sets of sentiments or mental organizations.

And it should not be difficult for the reader, in the light of our previous discussion of dissociative phenomena, to grasp the essential facts pertaining to co-existing personalities. Obviously, it is impossible for two personalities to have complete control of the mechanisms of the individual at the same moment; and no such case has ever been reported or could conceivably exist. On the other hand it is entirely comprehensible that one personality (organization of motives) may dominate most of the mechanisms (motor and intellective patterns) of the individual while a second personality controls the rest, resulting in subconscious (automatic) acts, hallucinations, etc. And it is conceivable that both personalities might be conscious of a given fact at the same moment just as two individuals might be. In brief, there appears to be nothing about the phenomenon of multiple personality which cannot be adequately described in terms of the concepts of integration and dissociation (disintegration).

We have discussed most of the principal forms of hysterical disorders and we have identified hysteria itself with a state of dissociation of the mental integration or personality. We have not yet said much, however, by way of explaining or interpreting this dissociation.

Interpretation of Hysterical Disorders. There are certain pronounced similarities among all hysterics, and an understanding of hysteria is to be found in a proper psychological evaluation of these common features. First, it is rather unusual for any person who is not definitely extraverted to develop genuine hysteric symptoms. In fact, it is the writer's opinion that such never happens, although it is true that we find in distinctly introverted persons conditions which bear a close superficial resemblance to hysteria. But upon a careful study of the person's symptoms and of his attitude toward his symptoms we shall find that we are not dealing with true dissociations.

The reader should try to grasp clearly exactly what we mean by extraversion. It is not merely a preponderance of overt activity; it is characterized fundamentally as we pointed out in an earlier chapter by a relative deficiency in that quality of mental activity which we call consciousness. The individual of strongly extraverted personality is very lacking, or unsaturated, in amount or degree of consciousness. If consciousness were a color we could say that the strongly extraverted person was a light tint or a dull shade.

Secondly, along with this shallowness of consciousness or perhaps somehow because of it, the strongly extraverted person is ideomotor in his reaction patterns. With him thinking and action tend to comprise a single unbroken, unitary sequence. He is not given to an abundance of purely implicit activity as the strongly introverted person is.

Now we believe, thirdly, that the quality of consciousness somehow has a cementing effect or influence upon the individual's different psychophysical functions and systems. It tends to bind them together within the individual's total organization of voluntary reaction patterns. And since the strongly extraverted person is deficient in amount or degree of consciousness he is prone to dissociation. But whether consciousness is the aspect of mental phenomena which tends to bring about a welding of the individual's different functions and reaction patterns—his thoughts, feelings, motives,

sentiments—into one single total organization or unity or whether it be some other aspect, we can safely say that the strongly extraverted person is relatively deficient in this aspect of mental phenomena. And this deficiency is his tendency to dissociation under stress, albeit, on the other hand, his facility for turning from one fact to another, for passing from one reaction pattern (of thought, feeling, or overt activity) to another with an enviable ease.

We believe that these personality features which we have just mentioned are basic to the development of psychoneurotic symptoms of the hysterical type. However, we do not mean to imply that every strongly extraverted person is a potential hysteric. There are other and equally important factors which are essential to the development of hysteria. Perhaps the most prominent feature of the potential hysteric's predisposition to mental illness is his over-developed racial motives, particularly suggestibility. And next to this is his shallow, inadequate, and narrow system of ego-identifications or personal values. Finally we have an exaggerated propensity to make over-identifications.

The hysteric or the potential hysteric is troubled by an excessively strong motive complex compounded of sex, affection, sympathy, and suggestibility. Freud has contended that this complex, which is easily detected in all hysterics, is of a distinctly sexual character. In the writer's opinion, suggestibility is more often its chief component. And to off-set the weight of this complex of powerful motives, the hysteric has only an inadequate set of ego-identifications. His principal identifications will frequently be found to relate to a parent or an older sibling of his own sex. Or his ego-identifications will be vague and indefinite and serve him but poorly as a guide to direct and specific activity. Hence he tends to become a victim of the pull of his racial complex. He is already too attached to some other person or he tends to become too attached. He then reacts by a simple and literal renunciation of such functions as are most involved in his racial proclivities, or he renounces (represses) the procliv-

ities. And in his distress he frequently endeavors to strengthen his threatened sense of individuality and personal autonomy by means of over-identifications. Hence a hysterical symptom may be expressive of any one of three fairly distinguishable meanings: (a) It may constitute an outright denial of certain functions belonging to racial motives; (b) it may be an expression of racial interest through displacement; or, (c) it may express an over-identification. A brief example of each of these three classes will make the distinctions more clear.

A young woman of hysterical make-up met with an unhappy romance. Her sweetheart quite suddenly discontinued his attentions without apology or apparent cause. The girl developed astasia-abasia. The loss of her ability to walk expressed a rejection of her intense desire to go forth and try to find her inconsiderate lover. A man who had partially repressed sex and who complained that seeing women's legs on the subway trains gave him painful feelings of guilt developed a peculiar symptom of the neck. He tried so hard to keep his eyes off women's ankles that he suffered from a stiff neck. He then went to a chiropractor to have his neck treated. The chiropractor would twist his neck till he produced a cracking sound. After the patient stopped seeing the chiropractor the peculiar symptom developed. His head would rotate of its own accord and without any volition on his part till a cracking sound was produced. The cracking sound gave the patient intense pleasure. The rotatory movements of the head could be elicited by discussing women with him. They constituted a displaced and symbolized masturbatory practice, which in all probability was accompanied by vaguely conscious or subconscious phantasy formation.

The young woman mentioned above who developed astasia-abasia was the same person who developed a drooping eye-lid corresponding to the drooping eye-lid of her mother. The drooping eye-lid expressed an over-identification with her mother, and the over-identification was indicative of an effort on the part of the girl to strengthen her resistance to going in search of her lover. By becoming like the very moral and

proper mother who would not have dreamed of running after a man, she would be strengthening her wavering ego-ideals of chastity and propriety.

Summary. The genuine hysteric is perhaps invariably of a strongly extraverted personality.

Racial motives, capacity for selfless interest in another person, are relatively over-developed.

The individual tends toward infantilism both in his racial and in his ego-interests.

Ego-identifications are usually narrow and socially inadequate. The identifications of the young hysteric woman often go little further than a narrow vanity and, frequently, equally narrow ideals of sexual chastity.

The potential hysteric is orientated to a degree toward future objectives.

The daily feeling tone of the hysteric is not usually particularly distressing. In fact, he often finds pleasure in exhibiting his symptoms.

Because of the obvious nature of his symptoms, the hysteric usually appears poorly adjusted to others.

The hysteric or the potential hysteric frequently walks serenely into marriage and into other relationships and undertakings which he is wholly unfitted to manage.

The potential hysteric may be normally motivated; the actual hysteric loses much of his motivation (drive) with the occurrence of his mental dissociation.

Repression followed by dissociation is the principal mode of reaction to difficulties.

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CHAPTER XIV

SOME BORDERLINE CONDITIONS

PSYCHOPATHIC PERSONALITY; EPILEPSY

Some Basic Features of the Psychopathic Personality. Many writers prefer to speak of the psychopathic personality as "constitutional psychopathic inferiority," which fact indicates the largely conjectural nature of the origin and genesis of this disorder. It is assumed that there is a constitutional deficiency from birth, a deficiency not in the realm of intellectual capacities but in the realm of affect, of feeling and emotion. The term "psychopathic" is included to indicate the emotional instability which characterizes these individuals.

But although the etiology of this disorder, or these disorders, remains in the dark, there are various descriptive features, personality characteristics, which are unusually pronounced. If the writer were asked to mention the most outstanding feature of the psychopathic personality he would unhesitatingly say a *pathologically inadequate devotion to future objectives*. Like the near-sighted individual the psychopath's horizon is foreshortened; there is no distant horizon, more than a blur. The individual lives in a world of immediate and momentary interests. There is no integration of, or connection between, his interests of today and those of tomorrow.

Stated slightly differently, the psychopath's orientation is toward the present; he is concerned neither with the past nor the future. Hence he is ever a victim of his present interest. This results in, or is expressed as, an irresponsible impulsiveness. This is his emotional instability. And not only are his interests confined to immediate objectives but even within this limited realm of striving he is characterized by a pathologically narrow perspective. Usually only one impulse, motive, or interest is present at one time; and until the objec-

tive belonging to this motive is attained all other interests or considerations remain in abeyance. The utter indifference which many of these persons manifest toward the presence, interests, and welfare of others is hardly believable. And this brings us to a second notable deficiency in the psychopath's make-up.

The individual of psychopathic personality is *empathetically deficient*. Empathy is a capacity for feeling oneself into a situation or circumstance. It appears to consist of an imaginative-feeling process; it is really a spontaneous identification. Now the psychopath comes to know of social values and standards and perspectives but they never become true feeling entities with him; he acquires them intellectually. Thus the young woman psychopath may know well enough of the disfavor with which others regard sexual promiscuity but she is incapable of achieving any feeling identity of herself with the social attitude. If one can induce the pathological liar to reflect for a moment he is aware that others regard lying as an indication of weakness and that he is making the worst kind of impression by his lying but he cannot feel that way about the matter. Generally speaking we can say that the psychopath lacks a feeling relationship to other persons.

A Classification of Psychopathic Personality. In a purely descriptive sense we may distinguish, as many do, a number of different types of psychopaths. In certain basic respects the *inadequate personality* includes all types. He is characterized by the dominance of momentary and immediate interests, lack of perseverance, faulty judgment, shiftlessness, sentimentality, and an incessant stream of short-lived enthusiasms. Persons of this type are all for this today and all for that tomorrow. They often can weep at a mere suggestion that they have been disloyal or inconsiderate. But the next moment their eyes are dry and their thoughts are on something entirely different. They may fairly "ooze" a desire to help another but they always fall a little short of their avowed promises of aid. Intellectually they are not infrequently of very superior intelligence.

The *paranoid personality* is characterized by suspiciousness, obstinacy, cynicism, secretiveness, argumentativeness, and ego-centricity. Such persons manifest the same general personality trends as the incipient paranoiac but never develop true delusions. We shall refer to this type of personality more fully in our chapter on paranoia and paranoid conditions.

The *excitable personality* reveals a pathological lack of self-control, is irritable and hostile, given to outbreaks of intense anger, frequently unapproachable, jealous, and quarrelsome. Individuals of this type have particular difficulty in adjusting to members of the opposite sex.

Pathological liars and *swindlers* comprise a significant group among psychopaths. They are to be distinguished from the merely dishonest person who lies or cheats in order to gain some definite and well thought out objective. The psychopath's lying is compulsive and pathological. Irrespective of what his position in life might become he would still lie. Moreover he tends to arrive at a point in his lying at which he is no longer certain of what is true and what is not. His imagination runs away with him, falsifies his memory, and leaves him the helpless victim of his own tendency to fabricate. He can no longer help lying, lying has become his one vehicle to the goal of individuality; it is his one great source of ego nourishment. And likewise the pathological swindler swindles because doing so has become his principal meaning in life.

The *anti-social personality* is characterized by a blunt inconsiderateness of the welfare of others, by irresponsibility, dishonesty, inaccessibility, and frequently by cruelty. Theft, robbery, and crimes of violence are not uncommon to this group. The notorious Leopold perhaps belongs here. It was particularly to this type of personality that the older term "moral imbecility" was applied.

The *nomadic personality* is characterized by an abiding restlessness which makes it difficult for him to remain for long in one place. Among hoboes there are feebleminded individuals, cases of dementia praecox, *psychopaths*, and others.

Many of us would like to let go of our responsibilities and "take to the road," but in the case of most of us there are various ties of sufficient strength to hold us in place. The psychopath lacks these ties.

Sexual psychopaths are not uncommon. Our Bluebeards, Jacks the Rippers, etc., belong to this category. The sexual psychopath may be perverted or only pathologically distorted. The Don Juan is merely an individual whose chief meaning in life is sexual conquest. Another sexual psychopath might be perverted or inverted. It makes little difference; the outstanding characteristic in either case is the reduction of the multitudinous meanings of life to a single issue.

The student will observe that this classification of psychopathic personalities is purely descriptive. By way of summary we may state that psychopathic personalities contribute largely to the ranks of criminals, the emotionally unstable, drug addicts, paranoid personalities, pathological liars, kleptomaniacs, swindlers, pyromaniacs, moral degenerates, hoboes, sexual perverts, malingerers, etc. But we are interested not so much in the pattern of behavior as in its etiology and dynamics. However, before suggesting an interpretation of the psychopathic personality let us examine one or two specific cases.

CASE 45. George T. was a young married man twenty-six years old, the father of one child. He was of superior intelligence. For the three years which he had been married he had contributed nothing to the support of his wife and child.

George exemplified many of the traits of the psychopathic personality. He was liar, swindler, egotist, sentimentalist. Once when asked if he loved his wife and child he immediately began weeping and declared that they were the only thing in life that meant anything to him whatever. A few minutes later he tried to borrow five dollars from the writer "in order to secure a position

that he might support his family." George was nomadic. He went to Florida where he became the self-invited guest of a family in very modest means. He represented himself as a colonel of the American Army on leave of absence from India. He induced the man with whom he was staying to dispose of his property, assuring him that much greater fortunes awaited him in India—with the aid and guidance of the Colonel. He borrowed part of the money which the man had realized from his properties and disappeared.

George next came to life in New York again. He went to one of the better hotels representing himself as an advance man for a group of middle-western buyers. He complained about the service until he had the manager of the hotel in a state of constant distress. After a couple of weeks he left the hotel, leaving his two large trunks packed with newspapers in lieu of his bill which he had neglected to pay.

Then George bedecked himself in uniform and went away for the summer to a citizens' army training camp. One day his wife received a telegram advising her that her husband's body was arriving at the Grand Central Terminal at a certain hour. She scarcely had read the telegram when George walked in. He stoutly denied that he knew anything whatever of the source of the telegram. He affected an almost convincing perplexity concerning the whole matter.

George next came to the attention of his acquaintances through a middle-western newspaper. He had given a lengthy interview on conditions in India to the paper. The "Colonel's" picture occupied a full quarter of a page. George went from there to California. He is avoiding New York at the present time inasmuch as the police of that city are very desirous of meeting him.

Case 46. Harriet A., one of the most brilliant young women the writer has ever met, was a classical example

of the psychopathic personality. Harriet was the only daughter in a family of three children. She was a college graduate, an accomplished pianist, and a much sought after artist's model. When she was sixteen she thought she would like to see the inside of a jail. She lingered around Broadway till three o'clock in the morning, hoping that a policeman would arrest her. Her wish finally was granted and she afterward declared that she thought the jail an unusually interesting place.

When she was seventeen, Harriet "fell in love with a writer." No better picture of a woman's devotion has perhaps ever been portrayed than that of Harriet to her lover. She pawned her jewels and other possessions without complaint in order that her lover might have food and a comfortable place in which to write. When they went out, she opened the turnstiles for him to the subways and she went without food for days at a time in order that he might eat. But her attachment was not, however, a pure love relationship. She unhesitatingly declared that if her sweetheart were ever to fail in his writing she would kill him. When she had no more possessions to pawn her lover suddenly found her unattractive.

Harriet endeavored in various ways to have a baby; but her lover very cautiously outwitted her. In lieu of a child she surrounded herself with dolls and toy animals of every type and description. One day she happened by a store which was selling embalmed baby chicks. She bought the entire stock of three or four dozens. She dressed them in suitable attire and buried them in a cemetery. She put her dolls to bed nightly and always kept them very presentable.

Harriet was a woman of unusual capacities. When she had an opportunity to become the secretary of a man who she thought was somewhat outstanding she acquired a speed of forty words a minute on the typewriter within a couple of weeks, never having typed

before. She entered one of New York's best nursing schools. After two months she was dismissed and her tuition fees were refunded. She was told that she was too intelligent to waste her time in nursing. She had been an "A" student in all her courses. But she had not agreed with the instructors on all points and she had refused to play the piano for the entertainment of the students, declaring that they were too stupid to appreciate her playing.

Harriet has always been unusually sympathetic, kind, and honest. Occasionally she inflicts pain upon herself as, for instance, placing a hot iron against her skin, but she never seeks to hurt another person. She is a vegetarian, is extremely fond of good music and of good literature. On one occasion she went without eating for seventeen days, losing about twenty pounds during that time.

When Harriet's lover began to lose interest in her she decided to commit suicide. She secured a bottle of lysol and took a taste of it to see how committing suicide would seem. But when the lysol burned her mouth she threw the bottle away and never spoke again of destroying herself.

Harriet has become nomadic and at the present time goes about the country from city to city. She has posed for artists in cities scattered all the way from New York to San Francisco. Despite her instability she has led a very restrained sex life, declaring that propagation is the sole meaning of sex. Yet on one or two occasions she has submitted to men's advances purely out of sympathy. And while she was living with her lover, she frequently went to unusual pains to secure attractive women for him. She never appeared to be jealous.

The Etiology of the Psychopathic Personality. The causes even of dementia praecox are no more obscure than those of psychopathic personality. Many facts strongly indicate an

inherent constitutional deficiency in the affective capacities. On the other hand as one studies a given case of this disorder he can find nothing that could not conceivably have resulted from early environmental influences. The writer has observed that very frequently the psychopath is one who acquired a very strong but very vague and indefinite ego-identification fairly early in life. Most commonly the identification will be found to be with the parent of like sex. In other words the history of psychopathic men often reveals the significant fact that they "stepped into their father's shoes" at the age of nine or ten. But the identification is not with the parent strictly speaking; it is with the position of the parent. Now an identification of this sort at an early age rarely results in a specific orientation. Rather it conduces to disorientation, to a vagueness of personal identity. And furthermore it effectually blocks emotional development. The individual tends to remain at the emotional level at which his identification occurred. He is but a child who is straining to be an adult. He accordingly resorts to pretense and affectation; he affects mannerisms, traits, and attitudes which at the age of nine or ten imply to him an adult maturity. He becomes estranged from others of his own age and continues his "development" only in contact with his childishly conceived indications of maturity. He may easily turn to lying as a means of suddenly becoming an adult. And when he becomes an adult he is restless and uncertain because he lacks a definite orientation. He consequently tends to overdo his efforts to gain a sense of completeness and maturity from activities and exploits of a childish nature. He lies or swindles to a fanatic degree, or he dwells in a world of unrestrained phantasy or he grows sullen, hostile, and unapproachable, or he wanders about from place to place in a vain search for his particular niche in life, for a feeling of rapport which he never achieves.

Some General Facts about Epilepsy. Literally the term "epilepsy" means "a laying hold of." The name derives, of course, from the fact of the seizure or convulsion.

Epilepsy has long been an enigma to the medical sciences and even today there is considerable diversity of opinion as to its essential causes. Descriptively it is customary to distinguish, as did Charcot, two principal types of attack: the *grand mal* and the *petit mal*. The *grand mal* seizure often is preceded by moodiness, restlessness, irritability, impulsiveness, and outbreaks of temper. Immediately preceding its occurrence many patients have the *aura*. This varies with different individuals. In some it is experienced as sensations of distress in the epigastrium, in others as flashes of light, stars, etc., while in still others it consists of olfactory, auditory, or some other mode of hallucinations. Immediately following the *aura* the patient suffers a complete loss of consciousness and falls to the floor. As he falls all the muscles of his body contract vigorously and remain in this *tonic* state for about half a minute. If the muscles of the chest and larynx contract at the same time, air is forcibly expelled, resulting in the epileptic cry.

With the ending of the tonic phase the *clonic* phase commences. This is characterized by alternate contractions and relaxations of muscles in different parts of the body. The jaw muscles contract and relax forcibly and churn the saliva into a foam; thus the patient is often described as frothing at the mouth. If the tongue slips between the teeth during a phase of relaxation, it may be severely bitten as the jaw muscles again contract. Gradually the periods of relaxation become longer and the periods of contraction shorter, until the latter disappear completely. The patient is then in a sort of stuporous condition and if left to himself he will usually sleep for an hour or two. Upon awakening he suffers from headache and fatigue.

Convulsions may occur during sleep as well as during waking life. In some patients the seizures are always nocturnal. One seizure may be followed by a second without the patient's regaining consciousness. In some instances five or six attacks follow each other in continuous succession, *status epilepticus*. And the frequency of the seizures varies greatly. One person

will have only two or three during his life while another will suffer from attacks daily.

And likewise the severity of the seizures varies widely, from the profoundly disturbing *grand mal* attacks on the one hand to the *petit mal* on the other. In the petit mal attack the individual does not fall although he may waver or stagger for a second or two. There is a momentary loss of consciousness during which the eyes assume a fixed stare or turn up or close; there is a break in speech or thoughts and perhaps a vague sense of dizziness. After one or two seconds consciousness returns and the individual continues with whatever he was doing, often quite unaware of the interruption of his mental continuum.

Certain substitute episodes known as *epileptic equivalents*, may replace the seizures. Common among the equivalents are sudden and extreme mood changes such as irritability, depression, states of confusion with loss of acuity of perception and orientation, delirium and hallucinations, pathological states of excitement known as *epileptic furor*, dream states lasting from a few hours to weeks and followed by amnesia for the period of the episode Furor states sometimes occur following a seizure. The patient is extremely dangerous as he is dominated by maniacal, homocidal, and destructive impulses. One such patient killed his wife and five children with an axe.

Slow mental deterioration is characteristic of epileptics, although it is said that the frequency and severity of the seizures have nothing to do with the deterioration.[1] The following table given by Wittman[2] suggests the degree of mental deterioration observable in epilepsy in comparison with that found in other psychopathological conditions. The indices are apparently in terms of percentages of earlier scores.

Epilepsy usually appears during the earlier years of life. Spratling found that 38.5% occurred before the age of ten,

[1] See, for instance, Worster-Drought, C., "Hystero-Epilepsy," *Brit. Jour. of Psychol.*, Medical Section, Vol. 14, 1934, pp. 50–81

[2] Wittman, Phyllis, "The Babcock, etc.," *Jour. of Abnor. Psychol.*, Vol. 38, 1933, pp. 70–83.

Psychosis	*No. of Patients*	*Average Index*	*Range*
Paresis	89	−5 1	−9.0 to +0 3
Alcoholism	66	−2.3	−4 2 to +1 4
Epilepsy	26	−5 4	−10.2 to +1 1
Schizophrenia	24	−0 8	−7.3 to −1.7
Manic Depressive	6	−1 4	−2 6 to −0 3
Organic Brain Disease	4	−3 3	−5 2 to −1 7
Psychoneurosis	4	−0 6	−0 8 to −0 4
Arteriosclerosis	4	−4 9	−6 1 to −3 7
Non-psychotic	26	−1 2	−2 1 to −5 2

43% between the ages of ten and twenty and 9% between the ages of twenty and twenty-nine. According to Gower, 76% of epileptics develop symptoms before the age of twenty.

Personality and Temperamental Factors. Convulsions and the loss of consciousness by no means complete the syndrome of epilepsy. "Careful study of the mental life of the idiopathic epileptic," says Noyes,[1] "leads one to believe that the disease has its origin in the temperament or the personality make-up of the patient. This temperament is characterized by irritability, sensitiveness and a self-centered egotism." Among the personality characteristics of epilepsy Strecker and Ebaugh[2] list egotism, conceit, emotional instability, hypochondriasis, sickly sentimentality in religion, inadaptability to environment, cruelty, laziness, irascibility, impulsiveness, excessive sexual and criminal tendencies, and violent impulses.

Epilepsy, that is, epileptic seizures, may be associated with conditions and disorders of different kinds. Thus we have the epileptic psychoses and epileptic amentia. The epilepsy and the condition with which it is associated are often so closely interwoven as to make a distinct separation of the two impossible. Many of those personality factors which we just mentioned are always present, however, irrespective of whatever complications exist. The following case illustrates some of the personality features which are

[1] Noyes, Arthur P., *Textbook of Psychiatry*, p. 152, Macmillan.

[2] Strecker, Edward A., and Ebaugh, Franklin G., *Clinical Psychiatry* Fourth Edition, p. 166, Blakiston.

invariably present, particularly ego-centricity, hypersensitivity, and emotional instability. The mental deterioration was also very marked in this case.

CASE 47. Oscar T. was the third child in a family of four. His two brothers and sister are married and well adjusted. One uncle is said to have died of attacks, the nature and origin of which could not be determined. His father died at an advanced age. The condition and whereabouts of the mother are unknown. There is some evidence that the mother was somewhat unstable and morally lax.

Oscar's parents separated when Oscar was a small child. He was reared by relatives of the family. His mother deserted her children at the time of her separation from her husband and has not been heard of since. Oscar's father married again when Oscar was eighteen. Oscar appears to have been particularly fond of his father. There is some evidence, though not conclusive, that Oscar had a few attacks when he was a small child.

Oscar is now forty. He has never been married and shows only a mild interest in members of the opposite sex. Shortly after his father's death, Oscar had his first attack, at the age of thirty-four. This was his first attack, at least during his adult life. At about this same time he became very presumptuous and egocentric. From his case history it would appear that he passed through a mild psychotic crisis. He quarrelled with his friends, became unusually critical of others, and boasted about himself. He succeeded in making himself so intolerable that he finally was committed to an institution on the complaint of several of his former friends. The specific complaints were that he had "formed the habit" of taking and doing whatever he wished irrespective of who was present or the rights of others.

Since his residence at the hospital, six years ago, Oscar has been fairly manageable. The superintendent

of the hospital reports that deterioration has been quite marked. Although he completed two years of high school, his present mental rating is an I.Q. of 72. In appearance he is very similar to a case of simple schizophrenia except that there is a very noticeable egocentricity about him. He likes to be interviewed and is obviously loath to depart when the interview is at an end. His memory, particularly for remote events, appears to be good. His judgement is that of a high grade moron. He works on the institution's farm and appears to be little concerned about his attacks. He stands a little straighter when he is joked about his girl friends.

Oscar has a number of scars from burns and other injuries, received during attacks at different times. His attacks occur at the present time at an average rate of two each week. Sometimes he will have several in fairly rapid succession. At other times a week or two will elapse between attacks. Most of his attacks now occur during the night or early in the morning.

Etiology of Epilepsy. As we have said there is considerable variance of opinion on the essential causes of epilepsy. Some authorities believe the condition to be primarily of psychogenic origin and see in the convulsion an escape mechanism; the patient withdraws from a reality to which he is incapable of adjusting. The fact that emotional disturbances are often sufficient to precipitate a seizure lends some support to such a view. On the other hand other authorities regard epilepsy not as a mental disorder properly speaking but as an organic affliction. Some assign a great deal of weight to hereditary factors while still others believe early traumatic factors are of fundamental importance.

Rosanoff [1] and his collaborators made a study of etiological factors in 107 cases of epilepsy in twins. Only cases in which at least one of the twins was epileptic were chosen. Of the 107 pairs of twins 23 pairs were monozygotic, 39 pairs dizy-

[1] Rosanoff, Aaron J., Handy, Leva M., and Rosanoff, Isabel Avis, "Etiology of Epilepsy," *Arch. of Neurol. and Psychiat.*, Vol. 31, 1934, pp. 1165-1193.

gotic of the same sex, and 45 dizygotic of opposite sex. One twin in each case was epileptic; the neuropsychiatric conditions found in the other members of the pairs were as follows:

(1) Monozygotic,—		
Deteriorating psychosis	1	
Tumor of spinal cord	1	
Epilepsy	12	
Normal	9	(39.1%)
(2) Dizygotic;—		
Mental deficiency	6	
Mental deficiency with psychosis	1	
Mental deficiency with behavior difficulty	1	
Deteriorating psychosis	1	
Behavior difficulty	1	
Dementia paralytica	1	
Epilepsy	9	
Normal	64	(76.2%)

The ratios and percentages shown by the figures given above would seem to suggest that hereditary factors are of considerable importance. But although Rosanoff recognizes such factors he apparently does not believe that they are the most important determinants. He points out that identicalness of manifestation even in monozygotics is the exception rather than the rule. He favors birth traumata as the most essential factor, believing that it is not so much the severity or extent of the injury as it is the localization and the nature of the resulting inflammatory condition. And he says the disproportionate number of first born epileptics tends to support his theory.

An understanding of the etiology of epilepsy and a closer agreement among authorities awaits further study. At the present time we are inclined to look upon hereditary and early psychogenic factors as being of considerable significance. At the same time physical traumata, organic and toxic factors are certainly not to be ignored. The epileptic appears to be inherently psychophysically unstable and low in resistance to a wide variety of disturbing factors, both mental and physical.

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CHAPTER XV

THE FUNCTIONAL PSYCHOSES

MANIC-DEPRESSIVE PSYCHOSES; INVOLUTIONAL MELANCHOLIA

Some General Facts about the Psychoses. In passing to the matter of the psychoses, the reader must prepare to discard all preconceptions of the nature of "insanity" and to look with a critical but unbiased eye upon a large group of phenomena with which he is likely to be unfamiliar. For most people know almost nothing of the nature or even of the existence of the more serious mental disorders—a rather surprising fact in view of their prevalence. According to a census taken in 1920, there were at that time in the United States 232,680 persons in hospitals for the mentally diseased. In addition to this there were 18,268 patients on parole, escaped, or otherwise on the books but not actually in the institutions, making a total of over 250,000 individuals.[1] At the beginning of 1934 there were 437,718 patients on the books of hospitals for the mentally diseased. During the year of 1934 there were 134,237 admissions, of which 79,940 were male and 54,297 female. Of the total admissions for the year 96,630 were first admissions. The distribution of these first admissions is given on pages 280 and 281.

Those entities before which we have placed an "*x*" are generally regarded as being essentially functional or of psychogenic origin. In the others organic, toxic, and traumatic factors are of great etiological importance, although, to be sure, personality factors enter into them to a considerable extent.

[1] Pollock, H. M., and Furbush, E. M., "Patients with Mental Disease, Mental Defect, Epilepsy, Alcoholism, and Drug Addiction in the United States, January 1, 1920," *Mental Hygiene*, Vol. 5, pp. 139–169.

It is to be regretted that we cannot take the reader for a visit to a mental hospital and point out along with our discussion the facts of which we speak; for to talk about or to teach the psychoses without actually having patients at hand, or without having seen such patients, is comparable to talking or teaching chemistry or physics without any laboratory work. In order properly to appreciate the facts of which we shall soon speak, it is important that these facts be observed firsthand. Hence it is strongly advised that if the reader has never visited a mental hospital he should take advantage of the first opportunity to do so, whether he is particularly interested in abnormal psychology or not. In all probability no one ever came out of a mental hospital—either as patient or visitor—without having gained a somewhat new and broader perspective on the human mind. These remarks do not hold with respect to the psychoneuroses, which we have discussed, since, in the first place, one need not go to mental hospitals or hospitals of any kind to meet with this type of disorder, and, in the second place, the psychoneurotic does not present a sufficiently different picture from the normal person to provide a sharp contrast. Moreover, in studying the psychoneuroses it is possible by means of hypnosis to induce with sufficient accuracy and detail many of the objective conditions presented by patients of this class for purposes of demonstration. But it is quite impossible to induce in a hypnotic subject anything closely approaching true psychotic reactions. However, there is no intention on the part of the writer to lead the reader to believe that unless he has seen psychotic patients it is useless for him to study about them; it is merely suggested that he take advantage of his first opportunity to see and observe firsthand the reactions of these classes of individuals.

Concerning Terminology. Before beginning our discussion proper it is necessary to say a few words concerning terms. The word *psychosis* has two current meanings: (a) It is used to designate any one of a large class of abnormal or disordered mental processes or reactions, and (b) it is also used

FIRST ADMISSIONS TO HOSPITALS FOR MENTAL DISEASE BY CLASS OF INSTITUTION AND PSYCHOSIS 1934 [1]

Psychosis	*Number*					*Per Cent Distribution*				
	Total	State hospitals	County and city hospitals	U S Veterans' hospitals	Private hospitals	Total	State hospitals	County and city hospitals	U S Veterans' hospitals	Private hospitals
Grand total	96,630	69,631	9,750	2,545	14,704	100 0	100 0	100 0	100 0	100.0
Total with psychosis	81,862	62,393	7,044	1,900	10,525	84.7	89 6	72 2	74 7	71.6
Traumatic	533	393	35	19	86	0 6	0 6	0.4	0.7	0 6
Senile	8,102	6,156	1,082	16	848	8 4	8.8	11.1	0.6	5.8
With cerebral arteriosclerosis	9,149	8,181	436	44	488	9.5	11 7	4.5	1.7	3.3
General paralysis	7,226	5,785	734	425	282	7.5	8.3	7.5	16.7	1.9
With cerebral syphilis	1,501	1,170	109	91	131	1 6	1.7	1.1	3 6	0.9
With other brain or nervous diseases	1,525	1,077	185	78	185	1 6	1.5	1.9	3 1	1 3
Alcoholic	4,734	3,338	444	112	840	4 9	4 8	4 6	4 4	5 7
Due to drugs or other exogenous toxins	558	281	46	17	214	0 6	0 4	0 5	0 7	1.5

[1] Department of Commerce, Bureau of the Census, Washington.

With pellagra	371	323	21	3	24	0 4	0 5	0 2	0 1	0.2
With other somatic diseases	2,178	1,633	223	37	285	2.3	2.3	2 3	1 5	1 9
* Manic-depressive	11,947	8,641	855	121	2,330	12.4	12.4	8.8	4 8	15.8
* Involution melancholia	2,262	1,343	258	4	657	2.3	1.9	2 6	0 2	4.5
* Dementia praecox (schizophrenia)	18,107	14,181	1,529	542	1,855	18.7	20.4	15.7	21.3	12.6
* Paranoia or paranoid conditions	1,539	1,013	130	30	366	1.6	1.5	1 3	1.2	2.5
Epileptic psychoses	1,981	1,616	193	52	120	2.1	2 3	2 0	2.0	0.8
* Psychoneuroses and neuroses	2,784	1,628	148	100	908	2.9	2.3	1 5	3 9	6.2
* With psychopathic personality	1,197	806	114	66	211	1 2	1.2	1 2	2 6	1.4
With mental deficiency	2,727	2,282	254	47	144	2 8	3.3	2.6	1.8	1.0
Undiagnosed and unknown	3,441	2,546	248	96	551	3.6	3.7	2.5	3.8	3.7
Total without psychosis	14,768	7,238	2,706	645	4,179	15.3	10.4	27.8	25 3	28.4
Epilepsy	372	234	53	22	63	0 4	0 3	0.5	0 9	0 4
Alcoholism	6,381	3,076	158	69	3,078	6 6	4.4	1.6	2 7	20.9
Drug addiction	997	505	48	7	437	1 0	0.7	0.5	0 3	3 0
* Psychopathic personality	612	395	52	57	108	0 6	0 6	0.5	2 2	0 7
Mental deficiency	1,440	1,147	230	32	31	1 5	1.6	2 4	1 3	0 2
Others without and unknown	4,966	1,881	2,165	458	462	5 1	2 7	22 2	18.0	3.1

to designate any one of various more or less typical mental syndromes (symptom-complexes or non-adjustive reaction-pictures). When used in the latter sense some qualifying term is employed with it, such as manic, toxic, etc. The term *insanity* is rapidly disappearing from usage within psychiatric and psychological circles. It has a fairly definite medico-legal and sociological connotation, implying a more or less permanent loss of the ability, as a result of severe mental disturbance, to make an adequate social adjustment and to assume social responsibilities, and therefore the necessity of commitment. *Dementia* implies a general loss of intelligence. *Orientation* refers to the knowledge of time and place and personal identity. The patient is said to be disorientated if, for instance, he does not know the season of the year and the approximate date, or where or who he is. The term *insight* refers to the patient's perspective on his own condition. For instance, he is said to lack insight if he contends that there is absolutely nothing mentally wrong with him. Other technical terms will be defined as they are taken up.

As we have seen, manic-depressive psychosis constitutes 12 or 13% of admissions to mental hospitals. With the exception of schizophrenia it is the most common psychosis. A large number of statistical studies would seem to indicate that manic-depressive psychosis occurs more frequently in the female; that it is extremely common in urban negro women; that the peak of its incidence is attained in women during the fourth and fifth decades and somewhat later in men; that it is more prevalent in cities than in rural districts; that it is more common in the foreign born than in the native population and, finally, that the Jew is relatively frequently afflicted with the psychosis.[1]

The term *manic-depressive psychosis* or *manic-depressive insanity* has largely supplanted the older terms *mania* and *melancholia*. It was formerly believed that mania and melancholia

[1] Strecker, Edward A., and Ebaugh, Franklin G., *Clinical Psychiatry*, Fourth Edition, pp. 284–285, Blakiston.

were two distinct mental disorders. But Kraepelin observed that the two conditions are frequently found together in the same patient, and moreover it gradually became clear that the two disorders were really opposite forms of manifestation of the same basic factors. Hence Kraepelin suggested as being more adequate the single term manic-depressive psychosis. Observations have since supported Kraepelin and consequently we now no longer speak of mania and melancholia in the sense of their being two different mental disorders but rather we use them, if at all, to characterize two different phases of the same disorder.

Some General Features of Manic-depressive Psychosis. Manic-depressive psychosis has been aptly characterized by Pressey as the "psychosis of emotional extremes." The classical case presents as its fundamental features states of extreme excitement in alternation with states of extreme depression. Both states or phases appear equally to involve the thought processes, the emotions, and the motor reactions. In other words, all three aspects of the personality are involved. The degree of excitement and of depression, however, varies greatly with different patients, and, likewise, there are actually but relatively few patients in whom states of depression alternate with states of excitement in a strictly regular manner. More frequently the patient manifests only one of the two phases or else the phases alternate in an irregular or mixed order.

With respect to excitement and to depression three degrees are commonly distinguished. In order, from the most extreme excitement to the most extreme depression, they are: *hyperacute mania*, *acute mania*, *hypomania*, normality, *simple retardation*, *acute melancholia*, *stuporous melancholia*. This implies that depression or melancholy is exactly the opposite of mania or excitement, an assumption which is often made. But McDougall points out, and seemingly with adequate justification, that the true opposite of excitement is not melancholy or depression but rather passivity or calmness;[1]

[1] McDougall, Wm., *Outline of Abnormal Psychology*, p. 355, Scribner's.

and likewise that the opposite of depression is exaltation. If this is true it behooves us to examine the facts carefully and to try to determine exactly what characterizes these two phases, mania and depression.

The most outstanding feature of *hypomania* is the individual's attitude that "God's in His heaven, all's right with the world." His every thought, every action, every emotion, is in keeping with such an attitude. He is blinded to the dark side of anything and everything. He resembles in certain respects the person who is moderately intoxicated. He reacts quickly and joyously; a smile is on his face, he is immensely pleased with himself and intensely eager to taste of life in its fullness. If his reactions become concentrated along one line, that is, toward some definite goal, he applies himself with unusual vigor and enthusiasm. Perhaps he desires to bring about some social reform. Then he will talk and write incessantly, rapidly filling page after page, condemning, arguing, extolling. The hypomanic is not only excited; he is obviously exalted. Although he sometimes manifests irritability and ill humor, this is not frequent and is usually the result of being thwarted in following out some desire. If left to his own devices his behavior is strikingly self-assertive, resulting in his thrusting himself often, however, with right good humor, into the affairs and activities of all those around him. His speech is quick and usually loud, his writing is large and shows haste, and his manner is unusually self-assured; it is next to impossible to break down his composure, his bearing of self-sufficiency.

Acute mania is simply hypomania exaggerated. Such an individual shows even greater intensity in his reactions; his attention is more distractible, shifting with surprising rapidity from one thing to another without end. His talk is not only extremely rapid but may reach a stage of complete incoherency, spoken of as "flight of ideas," "word salad," etc. His facial expressions and general manner are in keeping with the intensity and rapidity of his motor reactions; his eye-lids are distended, his eyes bulging, his gestures violent,

his manner unusually aggressive. If he is crossed in what he is doing he may fly into a violent rage, threatening his disturber with death and venting his anger by destroying the furniture, or by yelling, screaming, swearing, etc. On the other hand if he is not crossed he may simply be unbearably jovial and aggressive in his behavior, manifesting a tremendously inflated self-esteem and an extreme inconsiderateness of others. His judgments are likely to be extremely erratic and fanciful; his remarks, however, although incoherent as a whole, are frequently very pointed and clever. Like the hypomanic he can always be depended upon to amuse the visitor, usually choosing someone from his audience to whom to address his remarks.

In *hyperacute mania* the individual reaches a stage of veritable delirium. He conforms fairly closely to the popular conception of the "madman." His talk is entirely incoherent, so broken and unrelated as often to make it impossible to gather any meaning from what he is saying. His actions are extremely violent; he tears his hair, breaks the furniture, attacks other patients. He sings, laughs, dances, raves, and tears about the ward in a perfect frenzy. It may be necessary to restrain him in some way to prevent utter exhaustion; for his activity is constant, permitting neither of rest nor sleep. It was particularly with respect to this class of patients that, a hundred and fifty years ago, bleeding was used to a great extent as a means of quieting them, and thereby conserving their energy (!).

The patient in the depressed phase presents a picture which in many respects is diametrically opposed to that of the manic patient. In the case of *simple retardation*, the thoughts and motor reactions are noticeably slower than normal. Contrasting it with the manic phase we may point out that the smile is gone from the face and replaced by an expression of sadness; the buoyancy is gone from the step, the snap from all the movements; the self-assured mien has given way to a hesitating, uncertain, and backward manner. The patient responds slowly and without interest to questions; his

writing is slow; apparently all his mental processes are retarded

In *acute melancholia* or *acute depression* a tendency to self-depreciation is obvious. Suicide is always to be guarded against. The patient has become extremely retarded in his movements. His bodily weight appears to have become a load too heavy to carry. To bring a smile to his face is next to impossible.

The patient who is in a state of *stuporous melancholia* is difficult of study since it is often impossible to induce him to respond to questions. He may sit in one place in the wards day after day, appearing to be in a state of complete dejection, body drooping, chin resting on the chest, tears trickling in an endless stream down the face. Since these patients usually have some memory for the period of depression upon recovering from it, it is possible to learn something of their emotional and mental state from their own retrospective accounts. Hoch[1] has made some interesting and fairly intensive studies of patients of this kind, and these studies, together with the observations of others, show that such patients are always harboring some absurd conviction of sin or wrongdoing. One patient believed that she had been the cause of the World War and was consequently overcome with grief and self-reproach. Another believed herself guilty of some awful crime for which she was to be put to death and that the attending physicians were her executioners. Often such patients misinterpret the kindest of attentions from the nurse or doctor as so much deliberate torture, which, however, they passively accept.

Now inasmuch as either depression or exaltation may be accompanied by psychomotor retardation or by psychomotor acceleration, it is obviously impossible to distinguish between the phases of mania and depression wholly in terms of the quickness and intensity with which the patient reacts. That this is true is clearly shown by the following table of mixed forms of manic-depressive psychosis.[2]

[1] Hoch, August, *Benign Stupors*, Macmillan.

[2] Bridges, J. W., *Outline of Abnormal Psychology*, p. 155, Adams.

	Affectivity	*Association*	*Action*
1. Depressive mania	−	−	+
2. Akinetic (gehemmte) mania	+	+	−
3 Agitated depression	−	+	+
4. Maniacal stupor	+	−	−
5. Unproductive (gedankenarme) mania	+	−	+
6 Depression with flight of ideas	−	+	−

In the table given above the plus sign (+) indicates manic disorders, that is, acceleration and intensification; the minus sign (−) indicates depressive disorders, that is, retardation and apathy. Hence we see that in the depressed state the individual is not necessarily characterized by retardation with respect to all three of the major aspects of the personality; namely, affectivity (emotion and feeling), association (cognition), and action (tendency or conation). The reverse of this is likewise true with respect to the manic state. Apparently the one constant characteristic of one of the two typical phases of manic-depressive psychosis is a basic feeling of elation, exaltation, euphoria, importance, while the one constant characteristic of the other typical phase is a basic feeling of dejection, mental depression, melancholy. More usually the first of these two feelings is accompanied by a speeding up and intensification of the cognitive processes, of certain types of emotional reactions, and of the motor reactions. The second feeling is accompanied usually by a retardation of the cognitive processes, by an emotional apathy in many respects, and by a retardation of the motor reactions. It is to be remembered, however, that mixed or composite forms are fairly common and consequently that it is always necessary to study a given state in relation to the various major aspects of the personality.

Besides the different forms of manic-depressive psychosis which we have mentioned, we find others when we turn our attention to the various temporal relationships existing between the manic and depressive phases. Some few individuals pass from normality through a period of mania and back

to normality, where they may remain for years without any return of the disorder. Others similarly pass from normality through a period of depression and back to normality. Still others are characterized by a recurrent mania, or a recurrent depression—the successive manic or depressed episodes being separated by periods of normality—or an alternation of periods of mania with periods of depression, with or without periods of normality intervening. In short the following periodic and circular forms have been distinguished: (a) Recurrent mania, in which periods of mania alternate with periods of normality; (b) recurrent melancholia, in which periods of melancholia alternate with periods of normality; (c) alternating insanity, in which the manic and depressed phases are separated by periods of normality; (d) insanity of double form, in which depression is immediately followed by mania, or *vice versa*, a period of normality then intervening, followed by a period of depression and then a period of mania, etc.; (e) circular insanity, in which there is a continuous alternation of periods of mania with periods of depression; and (f) irregular forms, in which there is no definite sequence of states. If we indicate mania by the letter M, depression by D, and normality by N, then the forms just mentioned may be indicated as follows: (a) MNMNMN, etc., (b) NDNDND, etc., (c) DNMNDNM, etc., (d) MDNMDN, etc., (e) MDMDMD, etc.

The sudden change from a state of mania to a state of depression, or *vice versa*, to be observed in many manic-depressive patients, is one of the most interesting as well as baffling facts to be found in all mental phenomena. The writer recalls a patient, a woman in her early thirties, who clearly manifested this phenomenon. During her manic phase she was typically hypomanic, occasionally bordering on acute mania; she was extremely talkative, unusually witty in her remarks which were not without allusions to sex, voluntarily took the other patients in her ward in charge, and all in all though a bit forward was a very charming person. Such a period would last for some weeks when literally speaking she would

change over night to an entirely different sort of person. With the onset of the depressive phase she would appear suddenly to have aged eight or ten years. Her face wore a sad, hopeless expression, her movements became suddenly slow and uncertain, her talk and actions were those of the unusually reserved and modest person, and she could no longer see joy or fun in anything.

The change from one phase to the other is not usually so sudden, however, and if one knows the patient well he can usually detect evidence of the change which is taking place some time before it has become fully obvious. With respect to the duration of these phases, they vary from a period of days to years. Usually, it would appear, they continue for a period of several weeks or months.

We have endeavored to give the reader a general picture of the manic-depressive patient, essentially what one might observe during an hour's visit to a mental hospital. A closer and more detailed study reveals other facts, some of which must be mentioned. Following our discussion of these we shall give one or two typical cases and then consider some of the supposed etiological factors and interpretations of this disorder.

Symptomatology of Manic-depressive Psychosis. A very common symptom of manic-depressive psychosis, occurring in all the various forms, is *general imperception*, a general inadequacy of perception. The various stimuli or aspects of the situation to which the individual's attention is directed tend to be only vaguely or partially perceived. If a manic patient is requested to read a news item and then to give an account of it ten minutes later, chances are he will have only a very vague memory or no memory at all of what he read. This is to be expected from the extreme distractibility of attention which this type of patient manifests. He does not readily recall what he read simply because his constantly shifting attention was not sufficiently concentrated upon what he was reading at the time. In other words he did not adequately perceive or apprehend what he was reading. In the

case of the depressed patient it is difficult, to the extent of the depression or stupor, to elicit or attract the attention. He may apparently attend to what is being said or to what he is reading or to what he is doing, only to show unmistakably a minute later that he did not hear (i.e. clearly perceive) what was said or notice what he was reading or doing. Inattention and its consequent imperception naturally result in *anterograde amnesia.*

Except in the more extreme degrees of stupor and excitement there is no impairment of consciousness and orientation. In the extreme states there is frequently what is spoken of as *clouded consciousness* and disorientation. During a state of clouded consciousness there is a poor apprehension of the external world (Kraepelin), everything seeming more or less obscure and indefinite, very much as is normally the case with respect to "marginal consciousness." This of course is largely a matter of inference from the observable fact of the patient's confused and incoherent behavior. The patient appears uncertain and confused in his reactions and may not be clear as to where he is or as to the time of day, month, or year.

A fairly common symptom is the *impairment of judgment.* We have already noted the fact that some patients, the more serious cases, harbor some false belief (delusion) and that much of their behavior is definitely in keeping with this belief. Obviously, when such is the case the judgment is going to be impaired simply because their delusion exerts a definite influence upon their estimations and evaluations. For instance, it is easy to understand that a patient who believes he has committed some atrocious crime might readily interpret, say, a whispered conversation between doctor and nurse as a plot to put him to death, instead of perceiving in it an attempt to maintain quietness in the ward. The delusions of the depressed patient are usually of a self-accusatory nature. They are in keeping with the basic feeling of dejection and worthlessness which characterizes the patient during the depressed phase. On the other hand the manic's

delusions are expansive in nature. In keeping with his feeling of importance and inflated self-esteem he may readily come to believe that he is the most important person living, that he has a plan which will revolutionize civilization. Or he may believe that he has discovered an administrative policy which should immediately be put into effect in all mental hospitals, beginning with the one in which he lives. He thereupon demands an interview with the superintendent in order to lay his plan before him. Or he may write long letters to the governor of the state, the mayor of the city, or the president of the United States, expounding his views. Needless to say he is unable to understand why others do not at once recognize the infallibility of the plan which he advocates. Not only out of fairness to these patients but also in justice to the actual facts it should be pointed out that not every expansive notion, semi-delusion, or delusion of the manic patient is simply a "fool-idea." [1]

In the more extreme states of depression and mania, *illusions* sometimes occur and even *hallucinations*. Thus one patient mistakes a visitor for her long-missing son, rushes to him, and throws her arms about his neck (illusion or false perception). Especially during the night some of these patients have hallucinations; one hears voices, another complains that men enter her room during the night with evil intent. The significant thing about the illusions and hallucinations of the manic-depressive patient is that they are usually in keeping with the patient's mood and with the tendencies which are most active at the time. Thus while the manic may see in the visitor her lost son, which would be in keeping with her mood of elation, the depressed patient is more likely to see an enemy in the visitor or to hear voices accusing her of various crimes, or threatening her with eternal damnation for her wrongdoings. We must point out, how-

[1] It will be well worth the reader's time to learn how one manic patient's expansive semi-delusions, after being somewhat corrected and modified following the patient's recovery, initiated a nation-wide move in the direction of improvement of conditions in mental hospitals. The story is told by the patient himself in the book, *The Mind That Found Itself*, by C. W. Beers, Doubleday.

ever, that illusions and hallucinations are not typical of manic-depressive patients and that wherever they become pronounced the patient should be regarded as suffering from a mixed psychosis, manic-depressive with schizophrenic reaction trends.

Finally we might mention the striking change which occurs with the transition from one phase to another with respect to the innate dispositions which are brought into play, a point upon which we have already touched in a general manner. During the manic phase *anger* is easily aroused, *sexual desire* is readily awakened, and egoistic motives are clearly manifest in almost every action. On the other hand it is usually more difficult to arouse anger or sex in the depressed patient; *fear* is usually manifest in some degree, and the *self-submissive disposition* appears definitely to color all the behavior. In short, we can say that those dispositions which normally manifest themselves in positive and aggressive behavior are largely dominant during mania while in depression those dispositions which are manifested in negative and withdrawing reactions are dominant. If a depressed patient is ordered to take a seat in the back part of the room he will ordinarily comply without the slightest murmur; if a manic patient is given a similar order, nine chances out of ten he will openly resent it and at the same time try to usurp the "center of the stage." Again, the talk of most manic patients, or at least of a great many, runs to sex more or less, whereas the depressed patient seldom refers to sex either by word or action. In fact it is only when we relate these two pictures presented by the two typical phases of manic-depressive psychosis to the various basic motives of the human individual that they assume any real degree of unity and coherency.

The following case shows both the manic and depressive phases.

CASE 48. Hortense L. was the only daughter in a family of three children of higher middle-class Boston stock. Her two brothers who are both her seniors are prominent

and successful. At the age of twenty-two Hortense married a successful but unsympathetic and self-centered man who was ten years her senior. After four years of unhappy marriage she left her husband and secured a secretarial position. There were no children.

Mrs. L. is a refined and intelligent woman, now thirty-two years old and of attractive appearance. She completed two years of college. This is her third visit to the hospital, having had a depressive attack when she was twenty-four and again when she was twenty-nine. She is a voluntary patient and her psychotic periods always begin with depression.

During the depressive phase Mrs. L. is inactive; she sits with bent shoulders and her facial expression reveals deep dejection. She appears to experience difficulty in thinking or talking, even in answering the simplest questions. She says her head "feels foggy" and that it is hard for her to have thoughts or to formulate sentences. If coaxed she will endeavor to smile but does not succeed very well. She obviously prefers to be left alone when she is depressed. With the beginning of the depression she will do some routine work or read for a few hours each day. Over a period of a few days the depression becomes increasingly severe and she reaches the point where she will not or cannot carry out the simplest work, will not read, and just sits throughout the day with an expression of utter dejection and hopelessness on her face.

There is no evidence of self-accusation, thoughts of sin, or any delusional formation during the depressive phase. She is orientated and possesses considerable insight. She says "I am sick, all over." "My head feels thick and big." "My stomach feels bad." When she is asked if there is anything wrong with her mind, she says "I'm sick." "Thoughts won't come." "My mind is dull." "My head won't work."

Mrs. L. passes from a phase of depression to one of

excitement or elation over night. One can scarcely believe that she is the same person. In appearance she is fully ten years younger. For the first few days her excitement is not extremely acute. She is very clever and witty; her speech runs largely to sex; she switches from one subject to another with a surprising rapidity. During her excitement she is very distractible. Any slight stimulus is sufficient to change the direction of her attention and interest. She loses track of her original topic. Yet she is not incoherent. She still completes each sentence. She takes charge of the patients on her ward and secures an unusual degree of order and obedience even among the schizophrenic patients.

A few days later Mrs. L. has become very excited. She is unable to keep her attention on any one thing for more than a second. She has semi-delusions of her own greatness. She is going to reform the world; she is the most intelligent person in the world; she has innumerable friends and powerful acquaintances; she is going to make a lot of money; the physicians at the hospital are just old fogies who do not know anything. She casts off her clothing and dances up and down the ward. She says that she is the original fan dancer. She says her body is superb and that she is full of rhythm and grace. If she is crossed she suddenly becomes angry and violent or she may just as suddenly turn her attention to something else. Her memory is good for the past, particularly for previous manic phases; her calculation and information concerning current events are good, whereas in the depressed phase there is poor memory, lack of current knowledge, and poor ability in all lines of mental effort. In the excited phase she lacks insight, however, and declares that there is nothing wrong with her, that she is in perfect health, and never felt so well in her life.

Even during her most excited periods Mrs. L. remains tidy. She decorates her body with colored ribbons

and pieces of string. Her speech becomes somewhat obscene. She is ceaselessly active, singing, dancing, talking, and rushing about the ward. Her excited phase usually lasts for two or three weeks. She may then return to a period of normality or pass into a phase of depression. As time goes on during her stay at the hospital her phases of depression and excitement become less acute until they cease altogether and she returns home and to her work till the next depression commences.

Some Theories of the Nature and Cause of Manic-depressive Psychosis. There are many theories as to the causes of manic-depressive psychosis. Pressey says, "Manic-depressive insanity is *the* strikingly inherited psychosis," and he is merely voicing largely the consensus of opinion.[1] Bridges, a well-known authority, states that an hereditary taint is found in about 80% of cases.[2]

Strecker and Ebaugh hold that manic-depressive psychosis originates on the basis of a constitutional inheritance. Vogt stated that he found the psychosis in one of the parents of one-fifth of a group of cases which he studied and among the siblings in 35% of his cases.

Kraepelin, Reiss, and others have emphasized the predisposition to manic-depressive psychosis. In various studies it has been observed that cyclothymic (cycloid), depressive, irritable, or manic prepsychotic make-ups existed in from 50 to 80% of manic-depressive patients. It has become more or less generally accepted that the roots of manic-depressive psychosis exist in the somato-psychic make-up of the pyknic-extrovert individual.

But to say that a mental disorder is due to heredity is at best a very vague and almost meaningless statement. It is true that the manic-depressive patient usually comes from a family in which is to be found manic-depressive psychosis, "psychopathic personalities," "neuropathic personalities,"

[1] *Op. cit.*, p. 165.
[2] *Op. cit.*, p. 156.

chronic alcoholism, "sexual irregularities," or some other oddity of human nature. But if all normal families were carefully studied, how many, we wonder, would escape "hereditary taint!" For purposes of illustration let us assume that an individual inherits, to a greater extent than the average person does, a basis for reacting with depression to failure, to obstacles, to personal limitations, etc., but that this individual (let us call him A) grows up in an ideal environment, an environment which is not too easy nor too hard but which is such as to be conducive to the development in him of such sentiments and attitudes, such a mental organization, as will result in normally adjustive reactions. A, then, we shall assume, goes through life without developing any manic-depressive or other mental symptoms. B is a second individual whose inherited constitution is the same as A's. But B grows up in an environment which is not conducive to the development of the proper sentiments and attitudes; his early teaching and environment in general tend to give him a one-sided perspective on the world and on himself; he meets with too many failures and early is impressed with his own weakness and the futility of trying; his parents bemoan their fate and habitually point to the dark side of everything. Having become unduly impressed with his own weakness and having early taken over the belief of his parents that life holds nothing worthwhile for him, he frequently becomes anxious, fearful, and depressed. Upon reaching manhood he has an unfortunate love affair and goes into a state of prolonged depression. Now we may either legitimately conceive of two such cases or else we must believe that environment has nothing to do with the shaping of the individual's sentiments and attitudes and outlook on life, which obviously would be absurd and is not supported by a single fact. Now the question is, can we legitimately say that B's manic-depressive psychosis was due to heredity? Only if we overlook all the environmental factors which were instrumental in shaping his development. And at the same time we must also overlook all the environmental factors

which played a part in A's particular trend of development. In other words, we can say that B's psychosis was the result of heredity only if we make an implicit assumption that every individual grows up in the same, not general but specific, type of environment. In that case we should have to say that A's normality was the result of heredity; in short, that everything is a matter of heredity. On the other hand could we say that B's psychosis was entirely the result of environmental factors? Obviously not without overlooking the hereditary factors. We believe that we must always look upon any functional mental disorder, in the light of our present knowledge, as the result of an interplay of hereditary and environmental factors. If one or the other of these two sets of factors is to be ignored, we think it can more wisely be the former.[1]

A second theory endeavors to account for manic-depressive

[1] It appears to the writer that much of the confusion and controversy concerning the significance of environmental factors versus the significance of hereditary factors in the genesis of mental disorders arises largely from a general tendency to pay too little attention to the less obvious aspects of the individual's environment. We are too prone in general to think of environment in purely objective terms. A given environment may be one thing to one individual and something entirely different to another individual—a fact to which the layman does far greater justice than does many a psychologist. To the New Yorker, born and raised there, New York may mean little more than endless rows of office buildings and apartment houses, a monotonous humdrum of noise and activity. To the Texan who is seeing New York for the first time the office buildings may appear as towering monuments to man's power and industry, the noise and activity the pulse of a great metropolis throbbing with life The individual and his environment are not two distinct entities which may be isolated and studied apart, it takes the two to complete the picture, and the one must always be studied in relation to the other. Given an abnormal reaction in a certain individual, we can understand it, not by means of postulating "bad heredity" or discovering insanity in a grandfather, but only by tracing the genesis of the reaction back through the individual's sequence of experiences. To one individual running water is little else than running water, to a second individual running water is a definitely fear-exciting situation, something which throws him into a state of terror. We are able adequately to understand his abnormal reaction only when we have traced it back to some earlier situation in which strong fear was aroused in connection with running water or something in some way analogous to it. Certainly there is an hereditary basis in an ultimate sense for the reaction, but before we can properly evaluate the significance of heredity in any given case it is necessary first to know the environmental background in detail. Many adults will even become depressed or more or less excited if placed around individuals in whom such reactions are manifest. How much more likely is the child to develop sentiments and attitudes which will condition depressive or manic reactions if he grows up around parents who habitually react in such ways!

psychosis, as well as all other functional disorders, in terms of endocrinal disturbances.[1] And along with this theory we might put all others which make of organic lesions explanations *per se* of mental reactions.[2] Such theories would include among others Meynert's view that manic-depressive psychosis is a vasomotor disorder resulting in anemia or hyperemia of the brain, the view held by Cotton that it is due to poisoning of the body from focal infections, and the theory that it is a result of catabolic clogging.[3] We may dispose of all such theories with a few remarks. In the first place the reader should not assume that when we speak of functional disorders we are denying the existence of any organic basis for them. Certainly we postulate a physical basis for all mental reactions in a final sense; but mental reactions cannot be adequately explained and understood, at least in the present state of our knowledge of the physiology and chemistry of the human individual, in terms of physical changes. A single example will serve to illustrate our meaning at this point. It is an established fact that in paresis (a toxic, i.e. organic psychosis) there is a general lesion of the cerebral cortex as a result of the life processes of the syphilitic germ which is always present in this disorder. Now the cortical lesion is ample to account for the fact that there is a profound disturbance in the mental reactions of the paretic; *but it does not account for the nature of this disturbance.* The paretic very frequently believes himself to be a very important person, immensely wealthy, powerful, the possessor of many wives, hundreds of children, etc. The lesion does not account for these facts, it does not enable us to understand them as natural and inevitable consequences. The delusions do have some meaning for us, however, once we relate them to the individual's past desires, hopes, ambitions, etc. We may be able to see in them the imaginary realization of life-long dreams. In short, from a psychological point of view they have a certain significance, from a purely physical point of view they have little or no significance. Hence with respect to what we might term "organic theories" of manic-depressive

psychosis, let us admit that organic disturbances may and perhaps do play a very essential part, but to say that a glandular disturbance or malnutrition or a focal infection *explains* adequately the complex system of abnormal reactions which we call manic-depressive psychosis is entirely too much like saying that the existence of the atmosphere explains or accounts for the aviator's flight.

Another theory of manic-depressive psychosis is offered by McDougall.[1] He first endeavors to show that the disorder may be properly described in all its fundamental aspects in terms of the manifestations of the two innate dispositions (propensities), self-assertion and self-submission. Thus in the manic phase the behavior is clearly of the self-assertive type; in the depressed phase it is of the self-submissive type. Hence the disorder may theoretically be a matter of unbalance between these two dispositions as a result of environmental influences which have tended persistently to arouse one or the other,—such as a long run of "hard luck," trouble, disappointments, etc.—or as a result of organic disturbances, or, finally, as a result of an improper integration of these two dispositions within the sentiment of self-regard (system of ego-identifications).

We believe that McDougall's conception of the origin and genesis of manic-depressive psychosis is the most satisfactory that has been advanced and that it is worthy of more detailed consideration. For the benefit of the reader we may state that McDougall uses the term "self-assertion" in somewhat the same sense in which we have used the term "ego-motives." However, his conception of self-assertiveness is somewhat more restricted than our conception of egoism. Self-assertion for him is but one of seven or eight basic innate dispositions whereas for us egoism is fully half the meaning and dynamics of the average person's life. He postulates a self-submissive disposition or propensity and regards suggestibility as but an aspect or manifestation of it. He regards these two dispositions, self-assertion and self-

[1] *Op. cit.*, Chap. XXII.

submission, as vitally important in the individual's social adjustments. In other words one's reactions to other persons are largely expressions of these two dispositions. The well-adjusted person is one in whom they are nicely integrated, conditioning a give-take pattern of behavior. We may now subsume his theory of manic-depressive psychosis in which he contends there is a lack of integration of these two propensities.

Now, if the early environment is such as to keep one of these dispositions from being aroused to a normal extent due to the persistent and strong arousal of the other disposition which is antagonistic to it, obviously the two will not become properly integrated. The result will be that when the suppressed disposition is aroused it will tend to completely dominate the individual. Two innate dispositions (motives) become integrated—just as two motor reactions become coordinated—only if they are simultaneously aroused or exercised. Thus, for example, the parents who go to great trouble not to arouse their child's anger invariably find that the child has a "terrible temper." Or, again, we all know of the person who seldom gets angry but who is "perfectly terrible" when he does. Writers of fiction have dealt at great length with the helplessness of the naïve country girl whose self-esteem and self-assertive tendency (desire for self-display) have suddenly been strongly aroused—perhaps for the first time—by the flattering remarks of the theatrical producer (alias traveling salesman). And we all know of the tendency in the child, who is continuously bullied by his playmates, to go to the other extreme and himself become an even worse bully once he finds himself around children who are his inferiors. Now let us apply these facts to an interpretation of manic-depressive psychosis, assuming it to be primarily characterized by a lack of balance or integration of the dispositions of self-submission and self-assertion. These two dispositions, it must be remembered, are truly antagonistic in the sense that the strong arousal of one inhibits the other; to exist together they must strike a compromise, become blended. In other words each must modify the other. Now

if one motive has been more or less constantly aroused to the exclusion of the other throughout the individual's development, we may have an individual who is characterized either by an unusual tendency to put himself forward on every occasion or else by a tendency to withdraw into the background always, depending on which disposition has been emphasized. Or, we may have an individual who characteristically reacts with submission to certain aspects of his environment (his too domineering parents, for instance) and with extreme self-assertion toward other aspects (his younger brothers and sisters, for instance). Thus he develops a dual, instead of a unified, perspective on his environment; he makes a rough distinction, separating all situations into two general classes—those in which he recognizes himself as being superior and to which he reacts with considerable self-assertiveness, and those in which he recognizes himself as being inferior and to which he reacts with extreme submission. Now this individual who has never learned to give and take in a real sense may go a long way in concealing this split or lack of integration within his make-up. In many situations he ostensibly submits whereas in reality he is rebelling, and *vice versa*. How often does an individual comply and acquiesce with apparent good grace to the statements, arguments, etc., of another only to explode with "What an utter ass!" the moment the other's back is turned. Recently a college girl who certainly has no great claim to marked distinction frankly told the writer that she considered herself decidedly superior to the other students. Yet one never would have guessed this attitude in her from her self-effacing manner. So the pre-manic-depressive type is, we believe, the person who has not learned to compromise with life-situations; to whom all individuals are quite definitely either superior, inferior, or indifferent. No one person is adequate for arousing in him to a reasonable degree both the self-assertive and the self-submissive dispositions; only the one or the other or neither is aroused by a given situation. Then, being poorly equipped for making those niceties of adjustment which social and competitive

situations demand, the individual fails more and more to conceal his true tendencies and emotions, and, following an unfortunate love affair, illness, business reverses, or some other strongly disturbing experience, the split in his mental organization becomes complete and he goes, usually first, into a state of depression. Hence in manic-depressive psychosis we believe we are dealing fundamentally with a defective mental integration which is the result of improper conditioning in the early life of the individual.

The following case cited by McDougall[1] may help the reader to understand what we have been saying.

> CASE 49. O'B. was a man of thirty years, of Irish descent; his family was Roman Catholic and of the lower middle class. He had intellectual capacity and ambitions, and was studying law. As he boastfully remarked, he was the only member of his family, and perhaps the first of his name, to aspire to intellectual distinction. His father was a man of violent temper who, though not devout, insisted upon the forms of the Roman Church. At an early age the son began to rebel against the prescriptions of the family's religion, but continued to conform outwardly under the pressure of his father's authority. In the middle twenties he married a girl of a Protestant family, in defiance of his father. The girl was a typically modern, emancipated, and up-to-date young person. She refused to have any children, and regarded her husband as existing chiefly in order to supply her with the means to "have a good time," i.e. to continue the round of gaiety to which she had been accustomed before marriage. She habitually exposed as much of her person as the law would permit, and regarded young men as necessary means to "a good time." Further, she was entirely sceptical in all things, especially in respect of all moral and religious teachings; and she made fun of those religious beliefs which her husband

[1] *Op. cit.*, pp. 364–365.

continued to harbour, although he had ceased to be a practising Catholic. Here, then, was a train of circumstances which, if the hypothesis I am putting forward is sound, might be expected to lead to disorder of the manic-depressive type. Manic-depressive disorder of a mild type set in some few years after marriage, and became gradually accentuated. Up to the time when he came into my hands, he had escaped confinement in a hospital, except for one short period. The phases of exaltation and depression were of brief duration, and commonly were separated by weeks or months of normal or nearly normal mentality.

In the depressed phases he was full of fear, whose objects were largely determined by his religious training; at these times he believed in hell-fire and in the devil; and he felt that he was surrounded by spirits powerful to aid or to hurt; he looked upon himself as a miserable sinner who could not hope to escape the fate proper to a heretic and an apostate. His wife's sceptical pleasantries and jeers, at the expense of religion in general and of Roman Catholicism in particular, were terrible to him; and, when his fears were revealed to her, she lashed him with scorn and contempt before which he quailed miserably. Such gibes failed to stimulate him to any self-assertive reaction. What right had he, an ignorant creature of humble origin, to question the immense and ancient authority of the Church? What the Church taught was true; and there was no hope of salvation for him; he had had every chance to be a good Christian, and had wilfully chosen the path of evil. In his exalted phases he was entirely sceptical of all religious teaching. His self-assertion largely took the form of seeking controversies with high authorities on moral and religious questions. He sought and obtained interviews with priests and distinguished theologians and professors. It was in this way that he came across my path; he thought my reputation sufficiently high to make me a foeman

worthy of his steel; and he sought me out in order to argue sceptically, and with the utmost dogmatism and self-confidence, against all religious and moral beliefs. At these times his wife's frivolous conduct gave rise to a furious jealousy that was completely lacking in the depressed phases.

Involutional Melancholia. "A cross-section of psychiatric opinion," Strecker and Ebaugh say, "allies involutional melancholia with manic-depressive psychosis. Nevertheless, the effect of the somatic and psychic influences of the climateric are distinctive enough so that involutional melancholia merits separate description."[1] Where previous manic-depressive attacks have occurred in the individual prior to the climateric a diagnosis of involutional melancholia is not usually made.

This disorder usually occurs in women between the ages of forty and fifty-five and in men between the ages of fifty and sixty-five. Most typically it is characterized by a paucity of ideational content. The following case is offered as a fairly classical example of involutional melancholia, illustrating depression, fear and apprehension, psychomotor inhibition, self-repudiating reactions and somatic delusional formation.

CASE 50. Alice P. is 56 years old. She has given birth to two children, one of whom died in infancy. She has been married for thirty-two years and at the present time lives in her own home with her husband and surviving daughter. She is extremely emaciated and sits in a chair by a window most of her time. She makes no effort to help with the work about the house. Although she did not complete her high school training, she is very cultured, well informed, and considerably above average in intelligence.

Mrs. P. hailed from sound, rugged Rocky Mountain stock. She was the youngest child in a family of five, three boys and two girls. Her parents were of the pioneer caliber, emotionally stable, steady and persevering

[1] *Op. cit.*, p. 331.

in their work. No evidence of nervous or mental disorder has been noted in either branch of her family. Her father died at a fairly advanced age of tuberculosis while her mother is still living.

As a child, Mrs. P. was something of a "tomboy" and participated freely in the outdoor activities of the farm life of her family. She was regarded as somewhat "high-strung," strongly motivated, but never manifested childhood nervousness of any kind. Upon completing the eighth grade she took two years of high school and normal school training and then taught school for five years. At the age of twenty-four she married a hard working man of phlegmatic temperament. A year following her marriage a daughter was born, badly crippled, possibly due to instrumental delivery. This daughter is still living but is scarcely able to walk. However she is of good intelligence and she is excessively devoted to her mother. Two years later a second daughter was born but died in infancy. Mrs. P. states that following the birth of the second child she became completely anesthetic sexually and has remained so up to the present time.

There is no question but that Mrs. P. devoted most of her life to her crippled daughter. In fact as one talks to her and to the other members of the family (husband, brothers, nephew, etc.) he gains the impression that throughout the past thirty years this daughter has never been completely absent from Mrs. P.'s thoughts for more than a few minutes at a time. She has sought every kind of available help for her daughter but all attempts have proved largely futile. But Mrs. P. did not isolate herself and brood within her home. She has led a rather active club life and has been a well-known and highly respected woman in her community. But her unceasing concern about her daughter induced her to try one creed or philosophy after another. Finally, about ten years ago, she took up Christian Science and

for a period of five years became almost fanatically interested in it. It requires little imagination to see a probable connection between her concern about her daughter and the doctrines of Christian Science. After five years of devotion to Christian Science she discarded it.

Mrs. P. states that she has suffered from stomach and urinary troubles since the birth of her second child. About five months ago she suffered rather severely from pain in the bladder and incontinence of urine. She was treated principally by a chiropractor. Quite suddenly the bladder trouble disappeared, unreserved credit for which she gives to her chiropractor. Then one day, when she was feeling much better, she plucked a twig from her neighbor's rose bush and planted it in her own yard. She states that she also kept for herself a small amount of pecuniary profits which rightly belonged to the club of which she was treasurer. She reports that a day or two following the incident of the rose bush twig a verse from Scripture came to her mind and left her in a frenzy of fear and apprehension. The verse was to the effect that he who sins after knowing better is irrevocably damned. For two or three days she was emotionally very much distressed and agitated. Then it dawned upon her that the Devil had gained possession of her "heart, soul, and body" and that there was nothing she could possibly do about it.

Today Mrs. P. sits in a chair, her hands beneath her legs. Her face is heavily lined and she has the appearance of a woman seventy-five or eighty. Her expression is one of deep dejection, hopelessness. She says she eats but does not taste, she drinks but the water does not moisten her mouth or throat, she goes to bed but does not sleep, she sits by the radiator but does not feel the warmth, she sees and listens to her daughter and husband but is utterly indifferent to their presence or welfare. She states that the Devil has robbed her of all feeling. She believes that her husband and daughter

will inevitably suffer the same fate as herself due to their association with and interest in her. She believes the Devil gained complete control over her because she sinned, because she took the rose bush twig and the small amount of money.

Mrs. P.'s respiration is very shallow, with the result that she often sighs; her heart is somewhat rapid. Her skin feels cold and her movements are retarded. She is negativistic and demands a reason before she carries out the simplest command. She refuses to dress but sits day after day in her house robe.

Although little fear or apprehension is apparent in Mrs. P.'s waking life, the few dreams which she reported bordered on terror dreams or nightmares. Frequently she would dream that a huge pair of hairy hands were reaching out for her and occasionally she would scream in her sleep. But the moment she awakened from a dream she would again immediately subside into her state of deep despair.

There is no intellectual impairment in Mrs. P., her memory is unusually good, she is alert to what is going on around her, she talks freely, and there are no hallucinations present. Her prognosis is fairly favorable.

Interpretation. That a person should weather the ups and downs of life till the age of forty or fifty and then succumb to mental disorder without evidence of senility is psychologically somewhat perplexing. Many psychiatrists regard the somatic—glandular and physiological—changes which occur at the time of the climateric as being largely instrumental in the occurrence of this disorder. Others stress the fact that the individual is passing beyond the possibility of a psychobiologically complete productive life and regard involutional melancholia largely as a reaction to, or a protest against, waning capacities. The writer would suggest that the person who succumbs to a disorder of this type has always been characterized by an undiluted and unfulfilled egoistic yearn-

ing; that realization of decreasing capacities tends to aggravate this yearning; and that the psychological essence of the syndrome is of the nature of self-repudiating reactions. We must bear in mind that from a mental or psychological point of view the individual strives to maintain perspective and balance beyond all else and that he tends to reject, negate, or denounce any inner factor or aspiration which would destroy this balance.

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CHAPTER XVI

THE FUNCTIONAL PSYCHOSES (*Continued*)

PARANOIA AND PARANOID CONDITIONS

Orientation. There are three distinguishable conditions which are markedly characterized by delusional trends: True paranoia or paranoic psychosis, paranoid psychosis, and paranoid personality. By way of making the distinctions between the first two classes of disorder clear we can do no better than to give the following table by Henri Claudé.

Paranoic Psychoses	*Paranoid Psychoses*
Exaggeration of constitutional tendencies.	Distortion of tendencies.
Amplification of personality without signs of conflict	Fragmentation of personality. Signs of conflict.
Contact with reality preserved.	Loss of contact with reality.
Exaggeration of affectivity. (Ego-centricity)	Alteration of affectivity. Dissimulation of ego-centricity.
Logical development (of delusions) upon false premises.	Illogical and imperfect development of delusions.
Sound systematization in line with tendencies.	Looseness of systematization.
Frequent ideas of grandeur.	Idea of grandeur without strong conviction Frequent indifferences with regard to persecutions.
Exaggerated feelings of prejudice.	Early manifestation of delusion.
Self-control better preserved.	Absurd reactions.
Slow development of defense measures.	Hospitalization occurs early on account of odd behavior.
Recourse to legal measures.	Delusions are coherent and expansive.
	Memory falsification.

Submission to authority.	Stories are incoherent, changeable, and absurd. Reasoning poor.
Delusional activity may not manifest itself for many years, permitting social adaptation to continue.	Delusions change; are polymorphic.
Delusional formation is coherent, only slowly expanding. Memory good. Intellectual activity intense. Ingenious methods of defense. Reticence.	Apathy, autistic life of fancy.
Delusional system is fixed and well constructed.	Loss of intellectual activity.
Emotional reactions are lively.	Old acquisitions preserved.
Possibility of intellectual growth exists.	Nothing new is acquired.
Neuro-vegetative reflexes are active.	Neuro-vegetative reflexes often diminished or lost.

In the present chapter we shall be concerned only with true paranoia and with paranoid personality. The differences between these two conditions will become clear as we proceed.

Paranoia constitutes less than 2% of hospital admissions, but there are undoubtedly many more such persons outside hospitals than in them. Despite its relative infrequency, however, the phenomena which it presents are of singular interest and significance to the student of abnormal psychology, inasmuch as we are confronted not only with one of the clearest-cut of all pictures of mental abnormality but with rich suggestions for a better understanding of the normal mind. Unlike the personality disorders which we have discussed so far, paranoia offers a single, concise expression of personality derangement, a *systematized delusion.*

A delusion, of which there are various kinds, may be simply defined as a false belief. Since undoubtedly we all have certain false beliefs, it follows that we all have delusions. So it becomes necessary to draw some sort of distinction between

normal and abnormal delusions. Stoddart defines an "insane" delusion as "a judgment which cannot be accepted by the people of the same class, education, race, and period of life as the person who expresses it." [1] To illustrate: The belief on the part of an astronomer that the earth is flat would be considered an abnormal delusion. The same belief held by a member of the hill-folk of Kentucky would not be considered an abnormal delusion. Again: If an intelligent college student believes that by repeating "rit-tat-tat" ten times he can cure a case of scarlet fever, we should characterize his belief as an abnormal delusion, but the same belief in an aborigine of Australia would not be considered abnormal. In short, if a belief is obviously out of keeping with the intellectual background of the individual who entertains it, it is considered abnormal. It naturally would be extremely difficult to draw any hard and fast distinctions between normal and abnormal delusions; and fortunately we need not concern ourselves here with such a problem.

Some Classifications of Delusions. Delusions can be, and have been, classified from various angles. A delusion or false belief may pertain to one's own body or mind or to the objective world. In the last case the delusion is sometimes called *allopsychic;* an example would be the belief, on the part of an educated person, in "perpetual motion." Where the belief is primarily related to the person's own body it is spoken of as *somatopsychic.* An example of this type of delusion is found in the patient who believes she has no heart, lungs, or stomach, or who believes she has no body at all. If the delusion refers to the person's own mind or personality, as in the case of the person who believes he is the greatest inventor who ever lived, it is called *autopsychic.* Again we may classify delusions, with respect to their permanency, as *permanent* and *transitory.* Some delusions are very transitory and unstable, while others last for years, or as long as the patient lives.

A third way of classifying delusions, and one which is of

[1] Stoddart, W. H. B., *Mind and Its Disorders,* Fifth Edition, p. 165, Blakiston.

greater significance to us at the present time, is with respect to their coherency; from this point of view we have two kinds of delusions, *systematized* and *unsystematized*. In the case of the systematized delusion there is not only the nuclear or central belief or conviction; all other beliefs of the patient are in harmony with this central "idea." Thus if such a patient has the delusion that certain individuals are plotting his ruin, then everything that occurs in his environment is harmonized with this basic conviction: He believes, perhaps, that he is being persecuted by a designing relative or a political or business rival. And in keeping with this belief he logically enough believes that a certain attendant in the hospital or one of the physicians is in the employ of this person. If his food does not taste just right he may believe that an attempt on his life is being made. But whatever his various beliefs may be they will always be found to integrate logically with his nuclear belief. In many instances of highly systematized delusions, only a thorough and careful study of the patient's history will enable the observer to say whether the patient's statements are true or false. If the major premise, the basic belief, is granted, the rest logically follows. In the case of the unsystematized delusion there is a lack of coherency, relevancy, between the patient's different beliefs. Such a patient may believe that he is God and at the same time that he is being retained in a mental hospital against his wishes. He does not have logical arguments to support his basic contention; he does not rationalize. Hence he may merely reiterate the statement that he knows he is God, failing to fit his present surroundings and experiences into his belief. The person who suffers from unsystematized and conflicting beliefs is never a case of true paranoia; he belongs usually to the schizophrenic group, and to the paranoid psychoses.

Finally we may classify delusions with respect to the nature of the affect and of the urge which belongs to, or accompanies, the belief. According to McDougall, when such a classifica-

of desire and *delusions of aversion.*[1] Perhaps all delusions of true paranoia can be classed either as *delusions of persecution* or as *delusions of grandeur* or *both.* This will suffice for the various manners in which delusions may be classified; various points implicit in what we have said regarding classification will be brought out in the course of the chapter.

Now the reader must remember that true paranoia is characterized solely by systematized delusions, always of a very permanent nature. Although delusions are found in various mental disorders besides paranoia, except for paranoia the delusions are accompanied either by other mental symptoms or by organic disturbances of a pronounced character. Moreover, the delusions found in other mental disorders are not of the highly systematized and permanent character that is peculiar to the delusions of paranoia. It should be stated, however, that authorities are not all agreed that the mental disorder commonly called "paranoia" is a distinct disorder, some holding that it is one of the dementia praecox group of psychoses. From a psychological point of view, nevertheless, it is sufficiently distinct from every other mental disorder to permit of its isolation from the rest for purposes of study.

A number of different forms of paranoia have been distinguished, some of which we shall briefly mention.

Forms of Paranoia. (1) *Persecutory Paranoia.* This is perhaps the most common form—at least so far as cases in mental hospitals are concerned—and is of course characterized by delusions of persecution. This type of patient believes with the utmost sincerity that the world is against him. Or, in a given case, he may believe that only certain individuals, or certain institutions or organizations, are set upon his ultimate downfall. In keeping with this belief he is more than likely to misinterpret many of the events of his everyday life, misconstruing the remarks of others, seeing evil intent in the most innocent and insignificant act on the part of doctor or attendant. Provided it is possible to gain the confidence of such a patient, one may usually listen to his long, coherent,

[1] *Op. cit.*, pp. 333-334.

and very convincing story, telling exactly who brought about his commitment to the hospital, why they did it, and precisely how they exert their influence to keep him there. Perhaps a political rival or a rival in love wishes to bring about his moral and social downfall or even his death. He will perhaps tell you that the superintendent of the hospital as well as certain of the doctors and attendants are in the employ of this party and that they are attempting to poison him, that they have spies watching his every move, that his letters are being confiscated by the superintendent, and so on indefinitely. The attitude which patients of this type take toward their supposed persecutors varies considerably. One patient will remain more or less passive, complaining a great deal but accepting his persecutions and sufferings as so many misfortunes, while another patient will finally reach the point of open and active rebellion against his supposed persecutors. When the latter occurs, we perhaps have the most dangerous type of patient to be found in the mental hospital. He may either attack his supposed persecutors with all the abandon and fury of an animal or—and this is perhaps the more usual thing—he may plot (and sometimes achieve) with the greatest cunning his liberty and vengeance.

The following case given by Bleuler[1] illustrates the extent to which a paranoiac may go once he decides to right the wrongs which he believes have been done him.

> Case 51. During the night from the third to the fourth of September, 1913, the Headmaster Wagner, thirty-nine years old, murdered his four children and his wife while they were sleeping; the following night he set fire to several houses in another village where he had previously been a teacher, and was shooting at the male inhabitants, of whom he killed nine and seriously wounded eleven. Even as a boy he was easily insulted, ambitious, conceited. Later he had poetic plans for reforming the universe. His sexuality in respect to the animal impulse

[1] *Textbook of Psychiatry*, pp. 516–517, Macmillan.

was strong, but he had a "disinclination" toward marriage and evidently no parental instinct, even though he loved his children in an ordinary human way.

His highly developed self-esteem had been deeply depressed by a futile struggle of many years against onanism. Later (1901), under the influence of alcohol, he had let himself be carried away to sodomy, and then had a dreadful feeling of sin with incessant fear of contempt and arrest, which soon brought about delusions of reference and conviction that the inhabitants of the village knew of his crime and spoke about it.

His accusations against himself he transferred to his family; all "Wagners" should be exterminated; then his hatred extended to all mankind, above all to the inhabitants of his district who had treated him badly. He condemned himself doubly, in part as a man unworthy of life, but in part as a genius whom he honored as at least equal to the greatest poets, but whom he also ranked as equal and superior to Nero, and, on the other hand, compared with Christ. Transferred in 1902 to another place, he enjoyed relative quiet for six or seven years without, however, ever ceasing to build up further his delusional system. But then, according to his opinion, the remarks and contempt continued there also. The result was the plan even then developed in every detail, to murder his family as much because of reasons of race-hygiene as from pity, and then set fire to the village where he was first employed, and destroy it with all its hypocritical inhabitants. The first necessity was the extermination, the "redemption" of his children; but the revenge against, and contempt for, the village occupied him no less. His wife he had to kill because of pity. For a person like him there are special laws. He had not only the right but the duty to do this. His plan was a "humanitarian matter." For four years he postponed the execution of the bitter task. But when he was transferred to a third locality and there felt

himself the centre of bar-room gossip, he executed his plan systematically. In his feelings, as in his self-estimation, he was completely ambivalent: He could not witness the killing of a chicken, did not like to see blood generally. In the insane asylum also he was so soft during the visits of relatives that he denied them to himself, and with all this, he had made and also executed the bloodiest plans.

In the case just given, delusions of grandeur as well as delusions of persecution are clearly indicated. It is Bleuler's opinion that these two types of delusion always go together. He says: "There is probably no paranoiac (and paranoia-like) delusion of greatness without delusions of persecution, and no delusion of persecution without ideas of greatness or at least aspiration to greatness, and the difference between the two forms becomes relative. . . . The 'exalted feeling of self,' which is ascribed to paranoiacs of various kinds is, therefore, probably a necessary condition for the origin of the disease. But I should like to add that, according to everything I know, this feeling must be opposed by a feeling of insufficiency, probably repressed, before the paranoia can originate. Whoever collapses without this *inner* conflict has no occasion for a delusion of persecution, and also probably cannot produce the energy to separate himself from reality." [1]

(2) *Litigious Paranoia.* This often follows upon a lawsuit or perhaps upon some very minor misunderstanding and unsatisfactory adjustment of grievances. The individual seeks legal redress, going, if he has the money, from one court to another. He does not hesitate to forge documents and perjure himself without limit in order to win his ends. Failing to obtain satisfaction from the courts he may have recourse to plots of revenge, even to murder. Needless to say such an individual believes himself incapable of committing any wrong and therefore is convinced that the other person is the offender.

[1] *Ibid.*, p. 531.

(3) *Reformatory Paranoia.* These individuals usually see the world in danger of economic or moral bankruptcy, and themselves as the indispensable saviors of the race. Undoubtedly many, perhaps most, of our street-corner orators, fanatical prohibitionists, and others of our more ardent missionary group belong to this class of paranoid individuals. The reader must not suppose that since the percentage of paranoiacs in mental hospitals is relatively small this particular type of mental disorder is correspondingly infrequent outside the mental hospital. In fact, the reverse is perhaps nearer the truth. An individual is committed to a mental hospital usually either because he is unable to take care of himself on account of a mental disturbance or because he is considered a menace to society. But for some peculiar reason fanatical missionaries and "rabid" reformers are not considered a menace to society and consequently are usually allowed their freedom.

(4) *Religious Paranoia.* This does not differ greatly from the type which we have just mentioned. The religious paranoiac usually believes himself to have been chosen by God for the express task of converting the world to his own particular religious creed. The creed is usually somewhat fantastic and not infrequently a bit sensualistic. Recently a man in a western state, a faculty member in a university, stoutly declared that he had been commanded by God to institute a "religious" practice which he characterized as the "Sacrifice of Wives." This new doctrine, which was quite simple and which undoubtedly has occurred to many minds, merely commanded that all husbands who became members of this new religion should exchange wives at about the time when most people go to bed. Needless to say the creed found quite a number of "sincere believers" and the group, upon meeting with adverse criticism, moved to another part of the state. It is quite safe to say that many of the leaders and would-be leaders of religious creeds in the past were and in the present are religious paranoiacs.

(5) *Erotic Paranoia.* The individual believes that a member of the opposite sex is very much in love with him, and this

often despite the fact that the person may be utterly oblivious of the patient's existence. One such paranoiac wrote repeatedly to a young woman whom he had never met and who, incidentally, was considerably above him in social standing. The fact that his letters were not returned was taken to mean that his proposals were being looked upon with favor, and the fact that he received no answers was interpreted as indicating that the young woman's family was opposed to her marrying him. Even being turned away from the house when he called to make a proposal of marriage did not in the least alter his convictions. Finally, upon complaint of the woman, or her family, the man was arrested and later taken to a mental hospital.

It is of some significance that the erotic element may be scarcely if at all present in this form of paranoia; and likewise of significance is the fact that the person whom the paranoiac believes to be enamored of him is usually someone who is considerably above him socially and economically. This seems to be more true however with respect to male than with respect to female paranoiacs.

(6) *Hypochondriacal Paranoia.* In this form of paranoia the patient believes that there is something seriously wrong with his body. He may believe that he has cancer of the stomach, or that he has a missing lung, or that his bones are decaying, or in fact anything whatever relating to organic disorders. Usually he has gone through a long period of complaining, consulting doctors, and taking patent medicines before he is brought to the hospital. He blames the doctors for not being able to find anything physically wrong with him, accuses them of having given him the wrong medicine, and may even institute legal action or endeavor to do them some bodily injury. Or the patient may take a more passive attitude towards his "misfortunes," finally believing that his last day has arrived, that no power on earth can save him; and he may continue to harbor such a belief year after year.

What we have said will suffice for the different forms of paranoia, that is, for the different trends which paranoiac

delusions may take. Merely mentioning these peculiar phenomena, however, does not enable us to understand them, to harmonize them in any way with our own experience. How, the reader wishes to know, can an individual who in all other respects is quite sane actually believe in something which is obviously contradicted by every objective fact in his environment both past and present? By way of answering this question we can only offer certain suggestions; and in making these suggestions we must necessarily consider briefly the psychology of belief.

The Origin and Nature of Beliefs. Now we are inclined to suppose that our beliefs are merely the resultants of our cognitive processes, that is, of our perceiving and thinking. In other words we usually take for granted that we believe what we perceive and that we perceive things essentially as they are. But a moment's reflection will convince us that this is not at all the case with many of our beliefs, but rather that many of them are largely the direct resultant of motives. In short, what we speak of as a belief is typically the cognitive aspect of a mental disposition, an attitude or a sentiment. And we may arbitrarily separate all beliefs into three great classes: (a) Those toward which we are indifferent, (b) those which are more or less unpleasant or disagreeable, and (c) those which are more or less pleasant or agreeable. Let us briefly analyze examples of these arbitrary classes and note the different factors which enter into the formation of a belief.

To begin with, we must admit that it is very questionable whether any of us entertain beliefs toward which we are wholly indifferent; if we do it is then likely that at the time of the formation of the belief we were not indifferent toward it, that is, toward the fact or event to which the belief relates. Nevertheless we may distinguish a class of beliefs which lies between those which on the one hand are associated with feelings of aversion or unpleasantness and those that on the other hand are associated with feelings of desire and pleasantness. We may assume as belonging to this intermedi-

ate class such a belief as that there are forty-eight states in the United States. One may believe this and at the same time be, so far as he can tell, quite indifferent to the matter. Hence, in this case, only intellective processes appear to be involved; it is simply a fact which he knows but about which he is not concerned.[1] But at the time when he was learning the number of states in the Union, when he was being called upon in school to give this information, was he indifferent toward the fact? One has only to observe children to find evidence aplenty that all such presentations of facts elicit an affective response (interest, wonder). And it seems highly probable that if we were carefully to trace the genesis of any indifferent belief of the adult we should find that at the time when the belief was being acquired, the discovery or presentation of the facts with which the belief is concerned did arouse a definite affective tone. We all know of the pleasure associated with the acquisition of knowledge (new beliefs) and of the often pleasurable anticipation with which we begin a new line of enquiry. Most of our beliefs belong to this intermediate class and perhaps have involved primarily only the *motive of curiosity*, the desire to know, to discover and understand the facts of the world in which we live. According to McDougall it is only when the cognitive processes of perceiving, judging, and believing are motivated by the impulse of curiosity that the judgments and beliefs are likely to escape distortion. Thus: "It is, I think, literally true that one motive only can determine judgment and belief without to some extent biasing, or tending to disturb, the intellectual operation of judging, namely, the impulse of curiosity, the sheer desire to know, to become better acquainted with the facts."[2] According to this we should expect our more "indifferent" beliefs to be our truer, less distorted, beliefs.

It is when we turn to either of the other classes of belief

[1] The reader will observe that we make no distinction between "believing" and "knowing." Psychologically no such distinction can be made We can distinguish only different degrees of "certainty" or "conviction," i e. different degrees of believing.

[2] *Op. cit.*, p. 333.

that we mentioned that we are able to see very clearly the influence which our impulsive and affective processes exert upon our judgments and beliefs. Let us look first at those beliefs which are more or less disagreeable to us. First of all we should observe that all such beliefs have some definite personal significance to the believer—a belief concerning objective facts which are entirely impersonal in their relation to the believer is never disagreeable. And secondly, we shall observe that it is always more difficult to believe in the disagreeable or unpleasant than in the agreeable or pleasant. The student who believes he has made a "C" in an examination learns that he made an "F." He cannot believe it, and asks if he may see his paper. After going over the paper and discovering no arithmetical error in the computation of his grade, he slowly walks away, still only half convinced that he really made an "F" instead of a "C." A second student believes he has made a "C" and asks for his mark. He is told that he made an "A." He may be a bit surprised but he has no difficulty in actually believing that he made an "A." Neither of these students is shamming; it is simply easier to believe that which we want to believe than it is to believe that which we do not want to believe.

"A man convinced against his will
Is of the same opinion still."

That such should be true is not surprising if we bear in mind that to believe is to accept. But after all how is it possible for one to disbelieve, merely because it would be unpleasant to believe, anything which has all the obvious signs of actuality? Certainly it does not seem that anyone would be able to disbelieve simply because he would like to do so. We shall consider this question again as soon as we have considered briefly the class of agreeable beliefs.

Fortunately many of our beliefs are very agreeable to us; we often enjoy believing as we do. In fact it is so easy to believe what we wish that we all undoubtedly have delusions belonging to this class of beliefs. The writer is inclined to

the opinion that a prototype of all such beliefs is to be found, to a varying extent, in each and every one of us; namely, the fact of believing that we are in some (perhaps undemonstrable) way just a little superior to anyone else. If there is some such universal belief, whence does it spring? Well, to begin with, each individual recognizes the fact that he is different from anyone else. Now the one mark of distinction after all is "difference," and we all like distinction. Hence it is an easy step from the recognition of a difference between oneself and others to that of a belief in one's superiority. The difference recognized, or rather the recognition of the fact that there is a difference, is interpreted as a mark of distinction, and this means superiority. It is highly probable that another factor lends itself to this belief. Each of us knows that there is much about himself which is not apparent to the other person, that he has thoughts and feelings (particularly feelings) that he never talks about, which, in fact, he may be unable to put into words. Along with this recognition that there are certain aspects of his personality which he does not reveal to others is the assumption that others are what they appear to be, that they reveal themselves in their entirety. Perhaps this is in part the basis of that very common belief that we *know* others but that they do not *know* us; and this belief, of course, tends to give us a feeling of distinction. To many individuals it is an insult to tell them that they are as transparent as glass, that *we* can read them like a book. Everyone likes to believe that he is something over and above what others think he is.

Quite similar to those common beliefs which we have been discussing are those of the mother in regard to her children. Certainly many mothers believe that their children are the smartest, the best mannered, the most promising children in the neighborhood; and the amount of evidence necessary to convince a mother that a child of hers is inferior to others or that he has committed some misdemeanor is sometimes almost unbelievable. We might here allude to the fact that many mothers who lost sons during the war still believe

that their sons are alive. Many fathers believe that their sons have inherited the genius which unfavorable circumstances have always kept them from revealing, and in keeping with this belief they spend much time and money endeavoring to uncover those latent potentialities for greatness which they *know* their sons must possess. All in all we can say that the satisfaction which we gain from believing as we do is self-evident in many of our beliefs. But we have yet to decide how, and to what extent, the desire to believe a thing may determine one's believing it.

It is a universal fact of everyday life that strong desire or strong aversion or any strong emotion may distort perception, that is, lead to misperception. The individual who is dying of thirst in the desert *sees* a pool of water and rushes forward to quench his thirst; the jealous husband perceives in the most casual glance of the other man a "knowing look" at his wife; the embarrassed student sees in the smiles around him not sympathy but derision. The earnest lover who declares his sweetheart to be the most beautiful woman in the world often amuses his listener. But to him (the lover) the girl's squint is a charming little gesture, her freckles are not freckles at all but delicate little marks of distinction to be counted and kissed, her hooked nose denotes pride and strength of character and he would not for the world have it any other way, her small receding chin not only possesses a delicacy of its own but lends a softness to the general contour of her face—and yet the lover is sincere when he declares her beautiful. All this is strictly in keeping with the fact that an emotion (strongly aroused motive) acts in part as a mechanism, tending to condition the other mental processes in such manner as will be in harmony with it. This results in the perceiving of certain facts and the overlooking of others and furthermore in the "coloring" or distortion of the facts perceived. Distorted perception inevitably leads to distorted judgments and beliefs. Hence we see that strong desire and emotions may largely determine beliefs, due to their influence upon the perceptive processes. To il-

lustrate: A student recently told the writer that he did not believe his parents were really his own. Since he could offer no logical evidence to support his belief (or disbelief), it was naturally suspected that the student for some reason or other did not want to believe his parents were really his. A little tactful questioning clearly brought out the fact that he considers his parents definitely inferior to himself, that because they are uncouth and uneducated he is ashamed of them and, in short, that he would like to believe (to know) that he hails from nobler stock. Now if we start out with the assumption of what appears to be a rather obvious fact, namely, that he desires to disbelieve that he is the son of such a lowly couple, then it is clear when we trace the genesis of his belief that he has greatly over-emphasized the importance of certain insignificant facts and at the same time overlooked a thousand and one other perfectly obvious but contradictory facts. Thus he recalls that he was taken to Russia when he was four or five and he is sure that this had some definite significance of which he has never learned. His parents often talked in subdued tones and he is sure this has something to do with him and the question of his true parentage. He recalls a rather striking woman who used to call at his home when he was a child and he thinks this may have been his real mother. Such are the facts which he says lead him to believe as he does. On the other hand he overlooks such facts as that there are other children both older and younger than himself and that it is highly unlikely, since his parents are quite poor, that they would have burdened themselves with another child which was not their own; the fact that his brothers and sisters are not particularly different from himself either in physical appearance or ability; the fact that his parents have never shown any partiality; the fact that no one has ever hinted that he was not the child of the couple who claim him, etc. By directly influencing perception is one way, then, in which desire and emotions may lead to false beliefs.

Aside from this there is another way in which affective

and conative factors may be largely instrumental in determining beliefs. We are very prone to accept as true the statements of those whom we recognize as our superiors. Thus, the child accepts its mother's statement that a bad man will get it if it is not good; the naïve adult accepts the quack's statement that he can read minds and tell fortunes; we are all inclined to accept the astronomer's statement that it is so many miles from here to the sun. In all such cases we appear to be dealing merely with an aspect of the motive of suggestibility. One cannot recognize another as being his superior without really accepting him as such; and in doing this he has likewise implicitly accepted, at least to a considerable extent, the other's statements and actions—even before they are made.

Hence we see that strong desire and emotion may be instrumental in the development of false beliefs, in accordance with a mechanism which has long been known to psychology. It may be simply stated thus: If the individual's first reaction to the situation is of an emotional nature, this emotional reaction (emotional state) will tend to influence all subsequent intellective reactions of a perceptive nature and these in turn will give rise to faulty thinking and inferences (beliefs). In terms of this mechanism and the one mentioned in the preceding paragraph we are able to account to a considerable extent for many delusions, particularly delusions of desire. But in many cases our interpretation would be quite unsatisfactory if simplified to this extent, and consequently it becomes necessary to consider other factors, particularly with respect to delusions of aversion. First of all it is necessary to take into consideration the level of intelligence and the educational background of the deluded person. For instance, the belief that someone in another city or another part of the same city is sending electricity through his body at all hours would certainly strike us as being more absurd and illogical if held by an intelligent and educated person than if held by a dullard. The belief that one is God is cer-

cuted by others; the belief that one has no stomach is more absurd than the belief that one's parents are not really his own.

Thus, as we said in the early part of the chapter, our chief criterion for deciding whether a false belief shall be considered abnormal is the intelligence and educational background of the individual who entertains the belief. Conceptually at least, the possibility of a given individual's developing a delusion depends upon the relationship existing between two sets of variables—the strength and preciseness of the habits of perception which he has developed and the strength and persistency of impulsive and emotional trends which are inclined to interfere with, or distort, those habits. It is conceivably possible for one to believe anything whatever, provided the desire to believe it is sufficiently strong. However, the writer is of the opinion that there is a fairly high correlation between what we might speak of as the plausibility of the delusion and the intelligence and educational background of the patient.

There are still other factors to be considered in the psychology of beliefs, particularly unpleasant false beliefs, delusions of aversion. But we can more economically refer to these additional factors in connection with the interpretation of paranoid trends, after we have examined other cases of paranoia and have briefly considered the paranoid personality.

Cases of Paranoia. The student should carefully study the following cases of paranoia. They are fair examples of systematized delusions, absence of mental deterioration, relevancy of affect and belief and they shed light upon some of the basic aspects of the personality that is prone to the development of paranoid delusions.

> Case 52. Maynard R., age 40, was the second child in a family of five. He came of good Middle Western stock. He had never married. Physical findings were negative. It was impossible to learn when actual delusions commenced.

Maynard went to New York City in order to obtain work and to escape from his persecutors. After he had been in New York less than a month he went to the West Side Branch of the Y. M. C. A. in the hopes of obtaining aid and protection against his persecutors. He reported that his employer in a Middle Western city had learned of his unusual intelligence and of his profound interest in international affairs. He explained that he had seen through certain movements in Congress in regard to the relationship between the United States and Russia and had thereby come into possession of certain secrets which were of the greatest significance to the people of this country. He refused to divulge his secrets, explaining that it would be "worth his neck" to tell anyone all that he knew. He would only say that a certain group of persons in Congress were planning to form a dictatorship and to give the control of the country into the hands of the Pope.

Maynard went on to say that he had been employed in New York only two weeks when he detected a person watching him as he left his place of work. This distressed him a good deal but still he felt that he would be fairly safe if he could keep his enemies from learning where he lived. In order to throw his enemies off his track when he left his place of work he devised the ruse of taking subways to his home only during the rush hours, of having a nickle in his hand when he started for home, of sauntering casually along the street as if going no place in particular, and then of darting very rapidly into the subway entrance and losing himself within the crowd. But the ruse did not work and it was not long before Maynard detected an agent of his persecutors "spying" on him as he approached his residence.

According to information gained from family and friends Maynard had always been suspicious of the motives and intentions of others, hesitant and negative

toward the opposite sex, and given to periods of reticence and moodiness. At the time of his examination, he was a mentally keen and alert person, still holding a good vocational position and showing no sign of mental deterioration or other mental aberration other than his well systematized delusion.

CASE 53. Sally Y. was the only child of Swedish immigrants. Her parents reported that she had never had many friends and that throughout her childhood she often spent hours at a time by herself drawing, sketching, reading, playing solitaire, or "just thinking." She had received a high school and business college education. Upon completing her training she secured a secretarial position. She had held this position for four years and apparently was well liked by her employers when an outbreak of paranoia occurred At this time she was twenty-six years old.

The writer was asked to make a visit to Sally's home one particularly stormy night. The family lived in a private home in Brooklyn. The parents appeared almost stupefied. They were utterly unable to grasp the import of their daughter's peculiar behavior. Sally was alert, active, and openly suspicious. Once her confidence had been obtained she explained that there were two men on the roof directly above her bedroom. One of the men was her former employer and the other was a mere friend. Her former employer was sitting on the other man who was bound and gagged. Sally was keenly distressed. She felt very sorry for the man who was being sat on. She said that she had intended to call the police and had actually lifted the receiver from the telephone when she heard her former employer say that if she called the police he would "cut her throat from ear to ear."

Desiring to test the strength of Sally's delusions the writer suggested a cautious trip to the roof of the house. When no one could be discovered on the rain swept roof

Sally explained that careful as we had been her former employer nevertheless had heard our approach and had escaped with his victim by way of the fire escape. She worried lest our interference might occasion still more torture of the unhappy young man who was being mistreated.

Sally explained that the unfortunate situation of the man who was being tortured was largely her fault. She said that she had been kind to him and that her kindness had made her employer jealous and angry. Inasmuch as he was unable to avenge himself upon her directly, lacking the means and courage, he had resorted to this indirect way of distressing and humiliating her. Sally absolutely refused to have the police called in and had become very watchful of the telephone and the door.

Although hallucinations are not common in true paranoia, Sally apparently hallucinated voices at least once. There were no schizoid features present, however, or signs of deterioration.

Paranoid Personality. The paranoid personality is characterized by ambitiousness, suspiciousness, and fixed and inflexible ego-identifications. Many such persons continue through life without ever developing paranoia or a paranoid psychosis. They maintain a fixed distance from others without being shy or particularly introverted. One senses a guarded attitude which amounts to unfriendliness, a stolid negation of emotional intimacy. A young college student of this type told the writer without blush or shame that he tried most industriously to make friends but only as stepping stones to his own advancement. He never pretended friendship for a person unless he believed the person might be of value to him. A young college woman said that she had but one desire in life, to be the world's greatest prima donna, and that if she failed to achieve this desire she would commit suicide. She claimed to have no friends and said she did not want any.

The following case is fairly typical of the paranoid personality.

CASE 54. William C. was a young man of twenty-five, of fair intelligence and a high school education. He complained that his nose was more red than it should be. But his concern about his nose was really of secondary importance. His real concern was that he was not treated fairly where he worked. Other employees who had had no more experience than he and "who were perhaps less intelligent" received first consideration for advancement. Moreover, certain of his fellow employees, it seemed to him, were always on the outlook for opportunities to make disparaging remarks about him. He tried to be sociable and friendly but others seemed to suspect his motives; they seemed to think that he was too egoistical and wanted more than his just share of attention and recognition.

William was guarded and suspicious from the first visit. He could not seem to help feeling that the writer had some ulterior motive, a desire to make a fool of his patient. At the end of two months of cautious procedure on the writer's part, the patient was gently informed that he was extremely repressed and that he was unwittingly fighting against a sexual interest which had become directed to his own sex. William received the information with a sneer and immediately discontinued his visits. Two or three months later, happening to encounter the writer on the street, William stated that he was going to make one more visit—for the purpose of beating the hell out of his psychologist.

Interpretation of Paranoia and Paranoid Trends. That the paranoiac or the paranoid individual often harbors homosexual inclinations, as Freud has emphasized,[1] is entirely true. But the homosexual trend is not the basic causative factor;

[1] The following abbreviated Freudian interpretation of paranoia is taken from Stoddart, *op. cit.*, pp. 312–313. In the following presentation it is assumed that the patient is a man.

Persecuted paranoia.—"I love the man"—an intolerable idea, therefore becoming repressed and replaced in consciousness by "I do not love him, I hate him." This by projection becomes "He hates me," "I am persecuted by him." (*Continued p. 331.*)

it is itself but a derivative of a multiple of factors. We offer the following interpretation of paranoia, particularly of the persecutory type, and also of the development of unpleasant or disparaging, false beliefs (delusions).

(a) The potential paranoiac is characterized by a mental or psychical inflexibility, a definite proneness to rigid and unyielding mental constellations—sentiments, attitudes, ego-identifications. This inflexibility is in all probability a matter of hereditary emphasis. (b) Usually if not always he is an individual who early in childhood became enslaved by his racial proclivities; not only because of the strength of these proclivities but also because of the inflexibility of his interests, because of his inability to reconstruct or to divert them easily from one object to another. (c) The third step in the genesis of his disorder is the most complete sort of repression of his selfless complex of interests. His inflexibility occasions in him an all or none mode of reaction. (d) In the repression of his racial interests there is always a heavy loss to his ego-identifications with his own sex, and sometimes there is a further reaction of over-identification with the opposite sex. (e) But the potential paranoiac, it will be observed, always goes beyond identifications with the opposite sex; having freed himself to a great extent from selfless interests he always goes on to an ego-identification with an idea of exalted personal significance.

This is the psychological make-up of our individual when he arrives at maturity; and in terms of the factors which we

Exalted paranoia.—"I love him"—again an intolerable idea, therefore "I do not love him, I love myself." This by projection becomes "Everybody loves me," "I am a great person."

Religious paranoia.—"I love him" being intolerable, becomes "I love Him" (spelt with a capital H), meaning "I love God." This by projection becomes "God loves me," "I am the chosen one of God."

Amorous paranoia.—The intolerable "I love Him" becomes "I do not love *him*, I love *her*." This by projection becomes "She loves me."

Jealous paranoia.—"I love him," as usual, is replaced by "I do not love him, she loves him."

Hypochondriacal paranoia is somewhat like exalted paranoia, "I love myself" becoming "I must take care of myself."

have mentioned we are in a position to understand, at least to a considerable extent, his psychotic peculiarities. He has become genuinely unfriendly toward others through his repression of all racial motives. But it is his nature to feel toward others, to feel sympathetically, affectionately, sexually. Hence his repressed racial tendencies constantly bombard, so to speak, his rigid and unyielding ego-identifications, his self-concern. He egoistically renounces his selfless tendencies and meets them with a wall of unfriendliness. (The reader surely can see that objectively other persons are synonyms or correlates of one's selfless proclivities and, obversely, that one's selfless proclivities are the subjective correlates of other persons.) But his unfriendliness is itself egoistically intolerable. The individual therefore denies it as belonging to himself, that is, *he projects it on to some other person or persons.* But his racial motives, being repressed and therefore concealed from his immediate perspective, are felt to be a force which is greater than his own conscious intents and volition. He therefore projects the egoistic antagonism which they tend to arouse in him on to some person who is superior to him.

The homosexual trend which is latent in certain paranoiacs is conditioned by the individual's early loss of close ego-identifications with his own sex and by the development of identifications with the opposite sex. His suspiciousness is engendered by the weight of his repressed racial motives which he egoistically senses as baneful to his personal integrity. Where sex is a particularly prominent component of the repressed complex, erotic paranoia may result. Sex is present, but egoistically intolerable, and therefore it is projected on to another individual. Where the weight of the repressed racial complex becomes too great our individual may turn his attention specifically to himself and become hypochondriacal, or he may strike a partial compromise with his racial proclivities and develop religious or reformatory paranoia.

Thus we see that unpleasant beliefs come about as substitute

beliefs for beliefs which would be even more painful to the individual concerned. It is easier for the paranoiac to perceive himself as being *unfairly* persecuted by others than it would be for him to perceive himself as being *fairly* persecuted by himself. We might characterize his unpleasant *delusions as projected self-repudiating reactions.* Repression, overidentification, rationalization, projection, and self-repudiation are the modes of reaction which are peculiar to him.

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CHAPTER XVII

THE FUNCTIONAL PSYCHOSES (*Concluded*)

SCHIZOPHRENIA OR DEMENTIA PRAECOX

Terminology. The group of mental disorders which we shall discuss in the present chapter are still frequently subsumed under Kraepelin's term "dementia praecox" although a more appropriate term was long since suggested. Dementia praecox means literally early loss of mind, and thus it implies nothing more than that the disorder occurs early. The better term and one that is coming daily into wider use is "schizophrenia," suggested by Bleuler. This term has the connotation of split mind and also implies thereby that the disorder is functional or psychogenic. It will be used throughout in the present book.

Schizophrenia is by far the most common of all psychoses, comprising approximately 20% of first admissions to mental hospitals and 35% or 40% of mental hospital populations. The difference between its ratio to admissions and to hospital populations is accounted for by the fact that whereas this disorder does not kill, it is rarely cured.

According to Pollock [1] about 70% of cases of schizophrenia occur between the ages of fifteen and thirty; it is more common in men than women; it occurs earlier in men; it is found proportionately more frequently in cities than in rural communities; its incidence is higher in the foreign born than in the native population, occurring most frequently among the Irish, Polish, Austrian, Hungarian, Russian, Finnish, Greek, and Italian, and it is more prevalent among negroes than whites. Although the following table from May [2] does not entirely accord with Pollock's figures it will give some idea of the distribution of schizophrenia with respect to age.

[1] Pollock, H. M., "Statistics on Dementia Praecox," *Mental Hygiene*, July, 1936.
[2] May, J. V., *Mental Diseases*, pp. 458–460, Badger.

Age Group	*Percentage*
Under 15 years	0 2
15 to 19 years	7 8
20 to 24 years	20 1
25 to 29 years	22 0
30 to 34 years	16 6
35 to 39 years	13 5
40 to 44 years	8 4
45 to 49 years	5 3

Although we may see from this table that whereas the disorder is by no means confined to adolescence and the years immediately following, it is all in all a psychosis of the earlier years of adult life. It should be pointed out that there is considerable variation among the statistics given on schizophrenia by different writers. For instance, Stoddart,[1] an English writer, says that 12½% of first admissions are schizophrenia while certain authorities in this country find the incidence to be as high as 25%. Such wide variations are to be explained in part, undoubtedly, by differences in diagnostic criteria. Symptomatologically many patients present mixed clinical pictures and consequently wherein one psychiatrist would be inclined to make a diagnosis of schizophrenia a second would perhaps insist upon manic-depressive with schizoid features, etc.[1] Schizophrenia may be more readily comprehended as a way, or a variety of ways, of reacting to inner difficulties than as a fixed or specific mental disease. Thus a given patient may reveal a repertoire of symptomatic reactions which makes a rigid or exact classification of him unjustifiable. Or the same individual may react quite differently during successive periods of time. He may enter the hospital and be given a certain diagnosis, have a remission and leave the hospital, then return later presenting a changed clinical picture, and be given a different diagnosis. So let us bear in mind that throughout the field of functional disorders we are dealing with modes of reaction to difficulties and that different individuals present every conceivable variation and degree and shade of variation and mixture and combination

[1] Stoddart, W. H. B., *Mind and Its Disorders*, p. 317, Blakiston.

and blend of these different modes. We shall then more easily avoid falling into the easy but unscientific habit of indolently categorizing merely quantitatively diverse facts.

A Difficult Disorder to Understand. Schizophrenia is not only the most common of all psychoses, but it is also the most difficult to understand, "to feel oneself into." The manic-depressive's excitement or his depression does not impress us as being anything particularly fantastic, anything outside the realm of human experience. Most of us have moods of depression and of elation, and when we imagine such moods greatly exaggerated we recognize a certain similarity between them and those moods which appear to characterize the manic-depressive patient. And we can even understand to a great extent the delusions of the paranoiac; for we have all felt at times that we were somewhat downtrodden, or that we were of much greater consequence than the bare facts of our achievements seemed to attest. But in the presence of the schizophrenic patient this feeling of "kinship" is very likely to be wanting. Indeed, one gets some such impression as many persons appear to gain in the presence of monkeys or apes which are a little *too* human in their behavior. Not that there is a close analogy between the two situations but merely that in each case one perceives a sort of inconsistency or disharmony, an incongruity which simply will not fit in with one's past experience. In the case of the monkeys and apes, this undoubtedly arises as a result of the fact that most of us grow up believing that there is a very hard and fast line of demarcation between man and all other animals. Such a line of demarcation is quite apparent with respect to most of the animals with which we are associated. Consequently when we observe behavior in a lower animal which impresses us as being distinctly "human," we are inclined to feel that there is something wrong, that things are not exactly as they should be; in short, what we observe at the time seems to belie our past experience. If one were to come across a stream of water flowing up a hill, he would undoubtedly become disturbed in somewhat similar fashion.

Now let us enquire into the causes of this impression which so many normal individuals report upon their first contact with schizophrenic patients. In doing this we shall take up the symptoms which range throughout the various forms of this disorder.

Symptomatology of Schizophrenia. Undoubtedly the most common symptom of this disorder is *an emotional apathy and indifference in the patient with respect to his external environment including other individuals.* McDougall[1] contends that this is perhaps the only symptom which is common to all forms of schizophrenia. Whether or not this is so, it is surely the most apparent one. The patient may sit in the corner hour after hour for weeks, months, years, scarcely moving except for meals and to go and return from his bed. If you speak to him, he may give you a single glance, then return his gaze to the floor or the opposite wall. You plead, entreat, threaten, but he makes no response. He appears to be not only oblivious of your presence but also of the presence of the other patients, the doctors, and the nurses. You learn sooner or later that it is quite useless to try to break through his indifference. Some of these patients actually go for years without ever speaking a single word to anyone. One patient for years had never spoken to anyone except a certain nurse to whom she spoke quite freely and told of all that had taken place on her ward, often telling of mistreatment of the other patients by the attendants. She sat in the same chair day after day with lips tightly compressed and hands folded on her knees. Interestingly enough, a second patient sat across the room from and facing the first, also with compressed lips and folded hands. She had adopted the mannerisms of the first.

But not all schizophrenic patients behave in this manner. Others walk about in circles or up and down the hall or sit smiling and mumbling over and over to themselves. If you approach them they may stop their whispering and remain very quiet till you leave or they may continue

[1] *Op. cit.*, p. 370.

as before, taking no apparent notice of your presence. If you speak to them, the chances are they will pay no attention to you. Yet if you command them to carry out some simple act they may readily obey, proving that they have heard and understood what you said. Others may tell you of how they are being persecuted, how electricity is being passed through their bodies, or that they are mistreated during the night or that people are saying evil things about them. Still others lie in bed with tightly closed eyes or with stare fixed upon the ceiling, having to be tended as if they were infants, even frequently having to be forcibly fed. But whatever the particular behavior (or lack of behavior) and mannerisms of the patient, one is always confronted by the same lack of emotional response. The patient who tells of his persecutions does so with a striking absence of any display of emotions or feeling. He may actually be smiling while he tells about these terrible "experiences," although more commonly there is merely an apathetic sort of expression on his face. It is our emotions and feelings that lend color, tone, to our reactions, and when this tone is missing, one gets the impression that something is vitally wrong, that the patient is, as it were, in another world which is quite distinct from the world of objective reality with which the normal person deals. Finally we must mention still other patients who to the casual onlooker might appear quite normal. They go about their work systematically, engage in sports, dance, sing, attend chapel exercises, and converse rationally enough. It is only when their present is compared with their past that one is in a position properly to evaluate their reactions. Although such a patient may have a wife and family who are badly in need of support, he will perhaps tell you that he is quite content to remain in the hospital. One such patient told the writer that he got enough to eat and a place to sleep and that that was about all one could expect in life. Prior to his mental disorder he had been a very ambitious mechanic making good wages and taking a great interest in his family and affairs. So once again the thing we note

chiefly is a certain emotional apathy and indifference, a loss of interest, ambition, and pride.

A second symptom and one which again is perhaps always present in the schizophrenic patient, although it is frequently far less evident, is *a certain lack of harmony, integration, or co-ordination between affective, intellective, and motor reactions.* These classes of reactions are not properly synchronized; the relationship which normally exists between them is lacking. Technically this symptom is known as *intrapsychic ataxia*, and it is primarily to it that the term "schizophrenia," indicating a split or dissociation of the personality, applies. In many schizophrenic patients this symptom is not apparent, but this fact may be due primarily to the absence of any type of overt reactions whatever. In other patients, however, it is very apparent. Thus it is easily discernible in the patient who tells one without the slightest show of emotion that he is being persecuted or that he is going to die that night, and in the patient who knows very well where he is and that he is considered "insane" but who at the same time declares himself to be quite content or even perfectly happy. Another patient, a woman, walks in a circle shouting "God damn!" in a loud angry voice. There is scarcely any expression on her face and if one walks toward her she simply turns away. Still another patient implores you in a very plaintive voice to take her home but all the time there is a preoccupied expression on her face giving you the impression that she is talking about one thing and thinking about something else. And then there is the patient who breaks forth in loud laughter, or perhaps merely giggles in a silly fashion without any apparent cause at all; and the patient who suddenly darts across the room and attempts to choke another patient who for hours has been doing nothing but stare at the floor. Such reactions also contribute to the visitor's feeling that he is among individuals who in some radical way are different from himself, that they are concerned with facts and forces which are not apparent to him.

A third symptom which appears to characterize all schizo-

phrenic patients is a *gradual mental deterioration.* But it is probable, at least in many cases, that the deterioration is merely apparent rather than real. For after all is said and done, there is no way of accurately measuring the intellectual ability of an individual who will not coöperate, and an absence of coöperation (inadequate responses to the presence and actions of another person) is, as we have said, the most common feature of this class of patients. The woman who sat with compressed lips refusing to utter a word was to all outward appearances mentally deteriorated. Yet she proved a very reasonable degree of mental alertness by her conversations with a certain one of the nurses. It is highly probable, however, that in most of those cases of several years' standing there is some mental loss. We should expect this to be the case since it is generally conceded that disuse tends to weaken any function, mental or physical, and the "self-imposed" seclusion of these patients definitely brings about a cessation of contact with the world about them. And so there is perhaps a mental deterioration in the same sense that the normal individual's mental functions, concerned, shall we say, with the science of chemistry, grow stale or deteriorate after long-continued disuse. After many years of hospital residence many of these patients appear to lead a purely vegetative existence, taking no interest in things about them, making no response to others, quietly sitting in a corner or pushing a floor mop day by day from year to year.

Hallucinations, particularly of hearing and vision, are fairly common during the early stages of schizophrenia. Auditory hallucinations are much the more common and are most frequently of voices calling the patient bad names or making insinuating remarks. In a very large number of cases these voices have to do with sexual transgressions, imagined or real. In some cases hallucinations persist but seemingly in the majority they gradually die out after the initial stage of the disorder, or at least they become much less prominent.

Delusions also are quite common during the early stages of schizophrenia. Although usually of the paranoid type, they

differ from the delusions of paranoia in being less permanent, far less systematized, and in the majority of cases of a more fantastic nature. These, too, in many cases tend to disappear with the "crystalization" of the disorder, while in some cases they persist as one of the principal symptoms of the disorder. Occasionally they are fairly systematized and permanent and in such cases a diagnosis of schizophrenia is made because of the presence of additional symptoms of a schizophrenic nature. Although delusions of persecution are the most common, other varieties are frequently found. The fantastic nature of many of the delusions of schizophrenics is particularly striking. One patient declared there was an orchestra playing in his stomach; another declared electric wires were attached to his brain; a third believed he had no heart. In addition to the hallucinations and delusions of these patients, one frequently finds *ideas of reference* (the belief on the part of the patient that others are making disparaging remarks about him), and *ideas of influence* (the belief that others are exerting a hypnotic or an electrical or some other peculiar type of influence over him).

The following tabular presentation of the chief symptoms of schizophrenia may be of help to the student.

1. **Aspects of General Behavior:** Stereotypy, mannerisms, impulsive acts, untidiness, mental inertia, catalepsy, attitudinizing, echopraxia, negativism, unintelligible and unexplainable acts.
2. **Activity Involving Speech:** Echolalia, verbigeration, incoherence, blocking, evasiveness, mutism, neologisms.
3. **Mood, Affect:** Indifference, apathy, emotional blunting and blocking, embivalent feeling attitudes, absence of coordination of thought and feeling (intrapsychic ataxia).
4. **Special Affect Trends:**
   a. *Paranoid trends* (occurring in more than 50%): Suspiciousness, feelings of mistreatment, ideas of persecution, ideas of poisoned food, religious delusions, homicidal tendencies.
   b. *Ideas of influence:* Ideas of being influenced by hypnotic suggestion, by X-ray machines, by radio waves, by hypodermic injections, by electrical devices, etc.

c. *Ideas of reference:* Ideas of being talked about disparagingly, ideas that any casual remark refers to patient, ideas that others are plotting in whispers.
d. *Illusions and hallucinations:* Auditory hallucinations most common. Hallucinations of voices, of God's voice, of plotters, etc.
e. *Delusions:* Delusions of an unsystematized, phantastic and bizarre nature. Belief that he has no stomach, that the colon is missing, that there is a radio in the stomach, that organs are all connected with brain by wires, etc.
f. *Compensatory trends:* Day-dreaming, phantasies of being God, a saint, a prophet, etc.

5. **Sensory and Intellectual Status:** Grasp of general information, orientation with respect to time, place and person, memory and retention are not usually seriously impaired. An *apparent* intellectual deterioration usually gradually occurs over a period of years. In approximately 50% of cases insight is wholly lacking.

Clinical Forms of Schizophrenia. The different forms of schizophrenia are not mutually exclusive; rather they are distinguished on the basis of the relative prominence of some one symptom or group of symptoms rather than on the basis of an absence of certain symptoms. In other words, the most common type of schizophrenia is the mixed type, strictly speaking. Ignoring the mixed type, which in a broad sense would include all cases, it is customary to distinguish four forms: *Simple type*, *paranoid type*, *catatonic type*, and *the hebephrenic type.* With respect to the relative frequency of these different types, the following tables[1] are instructive. The first table is of cases in New York institutions, the second of cases in institutions in Massachusetts, the third of cases in nineteen other institutions, and the fourth is a composite of the three preceding tables. The disagreement apparent in these tables should perhaps be attributed primarily to differences in diagnostic criteria employed.

Simple schizophrenia (schizophrenia simplex) is undoubtedly much more common than hospital statistics indicate. It

[1] May, J. V., *Mental Diseases*, p. 457, Badger.

NUMBER OF CASES

I

Type		*Percentage*
Paranoid	3579	58.34
Catatonic	468	7.63
Hebephrenic	1463	23 84
Simple	625	10.19

II

Paranoid	1248	42.72
Catatonic	678	23 21
Hebephrenic	828	28 34
Simple	165	5 64

III

Paranoid	800	25.12
Catatonic	438	10 61
Hebephrenic	1666	52 32
Simple	230	7.22

IV

Paranoid	5627	45 97
Catatonic	1584	12 12
Hebephrenic	3957	32 32
Simple	1020	8 33

appears to be the consensus of opinion that a fairly large percentage of hoboes, prostitutes, and criminals have histories of schizophrenic crises or are incipient cases.

Hackfield [1] made a study of 32 capital criminals who came under the observation of the University of Zurich Psychiatric Clinic. The cases are divided into three groups: Those who committed their crimes while suffering from a latent or manifest schizophrenia but who nevertheless were sentenced to the penitentiary; similar cases who were treated medically; cases diagnosed as psychopathic personality—moral insanity—of the type who are considered responsible. All of the first group became progressively worse and had to be committed; 70% of the second group had remissions and were

[1] Hackfield, A. W., "Crimes of Unintelligible Motivation as Representing an Initial Symptom of an Insidiously Developing Schizophrenia," *Amer. Jour. of Psychiat.*, Vol. 91, 1934, pp. 639–668.

able to live outside institutions. Of the third group, all of whom were sentenced, none developed a psychosis.

Of seventy-five cases of schizophrenia admitted to the State Criminal Lunatic Asylum, Broadmoor, and studied by Murdoch,[1] 26 had committed murder, 18 had attempted murder, 3 manslaughter, 7 grievous bodily harm, 2 sex crimes, 16 burglary, 1 arson, 1 blackmail, and 1 malicious damage. Most of these patients were in an incipient or early stage of the disorder at the time of their criminal acts. Such studies strongly suggest the prevalence of serious mental disorder among the criminal and other groups of gross social maladjustment.

The onset of simple schizophrenia may be quite gradual or, to all appearances, it may be very sudden. If gradual, the first indications usually noticed are *loss of interest and ambition, a developing emotional apathy and indifference, an ever-increasing tendency toward reticence and seclusiveness, perhaps depression, and a general tendency to regress to earlier interests and activities.* It is observed that the individual takes less interest in his work and play, that he is becoming negligent with respect to his personal appearance, and that he sits around day-dreaming a good deal. Where the onset is sudden, the picture may be quite different: The individual may become suddenly quite ill, have considerable temperature, become excited and perhaps delirious. Hallucinations and delusions may be present, which tend to disappear with the progress of the disorder. After the initial crisis is past, the individual tends to settle down to a routine existence, being largely without interest in things about him and quite devoid of ambition, emotionally rather apathetic, and showing some apparent intellectual deterioration. He may continue with but little change to the end of his life, although usually there is a gradual mental deterioration. It is now that one is unable to distinguish between him and the feebleminded person without knowledge of his past history. The following case is somewhat typical of this class of patients.

[1] Murdoch, James Hunter, "Crime in Schizophrenic Reaction Type," *Jour. of Ment. Science*, Vol. 79, 1933, pp 285–297.

CASE 55. A man of twenty-five of Irish descent left his home one morning for a neighboring town for the purpose of withdrawing some money from his bank. On the train he became very nauseated and alighted at an intermediate station. An hour later he took another train and again became very sick, but continued until he had reached the town for which he had set out. He was still very sick but proceeded toward the bank. When about halfway there he turned around and went back home without afterward being able to say why he did not go on to the bank.

For the next two days he was quite ill, very much excited, hallucinated voices, and thought he was going to die. He was removed to a psychopathic hospital for observation. In a few days he quieted down. During the next four months, at the end of which time the writer saw him, there was no apparent change in him. He was perfectly orientated, had a good memory for his past life, talked intelligently enough but without emotion or interest. He said he would like to return to his wife and child but at the same time said he was quite content to remain at the hospital if the doctors wanted him to. He was a good worker on the hospital farm, played handball, and danced at the social gatherings. One day upon leaving, after talking to the writer, he emptied his pockets of their contents and insisted that the writer should accept them. The collection was interesting and might well have come from the pockets of a normal boy of nine or ten—an old pocket knife, some colored rocks, a woman's highly colored garter, some small change, a piece of a fountain pen, and some pieces of string were among the contents.

At another time the writer observed a peculiar reaction in this patient while giving him a form board test. The patient had placed blocks in all the depressions but the last one when he found himself with a triangular block and a circular depression. He tried several times to make

the block go into the depression, but it was too large. Then suddenly he took a dime from his pocket, placed it in the depression, and leaned back in his chair apparently perfectly satisfied with his completion of the test. Thus, whereas his conversation concerning his past life had appeared intelligent enough, as soon as he was confronted with a new situation he revealed an apparent lack of comprehension and evidence of intrapsychic ataxia.

It is extremely difficult to describe or characterize adequately the simple schizophrenic—he appears so normal and yet there is something lacking. Perhaps we may say by way of a general characterization that he impresses us as having "lost the edge of his personality"; he is blunted with respect to all three aspects of his mental make-up, the conative, the affective, and the intellective.

The *paranoid schizophrenic* is characterized, typically, by *delusions of persecution, ideas of reference, ideas of influence, and emotional apathy and indifference.* A differential diagnosis between schizophrenic paranoia and true paranoia is sometimes difficult to make and undoubtedly certain cases would be differently classified by different psychiatrists. In general we can say, however, that the delusions of schizophrenia are less systematized, less permanent, and more fantastic than those of true paranoia. Moreover there is always to be found in the schizophrenic the emotional apathy and indifference and the intrapsychic ataxia, although frequently neither of these is so very apparent. The following case illustrates the fantastic nature of some of the delusions of these patients and also seems to indicate a certain emotional apathy.[1]

Case 56. Male, aged 32 years. On admission to this hospital the patient was well oriented in all spheres, showed no clouding of consciousness, was neat in appearance and tidy in habits, took a normal interest in his

[1] White, Wm., *Outline of Psychiatry*, pp. 213-214, Nervous and Mental Disease Publishing Company.

surroundings, assisted with the ward work, and adapted himself readily to his new environment. He showed no disturbance emotionally as a rule, but when the subject of his sojourn here was broached, he worked himself up into a slight passion. He gave evidence of being slightly suspicious, and on one or two occasions exhibited delusions of reference. He elaborated a fairly well-organized system of persecutory delusions in which many people were involved, among these, some high officials in the Army and Navy, and this delusional system took its inception in the latter part of 1908, while the patient was a member of the Seamen's Gunner's Club at Washington, D. C. He claims that the first trouble started through the instigation of certain false accusations by fellow Masons, that the men at the class tried in every way to make life miserable for him, that he had heard them call him various unmentionable names, with a view of blemishing his character. On one occasion they administered to him an overdose of iron, quinine, and strychnine, on another, they tried to poison his food. They refused to eat with him at the same table, had detectives watch him, etc. He says back of all this stood some high officials of the Navy and Army, that he saw one of these give the sign to the other man to torture the patient, that the reason these officials had them persecuting him was the fact of the patient's invention of some dirigible aero torpedoes with proper detonators, and these officials stole the patent from the patient and then sold it to the combination of three European countries; and it was to their interest to get rid of the patient in some way in order that he should not expose them, as he had knowledge of this treasonable transaction.

The delusions of this man were quite well systematized nd much less fantastic than the delusions of many of these atients. It is in the case of such a patient that a differential

diagnosis is difficult; another psychiatrist might conceivably have diagnosed him as a case of paranoia, assuming, of course, no other symptoms were present than the ones mentioned in the report given above.

Catatonic schizophrenia is characterized by *negativism*, *catalepsy*, *suggestibility*, *stupor*, *excitement*, *mannerisms*, *stereotypy*, etc. Patients of this type are sometimes separated into two classes: Those characterized by stupor and those characterized by excitement. The onset of the disorder is usually somewhat gradual, marked by headache, insomnia, emaciation, loss of appetite, etc. On the other hand, the onset is occasionally very sudden, the patient usually going into a deep state of depression and stupor. In many of these patients the phases of excitement and stupor alternate in an irregular order. Catatonic stupor is characterized chiefly by stupor, negativism, and muscular tension. In its extreme forms the patient lies perfectly still, making no response if spoken to or, sometimes, even if a pin is thrust into him. He has to be tended and forcibly fed. Not only is he completely indifferent but he is usually negativistic—if he is told to open his eyes he closes them more tightly, if told to speak he compresses his lips. If the stupor is less extreme he may stand in the ward, assuming a certain posture without altering it for hours. An attempt to move one of his arms may be met by considerable resistance. In other cases there is a condition of wax-like rigidity of the muscles, the arms offering no resistance when moved and remaining in any position in which they are placed. This condition is called *catalepsy*. Along with this cataleptic condition there is found a peculiar sort of suggestibility—*command automatism*—the patient's doing in a mechanical sort of way whatever he is told. This heightened suggestibility sometimes leads to the patient's repeating the questions and remarks of the person who is talking to him—*echolalia*—and to the repeating of movements made in his presence—*echopraxia*.

It is common to distinguish two types of stupor: *Benign stupor* and *malignant stupor*. Some authorities make a diagnosis

of schizophrenia (dementia praecox) only in the case of the malignant stupor, classifying cases of benign stupor as manic-depressive psychosis.[1] Hoch and others have adduced rather conclusive evidence to the effect that benign stupors are almost invariably associated with delusions of death, the patient's often believing himself dead, or waiting to be put to death. In the case of malignant stupors there are not only ideas of death but other delusions as well. "In *malignant stupor* reactions there are, in addition to the fundamental symptoms of benign stupor, limitations of energy, emotion, and ideational content, . . . indications of fantastic thoughts, displacement of affect, anomalous symptoms such as inexplicable giggling and outbursts of rage, delusions other than ideas of death, and speech that is quite scattered, in short, inconsistencies in the stupor reaction and the inclusion of schizoid characteristics " [2]

In contrast to the stuporous phases which characterize these patients the alternating phase of excitement is marked with an increased psychomotor activity. Superficially this state bears a close resemblance to the excitement of manic-depressive psychosis. However, the actions are much more incoherent, are not directed toward any definite end, and frequently show a great deal of repetition. Thus the patient may make the same movement over and over almost endlessly, swaying the body back and forth, swinging the arms in a certain fashion, shouting the same thing over and over (verbigeration), as in the case of the woman who kept shouting "God damn!" from morning till night. This tendency to repeat the same phrase or sentence is clearly shown by the following example given by White.[3]

> "What is your name?" "How old are you?" "About thirty." "How long have you been here?" "A couple of years." "What do you do most of the time?" "Fold

[1] Hoch, August, *Benign Stupors*, Macmillan.

[2] White, Wm., *Outlines of Psychiatry*, p. 208, Nervous and Mental Disease Publishing Company.

[3] *Ibid.*, p. 209.

shirts in the laundry and mend clothes." "Do you talk to yourself?" "I do not talk to myself; talk to other people, also talk to all the people I run across." "What do you talk about?" "Talk about weather, etc." "What is that you say to yourself?" "Locks and keys, keys and locks, locks, keys, keys, locks, locks, locks, keys; just a sort of doggerel (perseveration). You know some of the attendants might get hold of me and punch me. Locks, keys, keys, locks, locks, keys, keys, locks. You know if they was to run across me making too much noise they might hurt me." "What do you say locks and keys for?" "Just to enjoy myself. You know there are times when there is nothing doing, and I have to do it to pass away the time, and you might just as well say something as nothing." "What did you say the other night to the students?" "Told them about locks and keys." "What else?" "Myriads of us keep growing in numbers, also in largenesses; locks and keys, keys, locks, locks, keys, keys, locks, locks, keys, keys, locks. Myriads of us quick-foot full through, ev-er no mat-ter. Locks, keys, keys, locks, locks, keys, keys. Myriads of us ev-er full us as keep lives giant's growths, ev-er lives giants keeper, ev-er no mat-ter. Locks, keys, keys, locks, locks, keys, keys, locks. Lives giant's wealth, health, and pleasures, ev-er no mat-ter. Lives sweet foreigners, ev-er no matter." "Can't you recite some more poetry?" "I cannot give any more; locks, keys, keys, locks, locks, keys, locks, Me don't know any more; locks, keys, keys, locks, locks, keys. I will get in trouble. I have been raking away at it outside and in and inside out again. I have tried to write poetry but could not write any more than six fools."

The tendency to *perseveration* which is well illustrated in the preceding example is to be observed in other slightly different forms. One patient repeats exactly the same sentence every morning upon the approach of the physician; another

walks up and down the same path or describes a circle always in his walking, or alternately flexes one and then the other arm. This tendency to stereotype certain reactions is called *stereotypy*. *Mannerisms* are also common, in which the patient may walk always against the wall, or always start off with the same foot, or stand on one leg, or swing one arm and hold the other rigid while he walks, etc. If asked why he does these things he will say he does not know, or that it is the will of the Lord, or give some other equally absurd answer, or not answer at all.

The following case illustrates some of the common features of catatonic schizophrenia.

CASE 57. Florence A. came of a middle class family of four children. She had always been rather quiet and introverted but pleasant and agreeable. At the time of her commitment to the hospital she was forty-three years old, married and the mother of five children. She had been married twenty-one years.

The onset of Mrs. A.'s disorder was somewhat gradual. For three years prior to her commitment her husband and neighbors had observed little peculiarities and changes in mood. She would become depressed and seclusive. She would attack the neighbor's children without any seeming provocation. She came to neglect her personal appearance and suffered from insomnia. There was an observable loss of interest in her home and family. A few days before she was brought to the hospital she caught up a neighbor's child and submerged it in a mud puddle.

Upon admission, Florence talked quite freely. She appeared to be disorientated for time and place but this may have been an expression of indifference rather than actual disorientation. She said that she had had no trouble at home and did not know why she had been brought to the hospital. On the second day after her arrival she refused to talk and sat staring at the ceiling.

When one of her arms was raised it retained its position. Later she said that she had been unable to move her arm but would give no explanation. On the third day she talked freely again and said that she wanted to go home. But she refused to eat. When she was told that she would have to eat before she would be permitted to go home she replied that she did not understand and then again refused to talk and stared at the ceiling. On the fourth and fifth days she had to be tube-fed and when asked questions would only reply that she did not understand. On the sixth day she arose early and dressed and said she wished to go home. On the eleventh day she was extremely restless and appeared unhappy. On the seventeenth day she became quite violent and tore her dress to shreds. By the fortieth day she was again eating of her own volition and coöperated with the attendants to a small degree.

Florence has now been at the hospital four months. There are still variations in mood and in her degree of responsiveness to her environment. Usually she will carry out commands in a mechanical, automatic sort of way. Occasionally she will not speak and sits staring at the ceiling giving no evidence of hearing what is said to her. She exhibits different manneristic acts, particularly grimacing and suddenly turning her head to the left as if listening. Occasionally she has been noted talking to herself. Auditory hallucinations are perhaps present.

Family history is good, with no evidence of hereditary taint. Physical findings are negative.

Into the *hebephrenic class* are placed those patients who do not fit, symptomatologically, into one of the other three groups and who are characterized particularly by *silliness*, *incongruity*, *mannerisms*, etc. The onset is usually quite abrupt and the prodromal period is generally marked by insomnia, headache, confusion, depression, hallucinations, and delu-

sions. The delusions are even more fantastic and bizarre than in the paranoid type, the hallucinations perhaps more numerous and prominent. All the symptoms seem to be of a more transient and unstable character. Thus the delusions are scarcely at all systematized and the patient does not assimilate them into his own personality. The speech may be almost completely incoherent, a veritable "word salad," devoid, seemingly, of all unity and meaning. Note the following example, given by White.[1]

> "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." "Do you know what year this is?" "Why, centuries ago." "Do you know who discovered America?" "Yes, sir; Columbus." "What year?" "1492; they have had several discoveries since then, sir." "When was the Civil War?" "That was in 1864–1860–1864." "Who was the President of the United States at that time?" "Well, let me see; they make you over again sir." "When did you enter the army?" "I entered the army, why it was centuries and centuries ago; not I but a body just like my remembrance around 1903."

[1] *Op. cit.*, p. 206.

"Were you ever in Cuba?" "Yes, sir; I was there three times. That was centuries ago; not I but my remembrance, because I had been killed; yes, I had been killed, I am positive of that. Over there originally—originally means first—they remake us. There are other stars like this. 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."

Perhaps in this type of patient more than in any other the condition of *intrapsychic ataxia* is apparent. The *silly laugh*, for instance, is very common; many of these patients begin to giggle at the appearance of every visitor and whenever spoken to. Some of them remind one strongly of the sexually excited adolescent girl, not only in the matter of their silly laughter but by ornamenting themselves with scraps of ribbon, colored strings, etc. Like the other types of schizophrenic patients they are emotionally quite apathetic and indifferent not only to their own appearance but also to the presence of others. It is not infrequent for patients of this class to expose themselves quite shamelessly regardless of who is present.

Some Experimental and Clinical Observations of Schizophrenics. During recent years a goodly number of experimental, psychometric, and other fairly well-controlled observations have been made upon schizophrenic and manic-depressive patients. The writer gives the following notations on some of these studies primarily for the purpose of acquainting the student with the nature of current approaches which are being made in an attempt to gain a fuller understanding of these conditions. Up to the present time very few reliable conclusions can be drawn from the results of these studies.

Mays[1] sought to measure the tendency to perseverate in

[1] Mays, L. L., "Studies of Catatonia," *Psychiat Quart.*, Vol. 8, 1934, pp. 728-735.

catatonic subjects by measuring the electrical resistance of the skin. He concluded that such patients manifested two or more times as much perseveration as normal individuals. He used only a small number of subjects.

Pinard[1] studied perseveration in 144 patients using the S Test, Triangle Test, Alphabet and Number Test, and the Mirror Image Test. He made a multi-modal classification of his patients according to the most pronounced symptoms, and with respect to degree of perseveration. The following table gives the results which he obtained.

E P —Extreme perseverators
M.P.—Moderate perseverators
M N.—Moderate non-perseverators
E N —Extreme non-perseverators

Number of Subjects	36	33	40	35
Degree of Perseveration	E N	M N	M P	E. P.
Type of symptom				
Mania	5	2	1	0
Melancholia	4	8	17	20
Obsessions	1	1	3	5
Hysteria	17	10	5	2
Anxiety	12	12	15	17
Paranoid state	2	4	7	8
Delusions	2	12	12	4
Hallucinations	3	2	6	5
Self-reproach	6	10	7	12
Antagonism	5	4	4	4
Eroticism	1	0	4	2
Suspicion	1	3	8	8
Sensitiveness	7	8	9	19
Depression	28	23	20	20
Ideas of reference	1	3	4	3
Regressive habits	1	3	2	1
Poor application	11	14	9	12

From the table it will be observed that no patient characterized by mania was an extreme perseverator while five such subjects were extreme non-perseverators; that twenty patients who were characterized by melancholia were extreme per-

[1] Pinard, J. W., "Tests of Perseveration," *Brit. Jour. of Psychol.*, Vol. 23, 1932, pp. 114-126.

severators while only four such patients were extreme non-perseverators, etc.

Freudians have long emphasized the "foetal posture" which some catatonic patients assume and have interpreted it as indicative of an unconscious wish to return to the comfort and security of the womb. By means of cameras and direct observations DuBois and Forbes [1] studied the sleeping postures of ten catatonic patients. They reported that foetal postures constituted less than 10% of the number of postures assumed and that less than 7% of sleeping time was spent in such postures. Comparisons with normal subjects were close and patients who assumed foetal postures during the day assumed a normal range of positions during sleep.

By means of photographic and other observations Forbes [2] studied changes in the cerea flexibilitas (catatonic rigidity) of five subjects in reference to sleeping and waking states. During sleep the rigidity all but disappeared and motility approached that of normal subjects. He concludes that explanations of experimental catalepsy and that of schizophrenic patients must provide a functional mechanism to account for the quick reversibility from sleep to waking and *vice versa*.

Page, Landis, and Katz [3] gave a questionnaire consisting of 50 typical schizophrenic behavior traits—according to the consensus of psychiatric opinion—to 100 manic-depressives, 125 schizophrenics, and 240 normal individuals. The table below gives a few examples from the questionnaire used. In the column headed "schizophrenic answer" the form of the answer is indicated which would be in accordance with the presence of the schizophrenic trait implied.

From their study the authors found or concluded: (1) Normal individuals reported 18 schizophrenic traits, schizophrenic patients reported 17.6 such traits, and manic-depres-

[1] DuBois, P. H., and Forbes, T. W., "Studies of Catatonis," *Psychiat. Quart.*, Vol. 8, 1934, pp. 546–552.

[2] *Ibid*, pp. 538–545.

[3] Page, James, Landis, Carney, and Katz, S. E., "Schizophrenic Traits in the Functional Psychoses and in Normal Individuals," *Amer. Jour. of Psychiat.*, Vol. 13, 1933, pp. 1213–1225.

Behavior Traits	% N.	% Schiz.	% M-D.	*Schiz. Ans.*
Prefer group sports to taking walks alone..	31	41	39	No
Have a limited range of interest	41	46	41	Yes
Find it difficult to concentrate	41	32	33	Yes
Feel different from others.	32	39	32	Yes
Blame yourself for misfortune	35	46	35	No
See things that others cannot	42	40	32	Yes
Tend to be carefree rather than serious-minded	65	58	52	No
Worry excessively over humiliating experiences	55	46	39	Yes
Are sensitive to criticism	72	58	61	Yes
Often occupied with your own thoughts . . .	84	70	65	Yes
Are talkative and unreserved	76	64	68	No
Believe people are after you	5	30	8	Yes
Hear voices that other people cannot hear	5	26	9	Yes

sive patients gave 14. (2) Analysis of individual traits fails to reveal a dichotomy of personality types—introverted, extraverted, schizoid, cyclothymic, etc. (3) Lack of agreement between clinical workers and experimental workers is perhaps due to the former's interpretation of personality as an organized whole and of the latter's as a sum of traits. (4) Either the questionnaire method is not a valid analysis of the hypothesis that "total personality" is basic in the development of the disease syndrome or the hypothesis is incorrect. The present writer suggests that the questionnaire method is hopelessly invalidated by the fact that the insane person is not capable of giving valid answers to questions which require introspection and self-analysis.

Some Theories of the Cause and Nature of Schizophrenia. Many writers are of the opinion that heredity plays the essential role in the production of this disorder. Stoddart says, "The history of the patients suffering from this disorder usually discloses the fact that they come of insane stock, generally on the maternal side, and frequently that theirs is not the first case of dementia praecox in the family." [1]

[1] *Op. cit.*, p. 317.

White, a well-known American psychiatrist, expresses his view, in part, as follows: [1] "Wolfsohn has made a study of the material of the Burghölzi Asylum at Zurich with a view to the determination of the frequency of the hereditary factor. Of 2215 admissions there were 647 cases of dementia praecox. About 90 per cent of these showed hereditary taint: of four hereditary factors insanity was the most frequent (about 64 per cent), followed by nervous diseases, alcoholism, and other forms of hereditary taint: heredity was combined in about 34 per cent. . . .

"Every individual born into the world has, if it could be determined, a definite potentiality for development. The force of the impetus which starts it on its path is sufficient to carry it a certain definite distance. The predetermined goal, in each case, will be reached if no accident intervenes to prevent. In the subjects of this disease the original impetus has been weak, only sufficient to carry them a short way and when its force is spent development stops and the retrograde process is hastened, or perhaps immediately initiated by some special physical or mental stress occurring at the critical point of puberty and adolescent evolution. As the French have it, these patients are 'stranded on the rock of puberty.'"

More recently some very interesting studies of the etiology of schizophrenia have been made. Rosanoff [2] and his coworkers studied 142 pairs of twins with schizophrenia in one or both twins. The twins were divided as follows: Monozygotic—41 pairs, dizygotic (same sex)—53 pairs and dizygotic (opposite sex)—48 pairs. In 68.3% of the monozygotics both twins were affected; in 14.9% of the dizygotics both twins were affected. A close similarity or identicalness of manifestation in the monozygotic schizophrenic twins was the exception rather than the rule. The authors concluded that the study suggested the following points: (1) Heredity is an important factor in the etiology of schizophrenia;

[1] *Op. cit.*, p. 192.

[2] Rosanoff, Aron J., Handy, Leva M., Plessett, Isabel Rosanoff, and Brush, Sandyl, "The Etiology of So-called Schizophrenic Psychosis," *Amer. Jour. of Psychiat.*, Vol. 91, 1934, pp. 247–286.

(2) hereditary factors by themselves are inadequate; (3) the pathogenic effect of hereditary factors is not highly specific; (4) hereditary factors are not always present and therefore are not essential to the development of schizophrenia. They further concluded that there are probably two etiological groups of factors in schizophrenia: Those in which psychogenic and hereditary factors play the prominent role, and those in which birth traumata are of primary importance. The authors go on to say: "We submit, as a part of our theory of so-called schizophrenic psychosis, that a large proportion of such psychoses originate in a cerebral trauma at birth or in childhood; that such cases are more prevalent in the male than in the female sex, and in young subjects than in those over thirty years of age; that the type of injury is often asymptomatic, or almost so, at the time of its occurrence; that it probably consists in subarachnoid and subpial hemorrhages upon the cerebral convexity in the frontal and parietal regions; and that it results in partial avulsions or detachment of the pia-arachnoid from the top and side surfaces of the gyri, causing interference with the blood supply, slow atrophy, and progressive impairment of mental function."

Pollock [1] and Malzberg studied the families of 175 cases of schizophrenia. In regard to the influence of hereditary factors they point out that of 329 siblings, giving a minimum of 66 cases according to Mendelian expectations, only 20 cases of different types of nervousness appeared. They believe that although inheritance ". . . plays a general role in the transmission of these diseases,[2] environmental influences nevertheless are also important factors."

Cotton held schizophrenia to be the result of focal infections of the teeth, tonsils, and colon. His naïve explanation of the disorder has received but scant recognition. Kraepelin advanced the idea of metabolic autointoxication as a result of disturbances in the gonads. Various other theories have

[1] Pollock, Horatio M., Malzberg, Benjamin, and Raymond, G., "Hereditary and Environmental Factors in the Causation of Dementia Praecox and Manic-Depressive Psychoses," *Psychiat. Quart.*, Vol. 8, 1934, pp. 553–599.

[2] They are speaking both of manic-depressive and schizophrenia.

come and departed. We may now examine briefly some of the psychogenic interpretations.

Schizophrenia, according to Adolph Meyer, is to be viewed as a reaction type and as the result of repeated failures to adjust to the environment. Before a diagnosis is made the individual's life must be viewed in long section, in regard to a considerable portion of the person's past and then, if such a perspective reveals a fairly constant inability to meet important and concrete situations and a tendency to compromise by resorting to day-dreaming concerning competition, sex, etc., a diagnosis of schizophrenia may be made. He sees the schizophrenic as characterized by an evasive attitude toward reality and by a tendency to compensate himself for his failures to adjust by the utilization of suspiciousness, fault finding, stubbornness, seclusiveness, hypochondriacal trends, etc.

C. G. Jung sees the disorder primarily as the manifestation of repressed complexes and as a regressive direction of the libido. The libido (the motivating or dynamic principle in the individual) may take either a forward or progressive or a backward or regressive direction. If the individual fails to make a proper adjustment to his environmental situations, his libido tends to become directed inward and backward. If the regressive flow becomes excessive, infantile modes of reaction and interests are re-awakened, latent archaic tendencies in the individual are activated, contact with reality is lost, and we have schizophrenia.

McDougall suggests that the secret to an understanding of schizophrenia is to be found in a study of the relationships existing between the mental dispositions which enter into the organization of the sentiment of self-regard. Thus he writes, "Now, the maintenance of normal social relations, normal *rapport*, is rendered possible only by a balanced harmonious development of the sentiment of self-regard; in normal healthy development we learn to oscillate smoothly and readily between self-assertion and submission, the excess of either tendency being prevented by the coöperation of the other; towards certain persons and certain phases of other

personalities we are deferential, admiring, docile, submissive; towards others, or other phases, we are self-assertive and dominating; in either case the affect expresses itself freely. The normal youth learns, through a thousand experimental approaches to other persons, to distinguish between those to whom he must defer and those over against whom he can assert himself; and thus he learns to range himself in his due place in the social order. But the schizoid [1] never learns to range himself comfortably in his due place; and, in spite of the strength of his self-regarding affects, they obtain no free and natural expression. The self-regarding affects are, as it were, nipped in the bud, inadequately expressed; their expressions are repressed." [2]

Summary. We have scarcely more than mentioned these different theories and interpretations of schizophrenia; and there are many others which we have not mentioned. For an adequate comprehension of any of them the student will need to refer to their original source. Without pretending any sort of complete understanding of this baffling disorder we offer the following summarization of what we regard as the most important factors in its development.

(1) In discussing the factors which underlie the development of schizophrenia Strecker and Ebaugh say: "You will recall that first there is a personality, introverted to a dangerous degree." [3] The present writer believes that there is a fairly definite distinction to be drawn between the introverted and the schizoid personalities. The schizoid is introverted, but more. Exactly what the differential factor is between the two is very difficult to detect. But certainly many extremely introverted individuals weather hardships and pass through life, perhaps largely in isolation, without ever manifesting schizoid traits. Perhaps the schizoid personality is more "intense"; perhaps he is more imaginative; perhaps he is deficient in some unidentified integrating factor in his psycho-

[1] The term "schizoid" is applied by Kretschmer to a personality type which is very similar to Jung's introvert type.

[2] *Op. cit.*, p. 387.

[3] *Op. cit.*, p. 378.

logical constitution. The simple introverted person tends to the development of a closely knit, strongly integrated personality, whereas the schizoid personality reveals a proneness to "splitting" and the development of unrelated mental systems or constellations. At any rate we would rather say that the individual who develops schizophrenia is characterized by an extremely schizoid personality—and this is essentially a matter of inheritance.

(2) The schizoid's turning away from his environment is quite different from his earliest reactions to it. It is the writer's belief that no person develops schizophrenia who does not early become over-invested, excessively involved, emotionally and in his interests, in some one or more concrete aspects of his environment. This involvement is usually with a parent, a sibling, or with the family as a whole. Thus Kasanin, Knight, and Sage [1] found maternal over-protection or rejection in 60% of the cases they studied. And Katz [2] observed a preponderance of older sisters in families contributing male schizophrenics. But over-protection or a preponderance of siblings of opposite sex would predispose to the development of schizoid reactions conceivably only in a child who was psychobiologically deficient or who was prone to an excessive intensity of response. The writer believes that the latter is particularly true of the schizoid personality. Thus the individual develops an unwieldly complex of racial motives.

(3) The schizoid personality is relatively incapable of making fine or discriminative feeling and emotional reactions; he tends to an all-or-none mode of response. Perhaps this is because of his early excessive emotional involvement; he becomes wholeheartedly attached to another person *before he learns how to become attached.* And this early acquired undifferentiated and unrefined racial attachment tends to stand in the way of his developing niceties of feeling and emotional response to other persons.

[1] Kasanin, Jacob; Knight, Elizabeth; and Sage, Priscilla, "The Parent-Child Relationship in Schizophrenia," *J. Nervous and Mental Disease*, Vol. 79, 1934, pp. 249–263.

[2] Katz, Seigfried E., "Constellation as a Predisposing Factor in Psychosis," *Psychiat. Quart.*, Vol. 8, 1934, pp. 121–128.

(4) Upon his reaching maturity our individual is greatly handicapped by his tendency to over-respond; to become interested in another person is, for him, to become slavishly interested. Quite a few cases of psychosis in women which occur in connection with childbirth are of the schizophrenic syndrome and are precipitated, the writer believes, by the mother's powerful inclination to become completely enslaved emotionally by her child (her feelings for her child). She reacts against this exaggerated tendency by withdrawing from her child (reality).

(5) The schizophrenic's symptoms all in all are defense reactions to, and withdrawal reactions from, a reality with which he has been incapable of coping. First, he withdraws his attention and interest from his external environment. Secondly, he obstinately refuses to substitute ideas and meanings of an adult caliber for the situations from which he has withdrawn; for such ideas and meanings would be too closely representative of the situations themselves. Hence, thirdly, his attention and interest can take only a regressive direction. We may now alter our first statement of this paragraph to read. His symptoms are manifestations of his motives, interests, thinking, etc., on a childishly imaginative and all around infantile level. The reactions which characterize this type of patient, then, are regressive, introspective, projective, perseverative, negativistic, and repressive.

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CHAPTER XVIII

SOME ORGANIC PSYCHOSES

GENERAL PARESIS; ALCOHOLIC PSYCHOSES; DRUG PSYCHOSES; SENILE PSYCHOSES

Definition, Frequency, Classification of General Paresis. General paresis (General Paralysis or Dementia Paralytica) is an organic psychosis, associated with, and primarily the result of, the invasion of the brain by the treponema pallidum (the syphilitic germ). The diagnostic value of the serological indices is essentially absolute; the neurological signs are all but conclusive; and the mental symptoms are fairly characteristic.

According to recent statistics of the United States Public Health Service, syphilis disables half a million Americans a year, which was nearly five times the number of persons disabled in automobile accidents during the year of 1934. Syphilis is responsible for more than 10% of all insanity, 18% of all diseases of the heart and blood vessels, and for many stillbirths and deaths of babies during the first few weeks of life. At the present time it ranks with cancer, tuberculosis, and pneumonia as one of the four great death dealing diseases of mankind; it is estimated that it does one hundred times as much damage as infantile paralysis and that one adult out of ten is syphilitically tainted or infected during his life time. General paresis is one of the many end-results of syphilis.

Various classifications of paresis have been offered. At the present time it is customary to distinguish four main types: *Simple demented*, *manic* or *expansive*, *melancholic* or *depressive*, and the *agitated*. In addition to these four fairly specific and typical varieties of paresis there are other conditions in which paresis appears to be superposed on a definitely psy-

chotic personality, resulting in a clinical picture of a functional-organic psychosis. Most common here are euphoric paresis, cyclic paresis, neurasthenic paresis, paranoid paresis, a catatonic and a stuporous variety.

Course and Symptomatology of General Paresis. "The *onset* is probably always gradual, even in the case where an acute attack first makes the disease manifest to those around it. Pupillary disturbances as well as transformations of character in many cases can be shown to have taken place a decade before the actual outbreak and symptoms like those of neurasthenia may for a few years exclusively announce the severe disease.

"But when the paresis is once noticeable, extensive remissions may simulate a cure. This hardly ever occurs in the simple demented form.

"The different manifestations may appear in an entirely irregular sequence. In the prodromal stage, i.e. before the disease is recognized, pupillary disturbances and those of writing, and transformations of character, are most frequent. A neurasthenic symptom, a paralytic attack, or another physical sign may begin the action just as well as a pronounced psychic syndrome, e.g. a senseless or criminal act. For the later stages, too, no rules can be set up, except perhaps that the excitements in severe dementia naturally readily assume the character of confusion.

"As the most frequent premonitory symptoms should be mentioned the *pupillary disturbances* and in complication with *tabes* the *absence of the patella* reflex, then irritability, anxiety, excessive ambitions or, the reverse, unusual weakness of will, twilight states lasting for minutes or hours, very similar in appearance to the epileptic, often with some incorrect act, attacks of dizziness, fainting spells, transient double vision, temporary failure of speech, sleep disturbances and especially the neurasthenic syndrome." [1]

Among the outstanding physical symptoms in paresis are the following: The pupils react sluggishly to light or not at

[1] Bleuler, Eugen, *Textbook of Psychiatry*, pp. 256–257, Macmillan.

all (Argyll-Robertson sign) while accommodation to distance perception is better preserved; the pupils are frequently unequal, abnormally dilated or contracted or changed in form; the patellar reflex tends to be exaggerated unless paresis is complicated by tabes in which case it is absent; muscular coördination suffers severely, particularly the finer movements necessary to speech and writing; sounds are run together, omitted, or displaced; and in writing, letters and syllables are omitted, perhaps entire words and sentences, and the writing is extremely awkward and incoördinated; frequently the tone of the mimetic muscles decreases and the nasolabial folds disappear, often more on one side than the other; tremors are common to the tongue; disturbances of the gait develop resulting in an irregular swaying walk with legs far apart; gradually the entire muscular system attains a condition of extreme spastic paralysis and the individual becomes quite helpless; incontinence of the urine appears and the bowels become sluggish; finally, attacks with loss of consciousness and convulsions are not unusual, and may last for seconds or days.

With respect to mental symptoms Landis and Rechetnick[1] noted the following frequency in a study of 100 cases:

(1) Memory disturbances are the prime psychological change in the early stages of general paralysis.

(2) Other changes in the order of their frequency:
Impairment in insight and judgment—85 cases
Impairment in counting and calculation—80 cases
Abnormality in affect and mood—80 cases
Impairment in reading and comprehension—78 cases
Abnormality in stream of mental activity—71 cases
Impairment in orientation—67 cases
Impairment in memory of recent past—58 cases
Impairment in memory of remote past—55 cases
Impairment in writing—52 cases.

(3) Improvement in retention and immediate recall is the most important (or apparent) psychological change during the course of recovery following treatment.

[1] Landis, C., and Rechetnick, Jos., "Changes in Psychological Function in Paresis," *Psychiat. Quart.*, Vol. 8, 1934, pp. 693–698.

The simple demented form usually is characterized by attacks in addition to the other physical symptoms. There is a gradual loss of mental efficiency, slowly progressing to dementia.

The manic or expansive type, sometimes called the classical type because it was the first form to be recognized, is characterized by a maniacal attack with intense feelings of joy, delusions of grandeur, strong impulses to activity. The patient may believe that he is God or even that he is a super-God; or he may believe that he is the possessor of trillions of dollars, many wives, hundreds of children; that he is the president of various banks and corporations. Or he may boast that he can lift fifty pounds or that he possesses an unusual fountain pen. One such patient boasted ceaselessly of his daughter's penmanship. A woman of this type may believe that she is the mother of all the persons in the world, that she gives birth to a child every minute or second and that she is the most beautiful of all her sex.

The melancholic or depressed form is featured chiefly by a persistent depression, or at least one with only mild fluctuations, with ideas and delusions of sin, impoverishment, and of nihilistic and hypochondriacal types. Usually these patients never come out of their depression, in the absence, of course, of the more modern methods of treatment.

The somewhat rare agitated form is accompanied by confusion, failure to recognize the environment, motor excitement without mania, hallucinations and illusions of hearing and vision, convulsive movements, gnashing of teeth, etc. In mild cases remissions sometimes occur in the absence of specific therapy.

Etiology of General Paresis. There is little to be said on the etiology of paresis, other than that the invasion of the brain by the syphilitic germ is an absolutely essential factor to its occurrence. Anywhere from a few to twenty or twenty-five years elapse after the contraction of syphilis—the time of the initial infection—to the advent of paresis. Why one individual who contracts syphilis later develops paresis while

another does not, is not yet known. Some have believed that paresis follows the contraction of a particular strain of syphilis. The consensus of opinion at the present time, however, appears to favor the assumption of other determining factors such as alcohol, head trauma, and various other aspects of the swirl of modern civilization.

The following case of general paresis, although not extreme in its manifestations, is fairly typical of the expansive form.

CASE 58. Helen O. was admitted to the hospital in August of 1934. She had been treated for syphilis for three years prior to this but her condition had become steadily worse. The results of the Wasserman tests may be of interest to the student. The variability which they showed, despite the fact that the patient was becoming steadily worse, should be noted.

Sept. 20, 1931	Four Plus
Sept. 22, 1931	Four plus
March 30, 1932	Negative
July 2, 1932	Two plus
August 6, 1932	Four plus
Oct. 11, 1932	Four plus
Nov. 19, 1932	Four plus
Jan. 21, 1933	Four plus
Feb. 1, 1933	Negative
April 29, 1933	Four plus
Aug. 1, 1933	Four plus
Oct. 26, 1933	One plus
Feb. 24, 1934	Negative
July 12, 1934	Four plus

At the time of Mrs. O.'s commitment her attending physician reported that she had become increasingly unreliable during the past year, manifested nervousness, over-activity, and impairment of judgment. She had ideas that she was of superior intelligence and of unusually high social position. She stated that she often had "hunches" and that she was never wrong. She believed

that she was a great painter. At times she was moody, depressed, and seclusive. She frequently complained of feeling tired, of weak spells, and of headache.

Upon admission Mrs. O.'s knee jerks were prompt and equal. Her pupils were equal and reacted both to light and to accommodation. She had no insight; she said that there had been something wrong with her mind but that the trouble had completely disappeared and that, in fact, she was mentally far superior to what she had been previously. She resisted coming to the hospital, refused to walk to the car, and fought with the sheriff and her husband.

Today, two years after admission, Mrs. O. shows marked deterioration. Her pupils are large and fixed to light; her knee jerks are absent. Her expression is vacuous; her memory is largely gone, as is her judgment. She does not know her son's age. Her speech and writing are extremely incoördinated and she is scarcely able to walk. Delusional formation is largely absent. Her existence has become almost entirely vegetative.

Although Mrs. O. has but a spark of mentality left, marks of culture and refinement still linger about her face and bearing. She is a gray haired woman of forty-eight who married at the age of twenty-two and bore two children. She had received a college education and her husband was a prominent man in the community. Prior to the onset of paresis she had never suffered from nervous or mental disorder with the exception that she "felt sort of dazed" for several months following the birth of her first child. It seems probable that she was syphilitic even at that time, twenty-one years ago.

Some Forms of Alcoholic Psychosis. Alcoholism may be the cart or the horse, it may be a principal cause of mental disturbance or it may be primarily a symptom of an already independently existing mental disturbance. Smalldon [1] con-

[1] Smalldon, J. L., "The Etiology of Chronic Alcoholism," *Psychiat. Quart.*, Vol. 7, 1933, pp. 640–661.

cludes that chronic alcoholism is usually compensatory for repressed wishes (a complex) which are denied fulfillment in reality, and that they are most commonly of a sexual nature, often homosexual. It is an established fact, of course, that alcohol, even in moderate doses, has a marked effect upon psychophysical functions. It diminishes physical strength, increases reflexes, lessens motor activity, lowers resistance to fatigue, decreases mental efficiency and clarity of ideation, dulls the memory, and diminishes emotional stability. It acts as an inhibitor (anesthetic) of the higher cerebral centers and thereby reduces volitional control of the impulses and emotions. Certainly formal studies are not necessary to the general knowledge that many persons seek to escape from unpleasant aspects of reality through the use of alcohol. Thus a person may commence the use of alcohol because of some existing maladjustment and later, following the excessive use of alcohol, develop a mental condition in which the alcohol is a prime etiological factor.

Alcohol affects different persons in somewhat different manners and to different degrees. Newman [1] made an interesting study of the effects of 40 cc. of 95% alcohol per square meter of surface area—about one-third the dose necessary for anesthesia—on 9 patients suffering from organic disease of the central nervous system, 32 psychoneurotic patients, and 9 schizophrenics. The following table gives his observations.

Effect	*Normal*	*Psychoneurotic*	*Schizophrenic*
Improved rapport.	100%	66%	11%
Increased volubility.	100%	78%	0
Euphoria.	33%	25%	0
Depression, crying.	0	34%	44%
Exaggeration of symptoms	11%	41%	33%
Loss of contact with reality	0	3%	100%

It is interesting to note that the alcohol intensified the tendency of the schizophrenics to withdraw from reality.

[1] Newman, Henry W., "Alcohol Injected Extravenously," *Amer. Jour. of Psychiat.*, Vol. 91, 1934, pp. 1344–1352.

This fact together with the further fact that there was a noticeable aggravation of symptoms in four of the nine patients suggests that the schizophrenic tended to oppose or react against the normal effect of the alcohol instead of in line with it. And from such studies as this and from our everyday observations we would conclude that the nature of an alcoholic psychosis which a given individual develops is quite as much determined by personality and temperamental factors as by the alcohol itself.

Pathological intoxication may be induced in some persons, particularly those of hysteric or epileptoid make-up, by even small doses. It is characterized by disorientation and confusion, and by visual illusions and hallucinations. It is accompanied by profound affective disturbances such as intense depression or anxiety and occasionally by outbursts of rage. Protracted sleep usually shortly intervenes after which there is amnesia for the events during the intoxication.

In pathological intoxication personality (emotional) factors are of considerable importance. Recently a man who had always drunk considerably but not to excess was deserted by his wife. He took his wife's desertion very much to heart, thought of suicide, begged her to return, and wept when she refused, etc. Then one evening while in the company of a friend he took a single glass of wine and almost immediately became pathologically intoxicated. Needless to say he is high-strung and not too stable.

Delirium Tremens is an acute psychosis which occurs only in the chronic drinker. It is attended by vivid illusions and hallucinations of a visual nature, sometimes tactual, restlessness, irritability, sleeplessness, and by fine tremors particularly of the fingers and tongue. There is an aversion to food. The hallucinations are fleeting and changeable and usually of a terrifying nature—of phantastic animals, snakes, toads, bugs, etc. The delirium often has to do with the patient's occupation and he tends to be incessantly busy carrying out imaginary details of his work. His emotions are very disturbed and usually alternate between attacks of fear, euphoria,

irritability and silly humor. The course of the disease is from three to ten days. Once prolonged sleep occurs the symptoms rapidly disappear. At the height of the delirium the pulse is rapid, irregular, and often weak; blood pressure is low. About 20% of cases die.

Korsakow's Psychosis is less common than the two we have mentioned. In its early stages it is similar to delirium tremens, but as it progresses the hallucinations disappear while the confusion and amnesia persist. There is marked memory loss, at first for recent and then for remote events. Clouding of consciousness and fabrication—filling in of memory gaps—are usually present. Anxious, irritable, dull, suspicious, and humorous moods are common. The disease is usually accompanied by or results in a polyneuritis of the central nervous system. The course of the disorder lasts for several months and severe cases never recover inasmuch as there is permanent damage to the cerebral substance.

Acute Alcoholic Hallucinosis is "selected" in preference to delirium tremens by certain chronic drinkers apparently because of personality factors. It is believed that chronic drinkers of a schizoid personality or temperament are prone to the development of hallucinosis. In contrast to delirium tremens the hallucinations are of an auditory rather than a visual character. The voices are threatening or accusatory and as a result of them the patient develops delusions. Not infrequently he appeals to the police or to other agencies for protection. Consciousness remains clear, in contrast to delirium tremens, and there is no amnesia after recovery for events during the course of the disease.

Generally recovery occurs in ten days to a month. Occasionally a case becomes chronic. In such an event the patient becomes less tense and reacts less violently to the accusatory voices. He may travel, however, from place to place, like the persecutory paranoiac, in order to get away from his enemies or the imaginary persons who accuse him, usually, of sexual offenses. The case given below is fairly typical of this type of alcoholic psychosis.

CASE 59. Henry C., fifty-six years old, was the second child in a family of two. His sibling was a brother, three years older than himself. Henry never married, perhaps as a result of the absence of sisters and girl companions during his formative period and of the isolated environment of his childhood. Having only one playmate, his brother, and being the younger by three years, Henry acquired the well-known inferiority complex, negative ego-identifications, and failed to develop social habits. His attitude toward others was always extremely subservient, and consequently when, at the age of twenty-two, he fell in with a group of young men who drank, Henry followed suit. For a number of years, however, he drank only when in the presence of others and even then he drank only beer. Gradually he stopped drinking beer and began the use of "moonshine" and other strong concoctions.

Despite the fact that Henry had never known the stabilizing influence of a wife and children, had lived most of his life alone and had but few friends, still he never drank to a dangerous degree till his place of business burned in August of 1936. During the earlier years of his adult life Henry had engaged in the ice business. Later, he entered into the poultry business. Although he had made no large amount of money still he had been reasonably successful and he had grown quite proud of his business and fond of his chickens. His chicken houses caught fire and burned. Henry was very much distressed and decided to obtain a pint of whiskey and drink it. The first pint was followed by an unknown number of other pints and at the end of a few days Henry was creating so much disturbance he was arrested.

Upon admission to the hospital Henry was violent and difficult to manage. He shouted back loudly and angrily at the "voices" which he heard and denounced his brother in no uncertain terms. He believed his brother "had it in for him" and had been trying to do him harm

and to interfere with his success for years. The "voices" were threatening him with harm but Henry showed anger rather than fear.

Henry's memory for recent events was poor. He could not recall the name or appearance of the judge who had him committed to the hospital; but he could say when he came to Idaho, tell the year of his birth, when he first began the use of alcohol, etc. He was not sure when his business burned and he thought that he had been on a trip. He was not sure where he was or of the month or year.

Henry's hallucinations gradually subsided, he became orientated, he lost (or suppressed) his feeling of hostility toward his brother and was discharged from the hospital at the end of three weeks.

Still other forms of alcoholic psychosis are distinguished by psychiatry, but the conditions which we have mentioned will suffice to give the reader a fairly clear idea of the nature of these disorders. Perhaps we should add that after long, continuous, and excessive use of alcohol some persons suffer complete mental deterioration, dementia.

Psychoses Due to Drugs. Many different poisonous substances if taken into the body over protracted periods of time produce disturbances of psychological functioning, warp the personality, undermine the character, and conduce to a general mental deterioration and dementia. As Strecker and Ebaugh point out, drug addiction may develop upon the basis of almost any kind of personality difficulty. Thus the initiating or predisposing factors in drug addiction and drug psychoses are very frequently of a truly psychological nature. Stress and strain, moodiness, anxiety and fear, general emotional instability, lack of strong positive ego-identifications and a specific orientation toward self and others, emotional tension and unsatisfied longings are common predisposing factors. Physicians and nurses contribute, proportionately, the greatest number to the ranks of drug addiction.

Of the many different forms of drug psychosis we shall mention only two and those but briefly. *Morphinism* is not so common but it is fairly illustrative of this general class of psychoses. It is usually accompanied by poor appetite and loss of weight, dry skin, coated tongue, faulty digestion, and constipation. The character changes are pronounced. The individual becomes increasingly indifferent to his obligations, unreliable and unmoral in general. He becomes extremely ego-centric. If he has gone for long without the drug he is restless and irritable, frequently anxious, and complains of pain and physical suffering. The following case clearly suggests the relationship which may exist between personality factors and the excessive use of drugs.

CASE 60. Lillian N. was forty-four years old at the time of her commitment. Physically, she was well preserved and well nourished. Her eyes were blackened as a result of a fight with a neighbor, and her forearms showed scars from the use of hypodermic needles. Reflexes were normal and Wasserman tests were negative.

Mrs. N. was the eldest child in a family of three. She came of sound Rocky Mountain stock and spent her childhood on a ranch. As a child she was very much of a tomboy (masculine identifications, probably) and at the age of twelve she was riding the range with cowboys. She says that she was never happy or satisfied, even as a child, and was always desiring more from life than she had or was able to obtain. She completed two years of high school. She says that she always felt cramped in school and thought the teachers were just a "bunch of silly old maids who did not know what life was all about."

At the age of twenty-six Mrs. N. married and later bore two children. She apparently never made a very satisfactory adjustment to married life. She did not have very much respect or admiration for her husband, feeling herself to be his superior in most respects. She tended to neglect her family out of interest in politics

and community affairs. After ten years of marriage she secured a divorce on the grounds of incompatibility and mental cruelty. A few years later she married a widower with sons and daughters. Her second marriage proved no more satisfactory than her first and in a few years she had become estranged from her husband.

Upon admission to the hospital Mrs. N. was partially disorientated and somewhat incoherent in her speech. She apparently suffered from hallucinations for she complained that others were reading her letters and that she could hear them as they read. She said she was brought to the hospital by one of her step-daughters who wanted to get rid of her. Actually she was brought to the hospital by the sheriff and her son. She complained that her father and brothers cheated her out of her property. She said she did not want her husband to know where she was for he would cheat her out of her property if he were able to locate her. She said that she was at the hospital by appointment of the governor and that there was nothing wrong with her mind.

Upon admission Mrs. N.'s memory was also markedly defective. She gave the year of her birth as 1882. She said that she began to suffer from a pain in one side of her head when she was twenty-nine but was unable to say what calendar year that was

She boasted of the wealth of her step-sons—who have no wealth. She said that she had a very important business which had to be carried on by air mail. After she had been at the hospital for a few days she said that her husband had visited the hospital the preceding day and was killed.

Mrs. N. admitted that she took drugs but excused herself by saying that she suffered much pain in her head and one ear. She stated that when she was twenty-six she suffered severely from a pain in her chest and was given morphine by her physician. Then, when she was twenty-nine, she began to suffer from pain in one

side of her head and again was given morphine. She says that thereafter she took morphine and barbitol regularly, with the exception of a five-year period during which she did not use drugs at all. Following this period she said she returned to the use of drugs and continued to use them since.

After six months Mrs. N. was discharged from the hospital as cured.

Mrs. N. had always been well liked and respected by her neighbors. The paranoid trends which were so obvious during her illness had not been noticeable prior to the occurrence of her psychosis. She had, however, always been regarded as unusually active and dynamic and not too satisfied.

Cocainism is characterized by more frequent psychotic reactions than morphinism. The addiction may result from the repeated and frequent application of preparations containing cocaine to the mucous membranes. Cutaneous hallucinations are fairly common in which the patient complains that he can feel bugs crawling on his skin. Inasmuch as he is unable to see the insects he may hallucinate them visually or believe that they are under the skin. Often such patients are unduly suspicious and may develop delusions of persecution.

Following a dose of cocaine the patient experiences a sense of exhilaration and euphoria. He is very talkative and exhibits an unusual pressure of activity. A young man of this class hiked for twenty-five miles with a heavy pack over mountainous trails. He was small and thin. Upon reaching camp he appeared to be scarcely able to move. But after a dose of cocaine he became almost immediately exhilarated and active and proceeded to chop wood for two hours.

When the effects of the drug wear off the patient feels weak and depressed. The withdrawal of the drug apparently occasions less distress, however, than in the case of morphinism. Yet it is said that relapses are even more common than in the other. Relapses are the rule rather than the exception in most forms of drug addiction.

Senile Psychoses. These conditions comprise about 8% of mental hospital admissions. Many additional cases, however, are to be found in homes for the aged. They are progressive mental disorders characterized particularly by defective mental functioning and by impairment of memory for recent events

Senile psychosis is an organic disorder etiologically. Actual brain destruction occurs as a result of cerebral arteriosclerosis, old age, toxic factors, and possibly hereditary influences. The greatest incidence is between the ages of sixty and seventy-five, and it is held by some that alcoholism hastens the appearance of the disease. Microscopical examination reveals distinct changes in the brain substance. Cortical sections show atrophy with loss of ganglion cells and increase of glia. The blood vessels are prominent due to their thickened walls. There is an excessive amount of fat throughout the cortex. In brief, the cellular picture shows great decrease in number, fatty changes, atrophic changes.

The senile psychoses are classified into the usual clinical varieties—simple, delirious, depressed, agitated, paranoid, etc. The simple dementia comprises about 50% of all cases, delirious and confused, 18%, depressed and agitated, 7%, and the paranoid type, approximately 16%. There is usually a prodromal period lasting several months, featured by irritability, insomnia, weakness, anorexia, seclusiveness, etc. The patient becomes emotionally dulled, poor in judgment, more or less disorientated, self-centered, given to violent outbreaks of temper, morally lax, obstinate, penurious. The following case is fairly typical of senile dementia, showing depression and agitation, hallucinations and disorientation, and marked loss of mental capacity.

> Case 61. Harriet H. is now eighty-five years old and has been at the hospital for one year. Her son, who brought her to the hospital and with whom she had lived for some years, reported that she had become restless and often did not sleep, that she would have periods

of confusion and disorientation and lose her way about the house, and that of recent months she had grown unusually irritable, depressed at times, and given to violent outbursts of temper.

Upon admission to the hospital, Harriet manifested hallucinations of sight and hearing and frequent periods of depression. She occasionally declared that she was going to commit suicide but never made any actual attempts. The most outstanding characteristic of her condition was her extremely poor memory. Two days after admission she said that her son had not brought her to the hospital and that he had not been present at all at that time. She was unable to say when or where she was born. She was unable to say when or where she entered school or how long she attended. She was unable to say when she married or when she came to Idaho. She said that both parents were dead but did not know when they died.

During her year at the hospital, Harriet has also suffered from disorientation and lack of insight. At the present time, she is disorientated for time and place. She does not know the year but thinks it may be 1919 or 1920. She does not know where she is and is disinclined to venture a guess. She thinks there is nothing mentally wrong with her and says that her plans for the future are to obtain another good meal. During recent months her periods of depression have decreased noticeably and she now appears to be fairly contented. No hallucinations are apparent at the present time.

Mrs. H. was the youngest child in a family of four, two sons and two daughters. There is no history of nervous or mental disorder in her family. She married sixty-three years ago and gave birth to two children, a son and a daughter. Fifteen years ago her husband died and during most of the time since she has lived with her son. There is no record of previous nervous or mental trouble.

With due allowance for her age, physical findings are essentially negative. Today she presents the picture of a white haired old lady with but a glimmering of mentality left. Each day she has to be shown her place at the table.

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CHAPTER XIX

SLEEPING

Why We Study Sleeping. Sleeping and the topics to be discussed in the two following chapters,—dreaming, and suggestion and hypnosis,—have a twofold interest for the student of abnormal psychology. First, they are of interest in themselves as more or less distinct types of activity and, secondly, they provide the student with a means of gaining considerable insight into the nature of mental organization and personality in general and, when carefully studied in relation to a specific individual, of gaining a better understanding of that individual's particular personality or mental make-up. Also, of course, they may become definitely abnormal if employed for some purpose other than their psychobiologically proper one, or if they become greatly exaggerated or diminished.

Some Aspects of Sleeping. We shall begin our discussion of sleeping by assuming it to be a definite reaction of the individual, rather than merely an absence of reaction, a view which will, we think, become clearer and thoroughly substantiated in the course of the chapter. The first thing to attract the psychologist's attention in observing the sleeping individual is that he does not respond to the forces or stimuli in the world about him as he does in the waking state. We may speak to him but he does not answer or give any indication of having heard us; we turn on the light and still he sleeps on; we brush our hand across his face but he gives no sign of perceiving it; we may even hold a bottle of hydrogen sulphide to his nose without getting any response. In short, we can say that the stimulus-thresholds have become raised, or that the threshold of consciousness is higher than in the waking state. But now, note a significant fact: If the sleeping person is a mother whose sick child is at her side

or in the adjoining room, a cry or sound from the child, which is ever so much lighter than the various sounds coming from the street, or the talking and laughing of others in the adjoining rooms, etc., will wake her at once—at least such is frequently the case. We must not be too ready, then, to generalize by saying that all stimulus-thresholds are raised during sleep; we can only say that in general they are higher. It is probable that under certain conditions an individual may be actually more responsive or sensitive to particular classes of stimuli during sleep than he is during the waking state.

Not only is the sleeper less responsive in general to his surroundings than the wakeful person, but his sensitivity to stimuli varies greatly from time to time during the sleep-period. A number of investigators have endeavored to measure the depth of sleep for the different phases of the sleep-period in terms of the intensity of a particular stimulus required to wake the sleeper. De Sanctis and Neyroz [1] experimented upon four normal subjects over a period of six months, using as their measure or criterion pressure stimuli applied to the forehead of the subject. They found that their subjects reached the greatest depth of sleep during the second hour, after which the sleep gradually became less profound till the usual time of awakening. In most of their subjects, however, there was a second phase of considerable depth during the fifth or sixth hour. In general their results are in agreement with those obtained by other investigators; but none of the studies has been sufficiently thorough and comprehensive to permit of generalizations. Obviously there are many difficulties to be met in the establishment of adequate controls in an experimental study of this kind

But, although the burglar and the tardy husband might well consider the depth of sleep its most pertinent aspect, there are certain other features which promise greater interest to the psychologist. Certain of these features pertain, more

[1] Sanctis, S. de, and Neyroz, W., "Experimental Investigations concerning the Depth of Sleep," *Psycholog. Review*, Vol. 9, 1902, pp. 254–282.

strictly speaking, to the period immediately preceding or following sleep, the period when the individual is half asleep and half awake, so to speak, and which has been called the *subwaking* or *hypnagogic* period. Dunlap suggests [1] that the most significant change that occurs with the approach of sleep is in respect to attention. It becomes increasingly difficult to sustain the attention with reference to any coherent or unified or coördinated type of activity, the attention and thinking tending to shift constantly to other things and from these to still others, making it extremely difficult, for instance, to solve a mathematical problem or to follow a logical discourse or argument. At the same time there is a narrowing of the range of attention. This is shown by the loss of efficiency in any complicated activity involving a wide range of attention (the unification of the different aspects of a situation and the rapid shifting of attention from one thing to another in a definite order), as, for instance, driving an automobile through heavy traffic, playing a new and difficult selection on the piano, or even playing a game of bridge. On the other hand, if the activity is strongly habitual, well stereotyped, "sleepiness" has far less influence upon it. Thus one may undress, or recite a familiar poem, or do simple problems in multiplication without any great difficulty even though he is on the verge of sleep.

Other aspects of the hypnagogic period are brought out when we view it from an introspective angle. Perhaps the most marked change which the individual observes as he becomes sleepy—besides the "feeling of sleepiness" itself—is a loss of interest both with respect to the present and the future. We all know how interest and enthusiasm tend to lag upon the approach of sleep, and we know how difficult it is to elicit the sleepy person's interest in a projected outing, an approaching football game, or even in some event of international significance. At the same time sleep is not something which comes along and overrides the individual's interest and volition whether or no. It is a common fact that strong

[1] Dunlap, K., "Sleep and Dreams," *Jour. of Abnor Psychol.*, Vol. 16, 1921, pp. 197–209.

interest, once aroused, tends to inhibit sleep, the same being true of any strong emotion or feeling. Thus, sleep on the one hand and interest, anticipation, desire, emotion on the other hold a reciprocally antagonistic relation to each other; to the extent to which the one is aroused the other is typically inhibited or absent. Or, as McDougall expresses it: "The most important single condition of sleep is, perhaps, peace of mind."

Perhaps the "feeling of sleepiness" is nothing more than a sort of composite of these factors which we have mentioned and of certain others. The individual not only loses interest and finds it difficult to pay attention but there is also a definite positive tendency (inclination) to ignore various types of stimuli, to assume a comfortable position, and even to avoid or withdraw from situations which are not conducive to sleep. We have often heard someone say, "Leave me alone, let me sleep," "I want to go to sleep," "Stop that noise, it keeps me awake," etc. If questioned, such a person will often emphatically state that he has a positive desire to sleep, that he has no interest at the time in anything else. On the physical side there is an inclination to yield to the force of gravity; the head begins to sag, the arms hang loosely at the sides, the tonicity of the musculature in general becomes lowered. This tendency toward a state of general relaxation is usually first experienced in the eyelids which become heavy and have a tendency to close. With the coming on of sleep, or a deeper stage of sleep, this tendency to relax gradually spreads throughout the body and we ordinarily find if we attempt to move the limbs of the sleeping person that there is no positive resistance. As the individual becomes more sleepy we note also a general loss of coördination in his movements; his walk is more awkward; skilled movements lose their smoothness and accuracy. We might say, from a physical point of view, that sleep is characterized by a condition of general incoördination or functional dissociation and greatly decreased innervation. Likewise we shall find that sleep when viewed from a mental or psychological

point of view offers considerable evidence of being a condition of general dissociation. Finally we may mention that many of the bodily functions become altered during sleep: The pulse rate becomes slower, respiration becomes slower, blood pressure decreases, while on the other hand sleep is supposedly conducive to such processes as digestion and anabolism.

The apparent ability of certain persons to awaken at any time which they may elect beforehand has provoked a number of studies. Omwake's[1] study of 20 college girls is fairly typical. The subjects were simply instructed to decide before going to sleep on a specific time for awakening. From her observations she arrived at the following conclusions: (1) The ability to awaken at a specified time is a special ability. (2) Half of the subjects awakened within 30 minutes of the time specified in 40% of trials. (3) One subject, if she awakened at all, did so at the exact time. (4) Those who believed they could awaken at a specified time did very much better than those who questioned their ability to do so. (5) Attempting to awaken at a specified time disturbs sleep. (6) The per cent of correct awakenings following the hour of 4:30 was much greater than the per cent of awakenings before that hour.

Considerably more light would be shed on this question of the ability to awaken at a specified time if a comprehensive study were made in which frequency and content of dreams and depth of sleep were checked. All subjects could be required to report their dreams and a control group could be used as a check of any variation in depth of sleep due to the intention to awaken at a given time. After all we may be dealing with nothing more subtle in those persons who show an unusual ability to awaken at a specified time than a reduced depth of sleep and a continuous preoccupation with the idea of waking.

Certain other aspects of sleep will be mentioned in connection with various theories of sleep, which follow topically,

[1] Omwake, Katharine T., "Study of Ability to Awaken at a Specified Time," *Jour. of Applied Psychol.*, Vol. 17, 1933, pp. 468–477.

and in connection with the abnormal aspects of sleep and in our discussion of dreaming.

Some Theories of Sleeping. 1. *Physiological or Circulatory Theories of Sleep.* On the one hand it has been held that sleep is due to cerebral anemia, and on the other that it is due to cerebral hyperemia. The former theory appears to have met with the greater favor, being supported, according to its advocates, by the fairly well-established fact that during sleep there is a decrease in the blood pressure in the brain. But it has been suggested by Dunlap [1] that since the blood pressure throughout the body becomes less during sleep, it cannot be said *a priori* that there is a relative decrease in blood pressure in the brain. The blood vessels relax, and the heart beat becomes slower, with the result that the blood pressure becomes less generally.

But, even though it could be definitely established that there is relatively less blood in the brain during sleep, or, if the opposite of this were to become an unquestionable fact, we certainly should hesitate to accept it as an explanation of sleep. It would be quite as logical to explain sleep on the basis of the general muscular relaxation, or the slower respiration, or any other of the physical correlates of sleep.

2. *Histological or Neurodynamic Theories of Sleep.* Following the work of Golgi and Ramon y Cajal, establishing the independence and continuity of the neural elements, Cajal advanced the theory that the expansion and contraction of the neuroglia-cells gave rise to the appearance and disappearance of states of consciousness. Subsequently to this, Mathias-Duval advanced the hypothesis that sleep is due to the contraction of the protoplasmic processes of the neurones. This, of course, would widen the synapses and consequently (theoretically) make it more difficult for nervous excitations to pass from one neurone to the next. But unfortunately this rather ingenious theory has little if any experimental support. No one has ever observed the contraction of the neurone-processes during sleep, although it has long been known

[1] *Op. cit.*

that changes of this sort follow long, continuous stimulation. But we must not be led to assume offhand that sleep necessarily involves changes similar to those found in conditions of over-fatigue, or other sleep-like states; much less that it is the result of such changes. Sleep, so far as is known, is as unlike certain other states of "unconsciousness" as it is unlike the waking state—perhaps more so.

Johnson proposes a somewhat different neurological theory of sleep, assuming the existence of a system of neurones which, when activated, bring about sleep. He says: "We would then say that the sleep mechanism is made up of neurones which one may call sleep neurones, just as we speak of motor neurones, and we would suppose that they possess the same general properties and in a general way obey the same laws as the other neurones. . . . In other words, the sleep neurones would inhibit other cortical neurones by the so-called drainage process." [1] This writer thinks it likely that the catabolic products in the body act as a stimulus to throw the sleep mechanism into operation, which not only drains off the excitation from the other cortical centers but whose excitations are conducted to the lower centers in the brain and the spinal cord. This latter fact, he assumes, may account for the organic changes during sleep and also for the fact that certain psychological factors are conducive to the approach of sleep.

Apparently it is assumed to begin with that sleeping is a positive reaction, and this being the case it is necessary to postulate the existence of some mechanism for the execution of this reaction. But to assume a separate and distinct mechanism which functions only in relation to sleep is seriously to risk a violation of the law of parsimony. Neither does such a theory offer any satisfactory account of dreaming and the abnormalities of sleep.

3. *Chemical Theories of Sleep.* Early in the nineteenth century it was proposed by Marshall Hall that sleep was a kind of

[1] Johnson, G. T., "Sleep as a Specialized Function," *Jour. of Abnor. and Social Psychol.*, Vol. 18, 1923, pp. 88–96.

epilepsy. Subsequent investigations into bio-chemistry and the nature of toxicity led to the assumption by Pryer that sleep is a condition of self-intoxication resulting from the toxic substances produced by the catabolic processes in the tissues. These toxins are supposed temporarily to put the brain centers out of order, thus bringing about a condition of insensibility and inactivity—a sort of mental and physical paralysis, as it were. A slightly different view, held by some, is that sleep is the result of the consumption of the intra-molecular oxygen in the brain tissue, leaving the nervous system less sensitive to stimulation.

There are certain very serious objections to these theories. For instance, they do not take adequate account of the fact that over-fatigue—an over-accumulation of toxins—frequently results in a state of sleeplessness instead of sleep. Nor do they account for the fact that many individuals sleep whenever they have nothing else to do, quite regardless of the time of day and the amount of sleep they have had. Moreover, one would expect the individual to return, necessarily, to a state of wakefulness as soon as the toxins had been practically eliminated or more oxygen accumulated; whereas, in fact, many persons wake up on Sunday morning only to turn over and sleep several hours longer as soon as they recall the day of the week.

4. *Psychological Theories of Sleep.* Manaceine[1] "explains" sleep as being the resting time of consciousness—which Sidis says is only to point out a perfectly obvious fact. But Heubel[2] perhaps goes a step further in lending tenability to the psychological interpretation of sleep when he assumes that consciousness is dependent upon incoming peripheral stimulation, and that in the absence of such stimulation consciousness ceases. He points out that the individual goes about the exclusion of peripheral stimuli when he undresses, assumes a comfortable position, relaxes, turns out the light, and closes his eyes.

[1] Manaceine, Marie de, *Sleep: Its Physiology, Hygiene, etc.*, Scribner's.

[2] Heubel, "Abhangigkeit des wachen Gehirnzustandes von ausseren Erregungch," *Pfluger's Arch.*, XIV, 1877.

That psychological factors play a very significant role in the inducing of sleep in the case of the human adult can hardly be doubted; but in view of the fact that millions of people sleep nightly in the midst of distractions, we can hardly believe that the sole requisite for sleep is the elimination of peripheral stimulation. Or, if it is, then certainly we must assume that elimination of peripheral stimulation is dependent upon some positive reaction of the individual other than merely a physical withdrawal from exciting factors. Neither are most psychologists inclined to take for granted that consciousness at any given moment is solely dependent upon peripheral stimulation; nor do they view sleep merely as a loss of consciousness.

Woolbert[1] attacks the problem from a purely behavioristic point of view. He assumes the neuro-musculature of the body to be arranged in a hierarchy of levels or systems. Those systems which develop earliest in the individual, such as respiration and circulation, are the most basic to life and are the most strongly established or integrated. At the other end of the scale are those systems concerned with speech and thinking, the functioning of which determines consciousness. In between are the systems concerned with the other everyday activities of the individual. Now sleep is merely a cessation of the functioning of the higher systems, and the depth of sleep depends upon how far down the scale the cessation of activity extends. In complete sleep the organism is under the dominance of the lowest systems.

The theory is perhaps as satisfactory as one would expect. Like any behavioristic concept it is merely a description, for the most part, of certain observable facts. We all know that along with sleep there is a cessation of most of the activities of the individual; but to identify this cessation of activity with sleep is hardly a justifiable procedure. Following out the theory logically leads its author to assert that sleep is impossible during widespread activity, such as walking, talk-

[1] Woolbert, C. H., "A Behavioristic Account of Sleep," *Psychol Rev.*, Vol. 27, 1920, pp. 420-428

ing, etc. Yet we all know that it is not uncommon for individuals to talk during their sleep, or even to walk, to say nothing of that very interesting and often quite complex activity which we call dreaming.

5. *Biological Theories of Sleep.* Claparède was perhaps the first to advance a concisely formulated biological theory of sleep. He conceives of sleep as an instinct, an inherent, adaptive reaction of the individual to certain needs. Thus he says: "Le sommeil n'est pas un état purement négatif, passif, il n'est pas la conséquence d'un simple arrêt de fonctionnement: il est une fonction positive, un acte d'ordre réflexe, un instinct qui a pour but cet arrêt de fonctionnement; ce n'est pas parce que nous sommes intoxiqués, on épuisés, que nous dormons, mais nous dormons pour ne pas l'être." [1] The individual does not sleep, then, because of poisoning from toxic substances or because he is exhausted. In short, according to this view, sleep is a positive act, the purpose and result of which are to bring about a cessation of most of the functions of the individual.

The reader will observe at once that this view is fundamentally different from those which we have been discussing, and it is perhaps one which offers a better approach to an understanding of the true nature of sleep. But what evidence is there to support the view that sleep is an instinctive reaction?

First we have the fact that most, if not all, vertebrates sleep, i.e. more or less periodically assume a rest-state, become relaxed, inactive, and seemingly oblivious of their surroundings. Boris Sidis and others have made some very interesting studies of the rest-states of certain of the lower animals, human infants, and children. Sidis investigated various aspects of the rest-state in frogs, guinea-pigs, cats, dogs, human infants, and children.[2] He found that if he placed a frog on its back and held it there for a few minutes,

[1] Claparède, E., "Esquisse d'un théorie biologique du sommeil," *Arch de Psychol*, Vol. 4, 1905, pp 245-349.

[2] Sidis, B., "An Experimental Study of Sleep," *Jour. of Abnor. Psychol.*, Vol. 4, 1905, pp. 245-349.

restraining all movements, the frog's eyes soon closed, its body became semi-rigid and immobile, and he could hang it over the side of a glass jar and carry it around the laboratory without "waking" it. Along with the semi-rigidity or wax-like condition (catalepsy) of the muscles, the frog showed a tendency to maintain any position in which it was placed. In the guinea-pigs he observed quite similar phenomena, although the cataleptic condition was less marked than in the frogs. On the other hand he discerned a more pronounced "sub-waking" (hypnoidal) state, i.e. a condition of apparent drowsiness or lethargy intervening between the sleeping and waking states. The cats (kittens) showed a still more marked hypnoidal state but not very marked catalepsy. In his experiments on the puppies he discovered that after the puppy had been "put to sleep" a number of times by wrapping a cloth around its body to curtail its movements, it was necessary merely to place the individual in the customary position to induce the sleep-state. If it were shortly aroused, it would appear sleepy and when left alone would soon relapse again into the sleep-state. During the hypnoidal state, or period between waking and sleeping, he was able to observe definite cataleptic conditions. He succeeded in inducing sleep in human infants of a few days of age simply by restraining all movements, while in children of nine he obtained cataleptic states, and hypnosis and fully developed hypnoidal states in children of thirteen. From his results, Sidis concludes that both sleep and hypnosis in human adults have developed or evolved from a hypnoidal or primitive rest-state similar to that found in many of the lower animals.

Whether we are inclined to agree with the particular conclusions drawn by Sidis, we can hardly deny that his work offers very strong evidence for a biological theory or concept of sleep in the human individual. Surely it is worthy of note that the child sleeps very soon after birth, certainly long before it can have become conditioned to various psychological factors. Therefore we can hardly consider sleep to be nothing more than a reaction to certain psychological factors,

as some seem to do. At the same time we are in no sense forced to ignore or under-estimate the significance of psychological factors in accepting the biological theory. Exactly what the nature of the stimuli is which calls forth the sleep-reaction in the infant is not known; it seems highly probable that they are principally of a chemical nature. But that the reaction should later become strongly conditioned to certain psychological factors is entirely in keeping with all facts relating to the conditioning of instinctive reactions.

Moreover, it might be pointed out that since man has not developed nocturnal vision, he has always been forced into a passive or quiescent state with the approach of darkness, since to venture forth would be to run into his foe, or walk off a precipice, or bump his head against a tree. (Of course it is but comparatively recently that man has enjoyed the advantages of artificial light.) Along with this enforced idleness at night we may perhaps assume that there has developed a periodicity of bodily functioning and an anabolic-catabolic relationship or ratio which is only sufficient to maintain the activities of the individual for a few hours at a time, except in case of extreme need when the reserve of energy may be called upon. Thus there has developed, in keeping with certain aspects of the environment, a tendency to relapse into a state of inactivity once in every twenty-four hours, which tendency has proved adaptive in sparing the individual possible risks and dangers which he would have inevitably encountered had he been wont to continue active after darkness had robbed him of his sense of vision.

In keeping with this we are led to infer that darkness, the exclusion of light stimuli, is one of the requisite and natural stimuli for the inducement of sleep. This condition of darkness is doubly assured by the preliminary reaction of closing the eyes, which is apparently common to all animals which sleep. We should further expect any factor which has a restraining or inhibiting effect upon the voluntary movements of the individual to act as a sleep stimulus since general muscular inactivity is so invariably an aspect of the

sleep-state. Thus, as some have pointed out, one may appreciably aid himself in going to sleep by voluntarily inhibiting all movements. Moreover, there are innumerable physical and psychological factors which tend either to inhibit or conduce to sleep, depending in part upon the previous experience and conditioning of the particular individual.

We may tentatively assume, then, that sleep is the expression of an innate reaction-tendency which has developed in relation to a certain aspect of the individual's environment. Furthermore, we must infer that there is a definite reaction-mechanism which is thrown into operation when the individual goes to sleep; although we need not assume the existence of a distinct and separate neuronic system which functions only during sleep. Finally, we may suggest as some of the many psychological factors which are instrumental in eliciting the sleep-reaction, the sight of the room where one customarily sleeps, an awareness of the approach of the usual time for going to sleep, others retiring, having nothing to do, finding oneself in a boresome or unpleasant situation, and, in many cases, the approach of darkness. In the lower animals as well as in man the tendency to sleep, at certain times and in certain situations, is expressed in part by the preparatory behavior which precedes sleep. The animal sniffs, walks around, seeks a comfortable place, and assumes the proper position for going to sleep; the man yawns, stretches, undresses, raises the window, turns off the light, goes to bed, and, perhaps, props his knees comfortably against his chin—and goes to sleep. That these reactions, in general, together with the relaxation of the body, are primarily the expression of a definite positive tendency which to be elicited requires its own adequate stimuli is suggested, in part, by the easily observable fact that it is next to impossible to relax completely unless one is sleepy and desires to sleep. The reader may quickly test this out by trying to relax while sitting in a straight-backed chair and in a wakeful state. If he really succeeds, he will either slide out upon the floor or hang over the side as limp as a wet rag. On the other hand, if the sleep-

reaction has already been aroused, it will be almost equally impossible for him to remain alert and to maintain an upright position.

Some Abnormalities of Sleeping. Having gone as far as we can at the present time in establishing the nature of sleep, the next matter of interest is the so-called abnormalities of sleep. Many of these, strictly speaking, are merely coincidental with sleep rather than true aspects of it. That is, certain mental reactions which are in themselves more or less abnormal, are more readily manifested during sleep than in the waking state for various reasons which will become clear as we proceed. We shall take up only the more significant of these reactions.

Perhaps the most common condition or reaction relative to sleep that can be considered abnormal is *insomnia* or *sleeplessness*. Insomnia may take any one of several forms: One individual experiences a great deal of difficulty in going to sleep; a second individual complains of broken or fitful sleep, waking many times during the night without any very apparent cause; a third individual falls asleep soon after retiring only to wake up shortly and remain awake the rest of the night. In most of those who are troubled with insomnia, however, all these various forms are found.

The causes of insomnia may be arbitrarily divided into two general classes, physical and mental. Of the first we shall say but little. Any kind of physical suffering—aches, pains, dizziness, nausea, etc.—is conducive to sleeplessness, as is well known. Certain drugs are sleep inhibiting, as well as lack of physical exercise, over-eating, and, frequently, overfatigue.

From our point of view the mental causes are of more importance. These are legion and are always, apparently, of an emotional nature. It is a generally known fact that any strong emotion—fear, anger, anxiety, sex-excitement, horror, disgust, despair—are outstanding inhibitors of sleep. In this connection we might again recall McDougall's statement to the effect that peace of mind is perhaps one of the

greatest requisites to sound sleep. Anything that tends to destroy one's peace of mind, whether it be strong anticipation of some future event that is of unusual interest, or a recent disappointment in domestic or business matters, or an unresolved state of anger or fear or excitement, prevents one from obtaining the necessary relaxation without which normal sleep is impossible.

Of less frequency are those cases of insomnia which result from some more or less permanent mental state or attitude such as fear or dread of going to sleep, or a persistent intense longing for some unacceptable or unattainable goal. Thus one person could not go to sleep because of anxiety lest he should commit some immoral or criminal act before waking; and another is obsessed by the belief that if she goes to sleep she will never wake. As somewhat similar to this last we may recall the patient in the mental hospital who spent most of her waking life seeking assurance from those about her that that day would not be her last—she had considerable difficulty in going to sleep at night. A third individual found it difficult to sleep because he was constantly worrying or anxious lest some injury should befall his mother. An analysis revealed that he "subconsciously" wished that his mother might meet with some accident and thus free him from her too strict guardianship.

Mental conflict is a frequent inhibitor of sleep and the reader will recall that we mentioned insomnia as being a characteristic symptom of neurasthenia. Moreover we believe that insomnia, like many other mental symptoms, may be viewed as a defense or protective reaction. How often do we hear someone offer sleeplessness as an excuse for not doing better, say in an examination. True, he may not have slept well the night before, but he also may have got a certain satisfaction the night before from his anticipated sleeplessness. He may reason, "I am not going to sleep well and therefore I shall not do myself justice in the examination tomorrow." He thus provides himself beforehand with an excuse for not doing better. As we have implied before the

individual usually prefers believing that he cannot do something to knowing that he cannot do it.

Finally we may mention as a fairly frequent inhibitor of sleep, excessive day-dreaming. Many individuals lie awake for hours after retiring, building "air-castles," not only unable to sleep but perhaps preferring their day-dreams to the sleep which they really need. In keeping with this cause of insomnia and certain of the other causes we have mentioned, we should expect insomnia to be more characteristic of the introverted than of the extroverted personality.

In contradistinction to the insomniac is the individual *who sleeps to an abnormal or unusual extent*, not including those persons troubled with "sleeping sickness" or some other chronic organic disorder. The inclination to sleep too much, i.e. more than seems natural or necessary, can often be understood as a withdrawal or defense reaction to an uncongenial situation. Certain psychoanalysts carry this interpretation to an extreme, contending that sleep is not only a defense reaction but that it symbolizes in an active way the desire to return to the peace and security of the mother's body—they point to the fact that so many individuals assume a curled-up position in going to sleep. But it is unnecessary to go this far in order to view, as defense reactions, certain cases characterized by a disposition to sleep considerably more than is usual. For instance, note the following case. It is given in the words of a mother speaking of her small son.[1]

> CASE 62. When Millard was four years old, he threw a piece of glass at a boy, and the boy happened to be what they call a "bleeder." I guess this frightened Millard nearly to death. Apparently no one saw him do it. He came into the house and said, "I'm tired; I want to go to sleep." I did not know, then, of course, what had happened, though he actually looked as though he would fall asleep then where he stood. He was always

[1] Willey, M. M., and Rice, S. A., "The Psychic Utility of Sleep," *Jour. of Abnor. Psychol.*, Vol. 19, 1924, pp. 174-178.

affected like that when he did anything wrong, and he actually would lie down anywhere, perhaps under the bed, and go to sleep at once, even with his hat and coat on. He always would sleep until I woke him for his next meal. Not infrequently I would be going around the house and find him asleep. Then I would know that he had done something wrong.

The same authors report a second case, that of a married man, in which sleep seemed to serve as a defense or escape reaction. Prior to his marriage, this man had led a very active life quite unlike the monotonous routine of his post-marital existence. He habitually became sleepy early in the evening, i.e. about ten o'clock, and retired. But when his wife went on a vacation and he enjoyed greater freedom—perhaps imaginary as well as real—he did not become sleepy until considerably later in the evening and he did not experience any need for more sleep. Under analysis he stated that since his marriage he had missed the excitement and freedom of his pre-marital life, that his life was very uninteresting, and that when evening drew on he became more and more sleepy until he could no longer keep his eyes open.

Cases similar to this one are not unusual. How often has the reader found himself almost overcome by sleepiness when he sat down to "cram" for an examination in an uninteresting subject? And how easy it is to become sleepy when asked to go somewhere in the evening if one does not wish to go. It is not an uncommon complaint among wives that their husbands are always too sleepy in the evenings to go calling. And there appears to be no good psychological reason why the sleep-reaction might not become conditioned to almost any stimulus or situation and consequently occasionally appear in the role of a defense or escape reaction.

Mention has already been made of the fact that during sleep one is not necessarily equally immune to all stimuli of the same intensity or even of the same mode. In other words, one may go to sleep "set to respond" to a certain

type of stimuli, as when the mother reacts by waking to the cry of her child, or the fireman to the fire alarm, while stimuli of much greater intensity are unheeded. The intensity of the stimulus necessary for eliciting a response in such cases apparently need be no greater than in the waking state, and indeed it is probable that it need not be as intense. The nature of the mechanism underlying this interesting phenomenon—sometimes described as "sleeping with one eye open"—is by no means certainly understood. It may be observed that it operates in the same manner as a "mental set" in the waking state, but this helps us very little to understand its nature. It has been suggested that the "subconscious" remains on guard during sleep, shunting all irrelevant stimuli to one side, as it were, but letting certain ones, because of their particular significance to the sleeper, enter consciousness and thus bring about an awakening. In the light of the psychological data we have at the present time, the notion seems a bit fantastic.

There are many reactions which, when they occur during sleep, are to be considered more or less abnormal. Among these are *talking and walking during sleep*. We believe that in all cases of this kind we are dealing with phenomena of mental dissociation. Studies of individuals who walk during their sleep have revealed that the walking is an expression of some quite definite motive and that there is mental activity of a distinctly purposive nature associated with it. One sleep-walker went to the bath room regularly every night in her sleep. An analysis of her case revealed that several years before, when she was a girl in her early teens, she had frequently gone to the bath room and left the door open in the hope that her step-brother, with whom she had been sexually intimate, would surprise her there. Hence in a very true sense her sleep-walking had a definite purpose and meaning. Another young woman while asleep told her friend of some very intimate family matters. Upon learning from her friend in the morning what she had said she was quite perturbed, feeling that she had compromised others. We know from

our previous discussions that a complex mental system may function quite independently of the personality as a whole, and this is what appears to occur in the case of walking and talking during sleep. These facts together with others incline us to view sleep, psychologically, as a state of general dissociation, and our consideration of that most interesting and significant of all sleep-phenomena, dreaming, will lend support to this view.

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CHAPTER XX

DREAMING

On the History of Dreaming. Unlike sleeping, dreaming has always aroused the interest and curiosity of man. Many ancient peoples believed dreams to be the visitations of foreign spirits during sleep, while others thought them to be the experiences of the soul which left the body during sleep and wandered to distant and strange places. Hippocrates (460–354 B.C.) was of the opinion that during sleep the soul hovered about the body, seeing, hearing, reflecting, grieving, and that upon waking such activities were recalled as dreams. Lucretius (98–55 B.C.) believed that the soul was made up of tiny particles, one from each cell of the body, which held the same relationship to each other as the corresponding cells; and that the soul was able to leave the body and to engage in various activities which for the body itself were impossible. The nocturnal activities of the soul while the body lay in slumber constituted and were remembered as dreams. Certain savage tribes are said to refrain from waking a sleeping person for fear of frightening the soul away; while many persons of our own time and civilization believe dreams are communications from a supernatural being, usually divine, and that they are to be interpreted as forebodings.

Thus if we search carefully enough, we shall find that in all ages and in all countries dreaming has incited the curiosity and stimulated the imagination of man. In many ages of the past, the interpreter has held a position of unusual respect, even reverence, in the eyes of his people, and even today the self-styled prognosticator of dreams (or a reader of hands or heads) may easily occupy a position of some importance in the minds of the more ignorant. But with the rapid sweep of scientific thought and discovery and the development of means of quick communication, the problem of dreams and

their interpretation became largely relegated by most thinking persons to the rubbish heap of man's outgrown past. In short, dreaming was not solved or even theoretically understood; it was simply discarded as a problem of little significance and unworthy of serious study. At least this was essentially the status of the dream-problem forty or fifty years ago, except for a few serious but spasmodic attempts to make sense out of what appeared to be utter nonsense.

Then an unusually venturesome Viennese psychiatrist, Sigmund Freud, undertook a serious study of dreams in connection with his observations and treatment of mental patients. And, although there were extant several dream theories at the time of Freud's advent into the psychology of dreaming, yet if one were to compare the dream literature of the forty years immediately preceding the publication of Freud's *Interpretation of Dreams* with that of the last forty years, he would inevitably conclude that the present widespread scientific interest in dreaming is primarily due to the impetus provided by this one writer. This implies, of course, that most of the present literature on dreaming is in some way definitely related to Freud's views, which is quite true.

But before considering Freud's or any other theory of dreams we must familiarize ourselves with some of the more important aspects of dreaming.

How Much Do We Dream? Dreaming may be briefly defined as mental activity during sleep; and it is generally assumed that it is an episodic phenomenon which may or may not occur. In keeping with this assumption, much has been written about the frequency of dreams, their length, their relation to the depth of sleep and to the internal and external condition of the sleeper. But the bare fact of the matter is that the assumption that most sleep is dreamless, devoid of mental activity, an assumption which is so universally accepted as to be seldom questioned, is based entirely upon the fact of the individual's ability, or inability, to recall any dreams when he wakes If the individual is unable to recall anything when he wakes, it is assumed that he did

not dream, that he has nothing to recall. But a moment's reflection will convince one that such an assumption is really without the slightest factual basis to support it. On the other hand there are several bits of evidence which tend to support the view that mental activity is continuous from waking to sleeping and on to waking, that our mental activity is a true continuity.

First, if the individual's mental activity during his waking hours is a true causal sequence of events, strictly deterministic in nature, it appears hardly likely that this sequence comes to an end every time the individual goes to sleep and then begins again when he wakes. *Secondly*, if we had no other means of proving the continuity of mental activity during waking life than the individual's ability to recall at the end of each eight- or ten-hour period his different thoughts, desires, feelings, emotions, perceptions, etc., we should perhaps believe waking mental activity to be as episodic and intermittent as is generally assumed of mental activity during sleep (dreaming). *Thirdly*, we find some evidence of the continuity of mental activity during sleep when we turn our attention to the subwaking or hypnagogic period. For some time after retiring—the time varying greatly for different individuals—one remains thoroughly alert and wide awake; he is fully conscious of himself, of where he is and what is going on about him. But gradually consciousness of his physical surroundings and of himself fades away and he passes into a state akin to abstraction or reverie. Mental activity continues but a change occurs in what we might term the personal or "I" element; the mental activity of the individual ceases to have as a reference point either self, as self exists at the moment, or an aspect of the present objective situation. In short, among other things, the individual loses self-consciousness. If the individual is not disturbed, he will slowly pass into normal sleep which, as we said in the last chapter, is characterized by mental dissociation. But if we arouse the individual during the hypnagogic period, we learn of a very interesting fact: He reports that he was thinking,

that his mind was active, as we say. Moreover, he will tell us that in a strict sense *he* was not thinking but rather that thinking seemed to be taking place quite without any participation or direction on his part. He may only vaguely recall what seems to him to have been a veritable host of thoughts, mental images, etc., all of which tended to fade away immediately upon his awakening. Had we not awakened him till morning, in all probability he would have been absolutely unable to recall even having had any thoughts during the hypnagogic period. And we may assume either that the mental activity characterizing the subwaking period comes to a stop as the individual passes into a deeper stage of sleep or that it continues throughout the night but for the most part is not recalled upon waking in the morning. The latter appears to be the more logical assumption.

Fourthly, de Sanctis and Neyroz[1] observed that certain of their subjects almost invariably reported when awakened that they had been dreaming. That the others did not does not necessarily mean that they had not been dreaming; it is equally probable that they simply failed to remember their dream-thoughts, due largely to the sudden shift in attention upon being awakened. *Finally*, we may mention the fact that some individuals report dreaming a great deal, while others say they never dream. It appears hardly likely that this is literally true. Perhaps the latter simply do not recall their dreams; we all know how readily we tend to forget our dreams.

The facts which we have cited are among the reasons which lead us to postulate a continuity of mental activity during sleep; and a dream is merely a phase of this continuity of activity. The reader must keep in mind, however, that neither this assumption nor the contrary one (that of sleep devoid of mental activity) has an adequate basis in established fact at the present time. The former assumption simply appears to be the more logical one in view of what facts we have.

[1] Sanctis, S. de, and Neyroz, W., "Experimental Investigation concerning the Depth of Sleep," *Psychol. Rev.*, Vol. 9, pp. 254, 282.

Having postulated a continuity of mental activity during sleep, we are not concerned with accounting for dreaming but only with the nature of it. Therefore let us examine some of the fundamental characteristics of dreams and certain classes of universally common dreams.

Dreams Are Symbolical. The apparently phantastic and bizarre nature of dreams reduces under close study to a matter of symbolism. Once the symbolism is understood, no dream is absurd. As Dunlap[1] says, any fact which stands for or represents some fact other than itself may be correctly regarded as a symbol. In other words any two associated words, facts, events, objects stand to each other in the relationship of fact and fact symbolized, for the person in whose mind they are associated. Certain facts are more or less universally associated with certain other facts and therefore stand as symbols of the latter in the minds of nearly all persons. Thus a flag is a symbol of a nation; a six-pointed star is a symbol of perfection; white is a common symbol of purity; red is frequently a symbol of passion; the Croix de Guerre is a symbol of courage. Science, literature, and art are largely symbolical expressions of motives, thought, and interests.

As we have said, any fact which has become associated with another fact assumes a symbolical meaning. It is not necessary for us to enter into a discussion of the various laws of association—similarity, contrast, contiguity in experience, etc. But let us point out that although there are certain universal symbols, it is never possible to say offhand what symbolical meaning, if any, a given fact may have for a given individual. Dreams can be correctly interpreted, therefore, only after one has gained a close acquaintanceship with the past experiences, the present situation, and the present interests of the dreamer.

Dreams are usually symbolical, perhaps because of the mental dissociation which exists during sleep and the fact that the dream activity tends to be dominated or determined

[1] Dunlap, K., "Sleep and Dreams," *Jour. of Abnor. Psychol.*, Vol 16, 1921, pp. 197–209.

by a single motive or interest. This being the case the dreamer of necessity uses whatever ideational vehicles of expression are available to him at the moment. And since experiences of the previous day are the most easily recalled, the dream is usually couched in terms of the previous day's events. These events or experiences, however, are given a symbolical significance in the great majority of cases.

Dreams Are Subjective and Centripetal Phenomena. A dream may always be given a strictly subjective interpretation. Thus if a person appears in a dream in addition to the dreamer, or if any other fact of whatever nature is present, this person or fact may be translated in terms of motives, interests, and inclinations of the dreamer. To illustrate: A repressed young woman dreams that she is walking across a lonely field late at night. She sees a man approaching her and becomes afraid. The man appears to be of a rough and primitive sort. She is certain in her dream that he has designs on her virtue. She runs as fast as she can but he steadily gains on her. An aunt of very staid and indomitable character and whom the dreamer has never liked suddenly appears and the dreamer takes refuge behind her. Now applying what we said about the subjective and centripetal nature of dreams to this dream, the man in the dream is simply the young woman's repressed interest in men; his threatening appearance is her fear of men; the aunt is but a representation of the young woman's own safeguards, her ego-identifications with chastity, strength of character, etc.

In the case of some adult dreams, the dreamer does not recall having taken an active part in the dream activity. Such dreams might incline us to infer that some dreams are concerned with the motives and problems of others and not of the dreamer. An analysis of such dreams reveals, however, that however passive the dreamer may have appeared in the activity of the dream, he was still the central figure. Just as one may be represented by proxy in situations of waking life so may one express his dream-motives through the activity of others.

Dreams as Imaginary Wish Fulfillments. Freud has contended that the great majority of dreams are imaginary, symbolical fulfillments of sexual wishes. If we were to use the term "wish" in such a broad sense as to include all motives of every description then we too could agree that dreams are implicit, symbolical wish fulfillments. We could not agree however that all wishes, even dream wishes, are of a sexual nature, using the term "sexual" even in the widest possible sense. But there is no justification for using the term "wish" in such an unrestricted sense. It is quite easy to distinguish between the child's wish fulfilling dream of receiving candy and the adult's dream of falling from a high scaffolding or of being unable to find his hat when he wishes to catch a train.

Some Dreams Are Self-repudiating Reactions. Dreams of frustration are often to be interpreted as self-repudiating. A young woman who was characterized by exaggerated egoistic aspirations dreamed that she was leaving her home with a male escort. They came to a picket fence and her escort offered to help her over the fence. She refused his offer, desiring to express her ability to take care of herself, her independence of others, particularly members of the opposite sex toward whom she felt a sense of rivalry. But when she endeavored to climb the fence she was unable to do so and was forced to accept the help of her escort. As he assisted her over the fence she became aware of multitudes of persons watching her, and she became very chagrined at her failure. An unusually egoistic, self-centered young man dreamed that he was on a very high platform from which he could easily gaze out over his surroundings. But the platform seemed very unsteady and he was in danger of falling. There is nothing surprising about the fact that certain dreams are of the nature of self-repudiating reactions. How often does an individual consciously "frown upon" his exaggerated aspirations to personal distinction or superiority in waking life!

On the other hand a dream of frustration or of danger might

be a safeguarding reaction. A young unmarried man dreamed that he and his brother were to board a train. They arrived at the depot just as the train was leaving. They both ran after the train. The dreamer's brother overtook the train but the dreamer was unable to run fast enough. In telling this dream the dreamer commented that it was strange that his brother should have overtaken the train inasmuch as the dreamer had always been the better runner. Taking a train often symbolizes making some radical change in one's life. The dreamer had been *anxiously* contemplating marriage, anxiously because he had always been self-effacingly subservient to his mother and sisters and marriage vaguely promised nothing better than becoming still more completely submerged by his self-negating tendencies toward the opposite sex. The dreamer's brother was already married and therefore, he overtook the train; the dreamer could not bring himself to the point of getting married and therefore he failed to catch the train. And this brings us to another and extremely important aspect of dreams.

Dreams Never Lie. The meaning of a dream is always true of the dreamer in the most fundamental sense. The dreamer whom we just mentioned did not marry; he developed neurotic symptoms which made marriage impossible. The young woman who ran away from the man in her dream later learned that she was so obsessed by her interest in men that it constituted a positive danger to her. A young man, already mentioned in an earlier chapter, who dreamed of a witch responded with the word "mother" when he was unexpectedly asked of whom the witch reminded him. Amidst sobs he protested that he had not meant to say mother and that there was no sort of connection between his mother and his ideas of a witch. But after he dried his tears he admitted that his mother had always exercised a witch-like influence over him although he had not recognized (faced) the fact before. A young mother dreamed repeatedly that her child was dying. It was almost heartbreaking for her to admit that

if it were not for her child she could go away with her lover and be happy.

The Anxiety Dream. The anxiety or fear dream is common to both children and to adults. It has been generally assumed that it is due to a carry-over of anxiety or fear from waking life, that the individual is confronted by some fear exciting situation, or anticipates such, in his waking life and that he therefore is disturbed by fearful thoughts during his sleep. The writer is of the opinion that most fear dreams are the result of an incentive within the dreamer to conquer fear in himself. Just as children "delight" in fear exciting games because, we believe, they aspire to a mastery of their fear, so does the dreamer confront himself with a fear exciting situation in order to try to master his fear. If waking thoughts and feelings of the preceding day tended to carry-over and to determine dream content, then obviously dreams would be a mere replica of waking experience. But such obviously is not the case. The child or man of reasonable courage who escapes from a dangerous situation during the day does not have a fear dream at night. On the other hand, the person who has only an inadequate control of fear and who experiences a fear exciting event during the day does tend to be troubled by fear dreams. He reinstates the situation in an effort to gain a mastery of fear. One may easily observe that it is the timid child who delights most in fear games—provided they are not too fearful.

Protest and Escape Dreams. Dreams of being nude or only partially clothed have received considerable attention from Freudian writers, their most frequent interpretation of such dreams being that they are due to a repressed exhibitionistic tendency. But this interpretation is untenable in the light of certain facts. The dreamer is usually not erotically excited; rather his attention is on the fact that other persons pay little or no attention to the fact of his nudity. The writer is of the opinion that these dreams are most commonly of the nature of a protest against undue restraint, often of an inner sort. In his dream the individual is dis-

regarding all social taboos and impositions and declaring his freedom from all restraints. In the great majority of cases, the dream of being nude is egoistically and not sexually motivated.

Kinesthetic dreams or dreams of levitation, flying, falling, etc., have always excited considerable interest and comment. As the name indicates, the kinesthetic senses (muscle, tendon, and joint) are assumed to play a prominent part in the determination of such dreams. Kimmins found in his studies of the dreams of children only very few dreams of this nature up to the age of ten, after which they became quite frequent. And correlated with this observation is the long-standing contention made by certain ones that at about the age of ten or eleven the individual tends largely to relinquish visual imagery in favor of the verbal and kinesthetic modes. But the extent to which peripheral stimulation (or sensations and perceptions) determines the trend and content of a dream, any dream, is still a highly debatable question. Horton,[1] for instance, believes the flying-dream to be conditioned or stimulated by respiration. Thus, the subject dreams he is soaring up and down because of the rhythmical rise and fall of the chest in breathing. Without denying that such a factor may be active in the flying-dream, we may still question it as a wholly adequate explanation. The observations reported by Mrs. Arnold-Forster [2] on her own dreams of flying suggested that such dreams may readily become the vehicle or nucleus of a very rich and varied mental activity. In the beginning, she tells us, she remained very close to the ground and flew only short distances at a time, but later she acquired more courage and also the ways and means of flying at any height and for any distance she desired. Gradually her flying-dreams became a very elaborate and fundamental aspect of her dream-life, and one from which she derived a great deal of pleasure. If, in the beginning, they were simple mental reactions conditioned by physicological

[1] Horton, L. H., "How 'Stimulus and Reaction' Explains Levitation Dreams," *Jour. of Abnor. Psychol.*, Vol. 15, 1920, pp. 11-35.

[2] Arnold-Forster, Mary, *Studies in Dreams*, Macmillan.

changes of a specific sort, certainly in the end they became a very elaborate mental system or structure.

Dreams concerning events which have not occurred at the time but which do take place later have led to much speculation and to certain unwarranted conclusions held by many. That one may sometimes correctly surmise in his dreams the occurrence of a certain future event, his conjecture being based upon a knowledge of certain present facts, is undoubtedly true. There is no obvious reason why he should not occasionally do this in his dreams just as he does it every day of his life in his waking state. But that the dream is ever a prognosticator of events of personal fortunes, good or bad, in terms of anything else than the factual knowledge which the dreamer possesses at the time, is highly untenable in the light of all known facts. On every hand we hear of instances of an individual's dreaming about something which later happened just as he had dreamed it; and such cases are cited by many sincere persons as evidence that the dream in some mysterious way foretells future happenings. To take a specific example: Recently a young woman dreamed that her mother received a letter from one of her several daughters (i.e. a sister of the dreamer). She told the dream at breakfast and shortly afterward a letter arrived from the person in her dream. Now, how do you explain that, the writer was asked. Not so difficult to account for in the light of certain definite facts. The young woman readily admitted that she had dreamed of hundreds, perhaps thousands, of events which had never happened afterward, so far as she knew. On the other hand she was able to recall but one or two of her own dreams which had "come true." Moreover, she knew that it was likely that her mother should receive such a letter almost any time and, we may assume, just as she might have entertained a thought during her waking state of her mother's receiving a letter, she had the thought during sleep, which, like most dream-thoughts, was accepted as being true. In other words, the two phenomena, the dream and the arrival of the letter, were merely coincidental.

It is highly probable that all dreams of the above nature are to be explained in essentially the same way. True, some of them seem extremely baffling, simply because one does not have at hand all the necessary facts. But one should not feel called upon to interpret or explain any isolated phenomenon; an event becomes tangible only when the various aspects of the situation in which it occurred are known. Too frequently the individual who has one of these prophetic dreams is so eager in his desire to baffle the person he asks to explain it that he offers very little assistance by way of recalling related or significant facts.

Dreams as Attempted Solutions of Personal Problems. In our dreams we deal with the same facts and problems with which we tend to deal in our waking lives. There is one very notable difference, however. In our waking life our thoughts, feelings, and reactions are determined or shaped to a considerable extent by our environmental situation; in our dreams the environmental situation is absent. It accordingly follows that a dream is a condensed and concentrated implicit approach to some specific problem without due regard for environmental factors which pertain to the dreamer's life situations. Note the following dreams.

> An attractive young married woman dreamed that she and her husband were to be married. The wedding ceremony was to be quite elaborate with many attendants and flowers. In her dream she and her husband started up the aisle of the church—and then everything faded out.

This is the sort of dream which one should not tell at the breakfast table. The young woman's dream was simply an unsuccessful approach to the problem of her unhappy marriage. In her dream she was reviewing the incident of her marriage and stating quite definitely that if she had it all to do over again she would not do it, she would not go through with her marriage. Incidentally her unhappiness was not due to any shortcomings of her husband; rather she

had been in love with another man when she married but had thought him too reckless to be a safe partner.

A young woman of twenty had been inveigled into a sordid love affair with a man of about her father's age. She sought desperately to repress her interest in the man with the result that she developed a sort of hysterical daze or confusion-state. A younger man had shown a genuine interest in her and had wished to marry her but she had not been interested in him. In the analysis of her case the writer had endeavored to awaken more interest in the young man and in the idea of marriage as a means of counteracting her fixation on the older man. After a few weeks she had the following dream.

> Miss Y.—as we shall call her—dreamed that she went one night to her sister's home. There were two men sitting on the porch. One man was fairly distinct and had a baby on his lap; the other was indistinct and seemed to be sitting back in the shadows of the porch. As Miss Y. entered the house, her sister told her that the man with the baby on his lap was waiting for her to go out with him. Miss Y. went upstairs to change clothes. It seemed to her that she had an orange colored dress and a blue dress. She could not decide which dress to wear. After trying first one on and then the other innumerable times she put on the blue dress and returned downstairs. She could not find the man with the baby. She asked her sister where the man had gone and the sister replied that he had gone to a funeral. She felt somewhat distressed and felt that she should have gone with him. The other man had simply faded from her dream-thoughts. She awakened feeling depressed.

There can be little question as to the essentially correct interpretation of this dream. The young woman was struggling with her fixation on the older man. During the analysis she had been induced to aspire more strongly to marriage, children of her own, and respectability. The man with the baby represented or symbolized her future in such a direction;

the other man represented the darkness and personal obscurity of a future in line with her fixation. The orange colored dress symbolized marriage—orange, orange blossoms, weddings; the blue dress represented her strong but self-effacing attachment to, or future with, the older man—he always wore blue suits without exception. Thus in her dream Miss Y. was endeavoring to make up her mind as to which mode of life to accept. Her fixation was still too strong—she put on the blue dress. Putting on the blue dress meant the rejection of a future with a younger man, marriage, children, etc. Hence upon returning downstairs the young man had gone to a funeral; the dreamer had buried such a future for herself. Needless to say, Miss Y. continued her relationship with the older man for some time following this dream although prior to the dream she had stoutly declared that she was through with him for all time—a dream never lies.

Dreams and Emotional Stability. A study made by Berrien [1] suggests that there is no correlation between emotional stability and frequency of dreams, or, we should say, frequency with which dreams are recalled. Eighty-one college students were used as subjects. They were requested to record all the dreams they were able to recall each morning. The frequency of dreams was then correlated with the Thurstone Personality Schedule and with the Colgate B_2. The results are given below.

	Thurstone		*Colgate* B_2	
Per cent of nights on which dreams were recalled	121	.08	.125	.07
Average number of dreams or fragments each night	035	081	075	.074
Average number of clearly recalled dreams	187	078	159	075

These insignificantly low correlations are not particularly surprising. All persons who have ever worked with psycho-

[1] Berrien, F. K., "A Statistical Study of Dreams in Relation to Emotional Stability," *Jour of Abnor. Psychol.*, Vol. 28, 1933, pp. 194-197.

neurotic patients know that among such persons the content of the dream is far more significant than the frequency with which dreams are recalled. The writer would unhesitatingly predict that if the content of dreams could always be correctly interpreted or understood that a positive correlation approximating 1.00 would be found between this aspect of dreams and the nature and severity of the individual's personality problems.

Some Theories of Dreaming. Our discussion of dreaming would not be complete without brief mention of some of the more important theories of dreaming.

1. *The Perception-Illusion Theory of Dreams.* This is one of the older and more conservative dream theories. It assumes that the dream is a response to various stimuli which are acting upon the individual during sleep. The perception of the stimulus does not lead to the normal or logical associations since (it is assumed) the association tracts are partially blocked during sleep. This leads the mental processes (nerve impulses) to pursue the paths of least resistance, resulting in such associations as are determined by the factors of recency, frequency, and intensity of past waking experiences. In short, the dream is a free association process, undirected by any interest or "mental set" and unchecked by any awareness of the physical world. In this way the absurd and fantastic nature of dreams is explained. According to this theory, the dream is essentially as meaningless and incoherent as it seems to be.

Such a theory is supported to a certain definite extent by experimental data. It is extremely important, however, that we realize to just what extent it is supported. It has long been known that peripheral stimulation influences the content of dreams. Take, for instance, the case of the individual who dreamed that a mask of tar was being pulled from his face, taking the skin with it, when in fact a very light object was drawn across his face. The relation of the peripheral stimulus to the dream content seems obvious; but to assume that it was the sole or even the chief determiner of the partic-

ular trend of the dream is to go much further than the facts warrant. The relative significance or emphasis which we give peripheral stimulation as a determinant of dreams depends largely upon whether we assume dreaming to be continuous during sleep or only episodic. It will be recalled that we made the former assumption in the beginning of our discussion and in keeping with this we can give peripheral stimulation, i.e. sensory perception, only a secondary place in the determination of dreams (dreaming). In other words, perceptions during sleep may, and undeniably often do, enter into the content of the dream, influencing both its particular course and frequently its vividness. But it is not only possible but highly probable that there is a far more fundamental directing or determining agency back of the dream than sensory perception. And if so, then the perception of sensory facts becomes correspondingly insignificant and the illusory (or hallucinatory) nature of dreams itself takes on a greater significance.

Moreover, those theorists who have held to the view that the dream is primarily a misperception or illusion, have utterly failed to offer any adequate explanation of many dream-facts. Why, for instance, should the stimulus be so grossly misinterpreted or distorted? An individual who has experienced light tactual stimulations about his face throughout his life dreams, when his face is lightly stimulated, that the skin is being torn away. Another individual dreams that he is drinking wine with some friends on a very hot day when a few drops of cold water are sprinkled on his face or forehead. And what might be the nature of the stimuli that led the mother to dream her son had been killed, or that resulted in the solution of a problem that the individual was unable to solve in his waking life? It is particularly this wide incongruity between the stimuli and the dream content that the above theory does not account for. In keeping not only with psychology but with all science, we must assume a strict quantitative determinism, i.e. that no result is greater than the factors or forces which give

rise to it. Consequently, if lightly tickling one's face is followed by his dreaming of severe pain, we must assume factors at work other than the mere perception of the tactual stimulus.

2. *The Dream as an "Apperceptive Trial and Error" Process or Series of Attempts to Interpret a Stimulus.*[1] This theory likewise assumes that the dream is a response to a peripheral stimulus. But it goes further and conceives the dream as an attempt to interpret the stimulus. The exact nature of the mechanism which is postulated by the author of this theory is a bit vague. It seems necessary to suppose that there is an unlimited number of "ideas" residing somewhere in the "subconscious," or at least they are not in consciousness. These "ideas" are possible solutions or interpretations of the stimulus. One after another is tried, only to be rejected as inappropriate. This gives the dream its ever-changing and incoherent nature. A completely successful attempt, i.e. a completely correct interpretation, results in, or means, a full awakening—but why, is not clear.

Practically the same objections may be made to this theory as were directed against the one above. Moreover, it presupposes an inclination or need on the part of the individual to interpret every stimulus perceived during sleep. That this is the case seems to be supported by little or no factual basis. Certainly it is not true of the individual during his waking state that he attempts to interpret all the various visual, auditory, tactual, and other stimuli which are acting upon him; or if he does it is in a very vague and uncertain manner.

3. *Freud's Theory of Dreams.* In taking up Freud's theory of dreams, the reader must prepare himself not only for an entirely different viewpoint but also to grapple with a new terminology and a generous supply of concepts and subconcepts. To begin with, it might be well to recall the tri-

[1] Horton, L. H., "Scientific Method in the Interpretation of Dreams, with a Theory to Explain the Dream-Process as Apperceptive Trial-and-Error," *Jour. of Abnor. Psychol.*, Vol. 10, 1916, pp. 369–396.

partite division of mind which Freud makes, and to point out briefly certain relationships.

At birth there is little or no mental content that can be said to be conscious. The individual consists, on the one hand, of a group or several groups of drives, tendencies, or instincts, and various mechanisms through which these tendencies may realize or express themselves; and on the other hand of his sensory or perceptual equipment. The nature of the child is activity, to react to the world about him; and he does this in the beginning on a purely instinctive level. Along with his reactions to his environment he perceives, that is, obtains impressions through the medium of his various senses of the different aspects of his environment. These impressions or experiences form the preconscious system or aspect of mind. These memory-traces or experience-residues are readily accessible to consciousness, that is, the individual is able to recall them at will in his thinking and general activity. The conscious aspect or division of mind is simply that of which the individual is conscious at any given moment, the truly conscious processes, in other words. Thus it will be seen that there is a ready and continuous exchange of material between the conscious and preconscious; what is conscious one moment has passed out of mind the next and a new perception or the recall of a past experience has taken its place.

Very early in the child's life his energies or tendencies (sexual) become directed or attached to some object in his environment, usually the parent of opposite sex. He then behaves toward this parent in a truly sexual manner, broadly speaking. He (if the child is a boy) demands the caresses of his mother, wants to be near her, seeks to keep her attention on himself, and becomes jealous of others for whom she shows affection. This early sexual attachment of the child to one of his parents is called, after the myth of Oedipus Rex who slew his father and married his mother, the Oedipus Complex.

As the child grows older, a strong incompatibility arises between his sexual feelings for his mother (it may be either

parent) and his developing sense of propriety, his moral sentiments or ideals. This most often results in a repression of his sexual feelings toward his mother and an extremely strong identification with his father. That is, he accepts his father as a model or ideal and straightway endeavors to become as much like him as possible, assuming his mannerisms, copying his actions, etc. The child then has a truly moral self, which acts as an inhibitor and repressing agent toward all wishes, desires, or tendencies which are incompatible with it. This not only serves to keep the Oedipus Complex from becoming conscious (having already been repressed) but forces down into the unconscious, so to speak, all subsequent incompatible wishes or impulses. Thus the unconscious, like the preconscious, continues to expand because of the new material that is added to it from time to time.

From this we may see that there are two aspects or kinds of material, as it were, comprising the unconscious. First, there exist those tendencies or instincts which are unconscious to begin with and can become conscious only by becoming clothed in or related to conscious perceptual elements (verbalized, the behaviorist would say); and, secondly, there are all those wishes or impulses which have been repressed after becoming conscious. But from the most significant and fundamental standpoint there is little difference between these two aspects; for it is the nature of any tendency or instinct, whether it has ever become conscious or not, to express itself, to find realization.

We are now in a better position to understand Freud's theory of dreams. As has been pointed out in another place, it is the group of sexual instincts that constitute the chief and primary motivating principle of behavior; it is these that come into conflict with the moral standards, and consequently it is these that are repressed. Or, to speak more accurately, it is particular manifestations of them, together with the memory-traces of the perceptual elements which belonged with these manifestations, that are repressed. But

repression does not in any sense destroy or eliminate them; it merely results in their being ousted from the conscious and preconscious systems and consequently denied their original form of conscious expression. They continue active, dynamic, striving for expression. At night the repressing agency (the nature of which is not clear, except that it is in some way tied up with the preconscious and conscious systems) goes half asleep and the repressed sexual wishes are able to partially express or manifest themselves as dreams. The dream, then, is an *imaginary fulfillment of a repressed sexual wish.*

But even with the moral nature of the individual asleep and the protector of this moral nature (mentioned a great deal in Freud's earlier writings as the *censor*) half asleep, it would still be impossible for the repressed wish to come into consciousness in its true form without shocking and waking the sleeper; and dreams, Freud says, are protectors and not disturbers of sleep. Thus, in order to realize itself, the repressed wish must comply with certain requisites which are automatically imposed by the fact of the existence of the censor. These requisites are met by means of *symbolization* and *distortion* of the true or *latent* content of the dream. In short, the dream appears in consciousness in a disguised form, having thereby deceived the censor and in turn resulting in no disturbance of consciousness (the sleeper). The ways and means whereby the disguise of the latent content is brought about are termed the *mechanisms* of *dream formation.* It is obvious, then, that one must distinguish between the true meaning of the dream or its latent content and its apparent meaning or *manifest content.* A brief discussion of the principal mechanisms of dream formation will help to make clear some of the relationships which exist between the latent and the manifest content.

Condensation: A single element in the manifest content may represent a number of elements (wishes or wish-objects) in the latent content. A fairly common example of this is to be found in the dream in which an individual possesses the

composite features of several individuals. This is supposed to be due to *over-determination* of the dream image. That is, since there are many repressed wishes seeking expression, several may become attached, so to speak, to the same image or thought. But they all retain, to a certain extent, their individual identity, which results in a composite rather than a unified image.

Displacement: An affect or emotion often becomes displaced from an important to an unimportant element of the dream. This contributes very largely to the disguise of the true meaning of the dream and gives rise to much of the nonsensical and bizarre character of the manifest content. Frequently displacement is carried to the extent of a latent element's being represented through its opposite in the manifest content. In other words, the dream, or certain elements in it, may imply or represent an opposite meaning or significance. An example would be to dream of extreme kindness to a certain individual, which would represent a strong dislike or desire to injure the person. Such a dislike, of course, would be unconscious. Displacement takes varied and interesting directions, but the *purpose* is always the same; namely, to permit an unconscious wish to find expression without resulting in a shock to the moral nature of the individual.

Dramatization and Visualization: These are quite different from the two mechanisms described above; they have a different basis. We are all aware of the fact that the majority of our dreams are expressed in visual imagery and in addition to this they are little life-dramas; they are the enactment of thoughts, purposes, desires. Dramatization of the dream is to be understood in relation to wishes or desires on the one hand and on the other to the oldest and most common mode of expression of such; that is, to overt behavior. Hence, in the dream the individual lives out or expresses in an overt manner, albeit symbolically and imaginatively, some one or several repressed wishes. The matter of visualization is explained as being a regressive phenomenon. Not only do most dreams involve one or more repressed infantile wishes,

but in dreaming the individual regresses or goes back to an early level or mode of thinking, i.e. he thinks (or dreams) in terms of pictures (visual images). Although this, and also dramatization, result more or less in a greater distortion or disguise of the true meaning of the dream, such is not their *raison d'être;* they result, rather, from the general nature of the dream mechanism.

Secondary Elaboration: A repressed wish must be thought of as an abstraction which can be made concrete only by being represented by some conscious element or mental process, very much, so to speak, as we may say the ether becomes manifest only as light, heat, or as some other tangible or experiential fact. The wish becomes conscious through the mechanism of visualization; a series of visual images symbolically represents the activity whereby the wish becomes imaginatively realized or expressed. But, upon coming into consciousness, the series of images or pictures usually appears incomplete and incoherent. Consequently elements from the preconscious are fitted into the skeletal dream-construction in order to give it unity, coherency, and meaning. This filling-in process is called *secondary elaboration.* It is identical with the tendency in waking life to subjectively supply the missing parts in a pattern, or to complete the half-expressed thought of another person as in interpreting a telegram or failing to notice the misspelling of a word in a line of print

Symbolization: This is not, strictly speaking, a dream mechanism; or perhaps it would be better to say that it is not limited to dreams. It is a characteristic of most thinking, both in our dreams and waking life. But in dreaming it takes on a particular significance, for it is primarily through the mechanism of symbolic thinking or expression that the repressed wish may become consciously realized. It is conceivable that the young man, desirous of attending college but lacking the necessary funds, *unconsciously* wishes therefore that his younger brothers and sisters were out of the way that he might have a larger share of the family income for his own use. But the desire for the death of his siblings can-

not find conscious expression as such because it is incompatible with his moral nature. So in his sleep he dreams of destroying vermin, obnoxious small animals, which, although it might cause him a certain amount of horror and disgust in his dream, is not highly contrary to his morals. The vermin having symbolically represented his brothers and sisters, his unconscious wish is gratified when he dreams of destroying them.

But if the manifest content of the dream, that which is recalled upon waking, is a distorted symbolical representation of the true content or meaning, how is one ever to determine the latter? The possibility of our doing this rests upon two sets of facts, the first of which is *universal symbols*. Most Freudians contend that there are certain elements which frequently appear in the manifest content of dreams, particularly in the dreams of mental patients, and that these elements almost invariably stand for or symbolize certain other elements which always belong to the latent content. However, for the most part this conviction of the Freudians has been expressed in general terms rather than specifically. In other words, they speak of classes of objects, events, or experiences as having fairly definite symbolic meanings rather than implying that any specific object always has a certain meaning. Thus, small animals, insects, etc., usually represent brothers and sisters; God, kings, and superior persons in general stand for a parent (or the parents); long objects represent the male genitals, hollow objects or containers the female genitals; going on a journey stands for death; a house usually stands for a man or woman, depending on its structure. Such symbols, when they appear in the dream, may be taken as a starting point in the interpretation, but they have no great deal of significance unless they are followed up by the basic and essential technique of Freudian dream interpretation.

The only sure and accurate method of arriving at the true meaning of a dream, according to Freud, is by obtaining the individual's free associations to the different elements in the manifest content and by studying his past life (experiences).

This is based upon the assumption that our free associations are involved with an absolute determinism; and that our thoughts, in the absence of any conscious purpose or mental set, are not mere chance affairs nor are they determined by the intensity, recency, and frequency of our experiences but that they are determined, like our dreams, by repressed wishes or complexes. Thus to the extent that it is possible to get true free associations to the different elements in the dream—and this is not always easy, because of the resistance due to the "censor"—these associations or thoughts will lead back to the repressed wish which motivated the dream. In this way it is possible to establish the true meaning of the dream.

To sum up briefly Freud's theory of dreams: Repressions occur due to a conflict between sex instincts on the one hand and the moral nature or ego-instincts on the other. Having been repressed, the sex wish or impulse is unable to gain conscious expression in its true form because of the censor, which is to be thought of as a resistance emanating or arising from the ego-instincts (or, in more familiar terms, the individual's moral sentiments) and opposed to the conscious expression of all repressed material. Since the repressed wishes cannot ordinarily overcome the resistance to them, they must in some way avoid it if they are to gain control of the motor mechanisms of the individual and thereby become realized. Motility, Freud says, is typically under the control of, or a function of, the conscious system; hence the necessity of the repressed wish's becoming in some way conscious if it is to gain expression. As we have seen, it succeeds often in becoming conscious not in its true form but in a disguised and symbolical form by means of the mechanisms of dream formation mentioned above. But dreams are but one instance of the expression of repressed wishes; others being day-dreaming or autistic thinking, slips of the tongue and pen, symptoms of mental disorders, and even much of the socially acceptable activity of our everyday life, particularly in art and literature.

Much criticism has been directed against Freud's theories, both from scientific and lay quarters. But up to the present time they have been neither proved nor disproved by careful experimental methods. Incidentally, no insignificant part of these criticisms is quite as much in support of his contentions as it is against them. For instance, it was early pointed out that if the subject (or patient) merely gives his free associations to the elements in a day-dream, or even to a "dream" deliberately manufactured, these are quite as apt to lead to material of a sexual significance as his associations to the elements in a nocturnal dream. But Freud, it must be understood, makes no fundamental distinction between nocturnal dreams and day-dreams, reveries, or even free-association itself. Hence one would expect any sequence of thoughts or mental pictures which is undirected to lead to unconscious material since all such mental activity is presumably motivated by repressed wishes.

The matter of symbolism, particularly of universal symbols, has called forth much harsh criticism. But it must not be supposed that Freud and his followers have arbitrarily assigned certain meanings to certain dream elements or thoughts. Symbolic meanings have been arrived at in two general ways: First, by a study of the mythology of past epochs in human civilization, many of the myths having come down to us through literature and everyday expressions, superstitions, and ways of thinking; and secondly, by a study of the free associations of patients and normal individuals to their own dreams. Unfortunately, no exhaustive study of a statistical nature has been made on the symbolic meaning of dreams as revealed by the free associations in the waking state. Only future studies can adequately clarify this question.

4. *Autosymbolic Theories of Dreams.* C. G. Jung, an early supporter of most of Freud's doctrines but who has since developed a system of "metapsychology" more or less divergent from the Freudian view, sees in the dream an expression of a conflict between two basic trends in the individual. Jung postulates a single general motivating principle (the

libido) which may take either a progressive or regressive trend. When it is expressed as purposive or reality thinking, that is, by thinking and reacting in an adaptive way to the world of reality, the libido is following the progressive trend. But it may quite as readily follow the regressive trend, in which case it is expressed as autistic thinking or dreaming (either nocturnal or day-dreaming) and in regressive overt activity. Particularly does the libido tend to take the regressive course whenever it fails to find an adequate outlet in the direction of adaptive thinking and behavior. Since everyone has his ups and downs, it is inevitable, according to Jung, that more or less conflict should arise between the opposite trends of the libido, the opposite modes of expression. Thus when a wish is kept from expressing itself in overt behavior, in an active and progressive fashion, and becomes repressed, it reverts or regresses to older, more infantile and primitive modes of expression. The dream is a common example of this. Thus in a certain sense the dream may be viewed as an attempted solution of a present difficulty.

Jung extends the meaning and importance of the unconscious considerably beyond the early Freudian view. Not only do we each have an individual or personal unconscious but we also have a *collective unconscious* which is an inheritance from the past of the race. This simply means that in certain universally common situations we tend to think in certain ways and in terms of certain symbolic meanings. In our dreams we frequently fall back upon these primitive modes of thought and preëstablished meaning relationships. Thus there is said to be a close relationship between the latent meaning or content of our dreams and the myths and beliefs of ancient peoples, although the dreamer is wholly ignorant in his waking life of the latter.

Another early disciple of Freud, Alfred Adler, but who like Jung has developed a system of psychological thought at a tangent to the Freudian system, conceives of the dream as an attempted solution of some problem arising from a conflict

between life's two basic principles—*superiority strivings* or the desire to be superior, and *feelings of inferiority* or the fear of failure. All of us, according to Adler, possess these two aspects of inherent human nature, either of which may become greatly exaggerated by early influences in life. On the one hand we all want to be superior, to attain to our *masculine ideal*, while on the other we stand in fear of failure or of losing what we have already attained. Theoretically, our development may be so one-sided as to lead us to entertain the most impossible ambitions and to plunge headlong into impossible tasks, or to stand in such fear of failing and to experience such strong feelings of inadequacy or inferiority as paralyze all effort. The dream then becomes an attempted symbolic solution of present difficulties, an attempt to harmonize these two aspects of our nature and the facts of reality. If feelings of inferiority predominate, then the dream may be taken as a warning against attempting something at which we might fail; it stands as a guard or protection over the weak, cautious side of our nature. If our ambitions are strong and chiefly motivate the dream, then it may stand as an encouragement to go on; a symbolical assurance of success. Many dreams, however, particularly of certain classes of mental patients, are purely compensatory, imaginary realizations of attainments which the individual no longer even aspires to in his waking state.

Concluding Remarks. So much for the various theories of dreams. The reader should not fall into the fallacy—so common to us all—of feeling that he must either wholeheartedly accept or completely reject any one of the theories. It is more than probable that they all have a large element of truth; and it is just as probable that each one of them is partly false or at least inadequate when applied to all dreams and to every type of dream situation. The Freudian theory has shed a world of light not only on the nature and significance of dreaming but on much of the thinking and behavior of waking life. But surely there is no sound evidence, even of a logical sort, that would incline us to the

view that all dreams are motivated by sex wishes, save those which are traceable to hunger, thirst, etc. At the same time if dreams are expressions of conflict, repression, etc., and are implicit attempts to solve personal problems, we should expect sex to be involved in a large number of them.

Whatever may be our final conclusion as to the cause (or causes) of dreams, we cannot help assuming that they are in some way expressions of aspects of the personality—sentiments, moods, wishes, motives—that they are true to the particular mental make-up of the individual. We have suggested that sleep, from a psychological standpoint, is a temporary dissociation of the mental integration, and in keeping with this we should expect mental activity during sleep to be one-sided and extreme, inasmuch as it would be the expression of dissociated systems instead of a single integrated system.

Closely similar to nocturnal dreams are day-dreams, reveries, or autistic thinking. In fact, the sole basic distinction that can be made is that the latter take place in the absence of sleep. Another distinction of degree might be made in most cases. In the nocturnal dream the individual is more completely divorced from his immediate physical surroundings than he is in the day-dream. But in other respects these two classes of mental activity are very much the same. It is frequently said that the day-dream is simply thinking for its own sake, as distinguished from purposive, adaptive, or realistic thinking. The fact that in his day-dreaming the individual is sometimes entertaining thoughts of illness, death, loss of fortune, etc., does not refute this contention. For if one searches deeply enough he will usually find that whatever the nature of the mental content, it is in some way giving the person satisfaction. Many of our day-dreams are obviously self-satisfying; they frankly pat the dreamer on the back. Many of them are at the same time compensatory. In them the individual realizes those ambitions which his defects or shortcomings keep him from actually attaining in real life.

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CHAPTER XXI

HYPNOTISM AND SUGGESTION

Historical Sketch. The scope of the present text does not permit us to take up in any detail the large and interesting topic of suggestion; for the most part we shall speak only of hypnosis, viewing it as a special and extreme form of the larger topic.

There is perhaps no phenomenon in the entire field of psychology which is more interesting than hypnosis, but which at the same time has received less experimental study. Yet as far back as we have written history we find evidence of suggestion and hypnosis playing an important part in man's life and activities. The ancient medicine man "cured" the sufferer by means of incantations and phantastic ceremonies The East Indian fakirs mystify their onlookers by arousing, or inducing, in them a high degree of suggestibility and then causing them to hallucinate a boy climbing hand over hand up a rope and finally disappearing into the sky. Even in our own country some persons carry small potatoes, rabbits' feet, or other objects in their pockets to rid themselves of "rheumatic" pains—and it sometimes works, because they believe it will. Similar examples involving marked suggestibility could be cited almost endlessly. Inasmuch as we failed to understand the true nature of such phenomena, it is not surprising that various objects in man's environment should have been endowed with curative, mystical, or supernatural properties. But although suggestion is as old as man, it was not until the latter part of the eighteenth century that it began to attract the serious attention of the scientific world.

Friedrich Anton Mesmer, a Vienna student of medicine, discovered in 1774 that by placing magnets on the body of a patient who was manifesting a variety of peculiar symptoms

(apparently of a hysterical nature) he could cause the symptoms to disappear and to remain absent for a period of six hours. He further observed that the patient was definitely influenced in somewhat similar fashion by any object which he had touched (in her presence), whereas she remained indifferent to contact with all other objects, including other individuals. This fact led Mesmer to the false conclusion that the influence was of the nature of a physical fluid which passed from him to the patient. He further inferred that, since objects which he had previously touched had a like influence upon his patients, it was therefore possible to "magnetize" any object by means of handling or making passes over it. In other words, the magnetic fluid might pass directly from his body into that of the patient or it might equally well pass first from him into some inanimate object and from that into the patient, upon bringing the two (object and patient) into physical contact. This hypothetical fluid he conceived to be a kind of *animal magnetism*, physical in nature.

In 1778 Mesmer went to Paris. His experiments and many "cures" of mental disorders soon brought him into the limelight. In order to cure several patients at the same time he introduced his famous *baquet*, a kind of crude "storage battery" with long handles for the patients. A number of patients could thus be subjected to the influence of the "magnetic fluid" at the same time. Although Mesmer continued to enjoy a large lay following, and even received no little attention and encouragement from certain individuals of royal birth and great influence, men of science were far from being unanimous in their acceptance of his doctrines. A great deal of controversy raged between the antagonists and protagonists until interest in hypnotism (then called mesmerism and animal magnetism) began to wane and finally, in 1840, the Academy of Science in Paris placed a formal ban upon the entire subject. Control tests which had been made had failed to substantiate Mesmer's contentions that the phenomena observed were due to a magnetic fluid passing from the operator to the subject.

A truer interpretation of hypnotic phenomena awaited the

studies of James Braid, a noted English surgeon, begun in 1841, although it appears that many of Braid's conclusions had already been anticipated as early as 1814 by the Abbé Faria.[1] Braid's interest was strongly aroused in hypnotic phenomena as a result of a popular demonstration given by a traveling mesmerist. Greatly impressed by what he had observed, Braid immediately began an investigation of the phenomena by self-devised experiments. He had a friend gaze fixedly at the neck of a bottle, which soon induced a passive state strongly resembling sleep. He obtained similar results upon his wife, as well as upon most of the others with whom he experimented. From his observations he arrived at the following conclusions: "I now stated that I considered the experiments fully proved my theory, and expressed my entire conviction that the phenomena of mesmerism were to be accounted for on the principle of a derangement of the state of the cerebrospinal centres, and of the circulatory, and respiratory, and muscular systems, induced, as I have explained, by a fixed stare, absolute repose of body, fixed attention, and suppressed respiration concomitant with that fixity of attention. That the whole depended upon the physical and psychical condition of the patient, arising from the causes referred to, and not at all on the volition, or passes of the operator, throwing out a magnetic fluid or medium." [2] This work of Braid was the true beginning of the modern era of what he called hypnotism.

But it must not be inferred that opposition to the serious study of hypnotic phenomena disappeared with the work of Braid. Far from it! In fact, Braid himself was made to suffer for manifesting a serious interest in something which was assumed to have no legitimate place in science. For, then as now, human nature was unduly skeptical and intolerant of any new theory, particularly one which seemed as foreign to established knowledge and rational behavior as those relating to hypnotism. Just as the average fond parent be-

[1] Jastrow, Joseph, *Fact and Fable in Psychology*, p. 200, Houghton, Mifflin.
[2] *Ibid.*, p. 206.

lieves there are certain things of which the child must remain ignorant if it is to grow up "pure" and "innocent," so has science been prone to take the attitude that there are certain things which must be excluded from its domain if it (science) is to remain unviolated. An absurd attitude, to be sure, but nevertheless it is one which has always existed to some extent. Moreover, the general interest in hypnotism had considerably died down by the time of Braid's publications, which may explain in part the scant attention which they received.

So it was not until the beginning of the last quarter of the nineteenth century that hypnotism began to take its place among the accepted studies of human nature. The publication in 1875 of an article on hypnotism by Richet, in an authoritative psychological journal, followed a few years later by the influential study and support of Charcot in Paris, went far toward removing the ban which had been imposed within scientific circles. At about this same time, Bernheim of Nancy was actively engaged in the study of hypnosis. Incidentally, a controversy arose between Charcot (the Paris school) and Bernheim (the Nancy school), which has come down to us to the present time; the former defining hypnosis as an artificially induced neurosis, or nervous or physiological condition, and the latter defining it in psychological terms as a condition of increased suggestibility.

With this admittedly very sketchy review of the history of hypnotism, we shall now give our attention to those phenomena which the word denotes. Obviously, the best way to become familiar with the phenomena of hypnosis is to observe and study them in a hypnotized subject; and a hypnotic demonstration, properly conducted, is always in place in a course in abnormal psychology, despite those views to the contrary held by a few who think it too dangerous to be meddled with except by the trained physician.[1] The best

[1] Incidentally, it has long been a puzzle to the writer why so many people—even college professors—should consider the medically trained man fitted to deal with problems of which he frequently knows nothing, and a great many medical men know little or nothing about hypnosis. Indeed, some of them are as skeptical, even superstitious, about the whole matter of hypnotism as any layman.

approach to the phenomena of hypnosis, in the absence of an actual demonstration, is, perhaps, to take a hypothetical case and see what we find.

Some Reactions of the Hypnotized Individual. The subject is requested to seat himself, preferably in a comfortable chair, and relax. If the subject is nervous or anxious, this should be overcome before going further. If he is consciously antagonistic to being hypnotized, or if he is strongly and openly skeptical concerning the reality of hypnosis, he should not be used. The willing, coöperative, open-to-conviction type of individual will make a more desirable subject, particularly for a class demonstration. Having obtained the coöperation of the subject, the experimenter has him fixate a small object (a small light, a dot on the blackboard, the head of a thumb tack) placed a little above the level of his eyes and at a distance of two or three feet. After the subject has gazed at the object for two or three minutes, the experimenter may begin by telling him his eyes are growing heavy and drowsy, that his body is becoming relaxed, his pulse is getting slower, he is gradually going to sleep. As the subject's eye-lids begin to droop, the forcefulness of the suggestions is increased; he is told that his eyes are going closed, his arms and legs are growing heavy, that his whole body is becoming extremely relaxed, and he is going into a deep sleep. The experimenter continues to give suggestions to the effect that the subject is going deeper and deeper asleep, for several minutes after the eyes become closed.

Now, assuming that we have an unusually good hypnotic subject, we are in a position to make some very interesting observations. We observe, to begin with, that the subject appears perfectly passive, apparently quite oblivious to his surroundings, his head inclined forward on his chest, and his whole body indicating a condition of almost complete relaxation. To all appearances the subject is sound asleep. A member of the audience requests him to move his hand, but he gives no sign of hearing. But if the experimenter tells him that his hand is going to move in a certain direction,

immediately the hand moves in the given direction. Or the experimenter tells him he is going to cross his legs and the suggestion is carried out; he tells him his ear itches and the subject rubs it vigorously. Again a member of the audience gives the subject a suggestion or command, but he gets no response. Thus, we must conclude either that the subject cannot hear or else that he simply ignores suggestions and commands given by anyone besides the experimenter. The latter is the interpretation that we shall eventually have to make. And this peculiar relationship which has been established between the experimenter and the subject and which predisposes the latter to ignore suggestions and commands, except when they are given by the experimenter, is termed *rapport*.

Now the experimenter points to the blank wall, commands the subject to open his eyes and read the time of day from the face of the clock. The subject follows the direction of the other's finger and states the time (positive hallucination). If requested, he will describe the clock in some detail. He is then told that his fingers are covered with glue and that he is getting it all over his clothes. The subject shows considerable perturbation, rubs his fingers with his handkerchief, and perhaps requests permission to leave the room and wash his hands. In a few minutes he returns, apparently much relieved.

The experimenter hands him a piece of paper, tells him it is cake and that he is very hungry and the subject eats with great relish (illusion), taking no heed of the laughter of the audience. Or perhaps the subject is told that the desk is a piano and he (the subject) a musician, and that he is going to play a selection. He thereupon goes through the actions of playing a piano.

Equally interesting facts of a slightly different order may be observed. The experimenter lifts the subject's arm to a horizontal position, extended straight out from the body, and releases it. The arm remains in the position in which it has been placed (catalepsy). How long it might remain there

is conjectural. McDougall [1] reports a case in which the arm remained extended for thirty minutes without any indication of fatigue in the subject. The reader might try holding his arm in a horizontal position, completely extended, for ten minutes, or even five, and note how fatiguing it is. The subject may be assured that his hands have lost all sensitivity, and he will then declare he feels nothing even though a pin is thrust into them (cutaneous anesthesia). If told that his arms are paralyzed and then requested to write his name on the board, he will complain that he cannot move his arms (functional paralysis). One subject took a piece of chalk between his teeth and proceeded to carry out such a command. The experimenter points to a seat occupied by one of the subject's classmates, tells the subject it is vacant and that he is going to sit down in it. Without giving any indication of seeing the other student (visual anesthesia), the subject proceeds to sit down in the former's lap. Although he may show perplexity, apparently at finding himself perched above the other students or at the unfamiliarity of his awkward or uncomfortable position, he still appears completely oblivious to the fact that he is sitting on someone.

The subject is now given two suggestions. The first is to the effect that after he is awakened he will multiply a three-place number by a two-place number and write the answer on the board, and the second is to the effect that he will have absolutely no memory for anything that has been said or done during the hypnotic period (post-hypnotic suggestions). Two numbers are now given to him and he is immediately awakened. If questioned he will now report that he has no recollection whatever for the hypnotic period, that it is exactly as if he had been asleep (post-hypnotic amnesia). We purposely engage the subject, who now appears to be entirely awake, in conversation. At the end of a few minutes he walks to the board and writes a number which, if the problem we gave him was not too difficult, is the product of the two numbers. We ask him what the number means,

[1] McDougall, *Outline of Abnormal Psychology*, p 88, Scribner's.

what it stands for, and why he wrote it on the board. He replies that he has no idea of what the number signifies but that it just came to his mind and that for some reason or other he wanted to write it down. He is wholly ignorant of its significance or of how he obtained it. In other words, while engaged in conversation he was solving a mathematical problem without being aware at the time that he was engaged in any such activity (subconscious activity). The experimenter again hypnotizes the subject. The subject now readily recalls all that occurred during the previous hypnotic period and he also tells us in detail how he solved the problem in multiplication.

Are Hypnotic Phenomena Genuine? We have attempted to point out some of the more obvious aspects of hypnosis, such things as might readily be observed by the casual onlooker at nearly any hypnotic demonstration. We have seen that illusions, hallucinations, amnesia, anesthesia, paralysis, muscular contractures, and various other phenomena can be easily induced in a good hypnotic subject. And we may add that they can all be made to take place following the hypnotic period, that is, as post-hypnotic phenomena. The question which now most commonly arises is whether these manifestations are real or merely a kind of pretense or playing-up-to-the-situation on the part of the subject. It has been said that hypnosis is nothing more or less than an extreme willingness in the subject to please the experimenter, and that if the extent of this willingness is exceeded by the commands of the experimenter, then the subject will not respond. Possibly hypnosis may be viewed from such an angle *provided we duly stress this matter of willingness.* But unfortunately this does not satisfactorily answer the question with respect to the genuineness of the phenomena. To say that the subject is willing to do this or that is merely to observe that he seems to do it with real good nature. But why? Major surgical operations have been performed upon hypnotized subjects without the use of anesthetics, and such subjects have reported both during and after the operation that they felt no

pain. They were assured, of course, by the experimenter (surgeon), that they would experience no pain. To sum it all up by merely saying that they were entirely willing to comply with the experimenter's commands or suggestions, is but to state an obvious fact.

But, at the present time, everyone except the ignorantly skeptical person agrees that the phenomena of hypnosis are genuine in the strictest sense; they are in no way comparable to the deliberate faking or shamming of the waking state. The young woman is hypnotized and told her mother is dead She weeps copiously and cannot be comforted except by the experimenter. The interesting and significant fact here is that the same young woman will in all probability find it absolutely impossible to weep in her waking state by merely imagining that her mother is dead. Perhaps the most convincing evidence that hypnotic phenomena are real and not feigned comes from a study of post-hypnotic suggestions. One good example will go far toward convincing the most skeptical individual Assume that a deeply hypnotized individual is given the suggestion that he will under no consideration leave the room till everyone else has left, and that following this post-hypnotic amnesia is suggested for everything that has been said. Now observe what happens when the subject is awakened. The demonstration is brought to a close, or the class is dismissed, and everyone starts for the door. The subject will be observed to linger behind the others. Now, wishing to test the force of the suggestion, one of the members steps aside holding the door open for the others to pass through. When the subject comes to the door he courteously motions for the other to precede him. The other individual returns the courtesy. The subject refuses to leave first, though he may still be very courteous. The other insists; the subject grows suddenly obdurate. Even begging him to go first has no effect; he perhaps contends that it is entirely a matter of principle and therefore he must refuse to concede to the other's request. The other may plead, argue, threaten, but to no avail. He may now recall that he has a class in the room

the next hour, sit down and lose himself in a book. The subject immediately finds a reason (an excuse) likewise for remaining (rationalization). Perhaps he says he must see some student who has a class in the room the next hour, or he may say that he has always been curious as to the nature of the course, or to see what the instructor is like, or something else; at any rate he will find some reason for remaining. And if the reason which he gives for remaining is seriously questioned, he will perhaps take offense and become angry, for to him it is the real reason; he has no memory of the post-hypnotic suggestion which was given.

Any amount of evidence could be cited in support of the genuine nature of hypnosis, i.e. that the hypnotic state is decidedly different from that of normal wakefulness. But to go into that aspect of the problem would be out of place here. The reader who is *sure* there is nothing genuine about hypnosis has small chance of learning anything about it. Incidentally, we might say that the state of mind of such an individual is frequently very much like that mental state or condition which we call hypnosis—as we shall see later.

What Are the Inherent Aspects of Hypnosis? There is a second question which has perhaps occurred to the reader. Exactly what are the essential characteristics of hypnosis? This question is much more difficult to answer than the one we have been considering. It has been observed that certain phenomena seem to occur spontaneously in many hypnotic subjects, while others are undeniably the result of suggestions. For instance, the subject does not see a clock on the wall where there is none unless he is told by the experimenter that there is one there. On the other hand, many authorities have contended that certain phenomena are not due to suggestions but are essential or spontaneous aspects of hypnosis. Three phenomena in particular have long been held by many to characterize hypnosis: Catalepsy, post-hypnotic amnesia, and *rapport*.

The term catalepsy was apparently first used in this connection by Petétin in the latter part of the eighteenth cen-

tury to designate or describe a peculiar wax-like semi-rigidity of the muscles. In some hypnotized subjects the limbs will remain in any position in which they are placed, without any apparent effort on the part of the subject. A case cited by McDougall, in which an arm remained in a horizontal position for thirty minutes without apparent effort or fatigue, has already been referred to. One of the writer's subjects became so cataleptic upon being hypnotized as to make it seemingly difficult for her to walk, the entire body becoming quite stiff. Some subjects manifest marked catalepsy the first time they are hypnotized, while others show little or no indications of it even when they are hypnotized a great many times. Up to the present time, it has not been definitely determined whether catalepsy in certain subjects—those who show it the first time—is the result of an expectation of such a condition on their part, and consequently a suggestion-phenomenon, or whether it spontaneously occurs and is therefore an inherent aspect of the hypnotic condition. Moll, a recent noted authority on hypnotism, declared that although catalepsy is easily produced, it is not an essential condition of any stage of hypnosis.[1] Bramwell[2] holds the same view, while many of the older authorities believe the opposite to be true. Young[3] concludes from his own studies of hypnosis that catalepsy is not a spontaneous phenomenon unless the limbs of the subject are manipulated or stroked, or unless he is given the impression in some other way that a cataleptic condition is going to occur.

These facts necessarily point to one of two conclusions: Either catalepsy is a spontaneous phenomenon of hypnosis in some subjects but not in others, or else it is a suggestion-phenomenon which may or may not occur, depending upon the expectations—conscious or subconscious—of the subject. Only careful experimental work will enable us to decide which it is.

[1] Moll, A., *Hypnotism* (tr. from 4th Ger. ed.), p. 80.
[2] Bramwell, J. M., *Hypnotism*, Third Edition, p. 153, Lippincott.
[3] Young, P. C., "Hypnotism," *Psychology Bulletin*, Vol. 23, 1926, pp. 504-523.

Post-hypnotic amnesia, i.e. amnesia after waking from the hypnotic period, has been accepted by many as a reliable criterion of hypnosis. Thus Hadfield says, "Amnesia is perhaps the best single test of hypnosis as distinct from the hypnoidal condition," [1] while Mitchell declares, "In the hypnotic state there is recollection, actual and potential, of all the events of waking life, whilst in the waking state there is no recollection of the hypnotic phase," [2] Wells and other authorities seem to have taken the same view. On the other hand, Bernheim,[3] Moll,[4] Bramwell,[5] and others have taken the opposite stand, contending that post-hypnotic amnesia is not an essential feature even of the deepest stages of hypnosis. There are several facts which appear to support this view.

Young suggests that there has been considerable confusion between inability to recall and inability to recognize. He states that most subjects who are unable to recollect the incidents of the hypnotic period easily recognize them when they are mentioned. This implies that the amnesia is not complete; it involves only recall—not both recall and recognition, which is the case in complete amnesia. Thus it has been observed, in connection with learning under hypnosis and then the re-learning of the same material in the waking state, that although the subject does not recall having learned the material while hypnotized, there is a definite saving in re-learning it in the waking state.[6] Again, experiments show that if the individual makes up his mind before being hypnotized to remember, upon waking, everything that occurs during the hypnotic period, he will be able to do so, or at least nearly everything.[7] Finally some subjects have amnesia for the hypnotic period only when they are told while under

[1] Hadfield, J. A., *Functional Nerve Disease*, p 61

[2] Mitchell, T. W., "Presidential Address," *Proc Soc Psych Res*, Vol 33, 1922-1923, p. 13.

[3] See Bramwell, *op cit*, p 105.

[4] *Op cit.*

[5] *Op cit.*

[6] Young, P. C., *op. cit.*, p. 507.

[7] *Ibid*, p 507.

hypnosis that they will be able to remember nothing when they awake. On the other hand, if the subject is told during the hypnotic period that he will remember everything when he wakes, he will usually do so. And while most writers are agreed that no hard and fast line can be drawn between the lighter and deeper stages of hypnosis, post-hypnotic amnesia is not common for the lighter stages. All these facts seem to favor the conclusion that post-hypnotic amnesia is not an essential aspect of hypnosis, but rather that it perhaps depends upon a number of factors in any given case.

McDougall says, "*rapport* is of the essence of suggestion in hypnosis." [1] By *rapport* is meant that peculiar harmonious relationship which is established between the experimenter and the subject. It is definitely one-sided, in a way; the subject assumes an attitude of subservience or submissiveness toward the experimenter. And Coriat lists as three of the four most important symptoms or features of hypnosis: loss of initiative, increased suggestibility, and *rapport*. But, incidentally, the first two of these seem to be nothing more than two different ways of looking at the third. For to lose one's initiative and still be active is to follow out the suggestions and commands of others; increased suggestibility amounts essentially to the same thing, and both characterize this peculiar relationship which is termed *rapport*. It is in this matter of *rapport*, McDougall thinks, that the secret of hypnosis is to be found. He assumes that in hypnosis a powerful instinct, that of self-submissiveness, is aroused or set off, and that it is due to the inherent nature of this instinct that the hypnotized subject responds as he does to the commands and suggestions of the operator. Thus, since the dominant instinctive tendency or disposition at the time is that of self-submission, the subject is inevitably disposed to accept and put into execution whatever the experimenter suggests or commands.

Certainly there is much to be said in favor of this view, but before following out and testing its implications, it will

[1] *Op. cit.*, p. 116.

perhaps be well to consider certain relevant, if not serious, objections which have been made to accepting *rapport* as an essential and fundamental aspect of hypnosis.

The representatives of the New Nancy School of Suggestion, a fairly recent development, contend that all suggestion is auto-suggestion, that all hypnosis is auto-hypnosis. By this they mean that in truth the subject hypnotizes himself, and that the experimenter is superfluous, at least after the first few occasions. If this is literally true, then obviously *rapport* is not an essential aspect of hypnosis. But let us see exactly what this auto-hypnosis involves. If I tell a hypnotized subject that within, say, five minutes after I wake him he will count to himself or recite poetry or read a book and thereupon go back to sleep, he will carry out my statements even though he has no recollection of the suggestion. I may even leave the room, to return in a few minutes and find him asleep (hypnotized). Superficially this may appear to be a case of auto-hypnosis; the subject becomes hypnotized during my absence. But upon second thought we must conclude that he has simply carried out my suggestions, and moreover, I find upon returning that he responds to my commands while he may completely ignore those of another, indicating that he is in *rapport* with me.

We may go a step further still in the same direction. A student asks me if it is possible to hypnotize oneself. I perhaps reply that it is and he goes home and tries it out. The next day he reports that he succeeded in hypnotizing himself, coming out of the state at a certain time upon which he had decided beforehand. Another student does the same thing without having said anything about it to anyone before trying it out. He will usually say that he believed he could do it and merely wanted to see if he was correct. Now we have something that looks very much like self- or auto-hypnosis; but let us see. The first student was told that it was possible to hypnotize oneself. Perhaps being told this by one in whom he had considerable confidence had something to do with his success. If so, then his becoming hypnotized need

have been nothing more than a response to the influence (statements of fact) of another individual, even though that other person was not present at the time. The second individual *believed* he could do it. Obviously that conviction did not arise within himself; our beliefs and convictions are the result of our contact with our environment, particularly other individuals. Even though he may have been absolutely unable to recall how he came by such a belief, the fact remains that it originally arose as a result of some external or objective agency. In ordinary hetero-hypnosis or hetero-suggestion, the individual does not respond unless he accepts the statement or suggestion of the experimenter; and thus he may be said to respond to, or be in keeping with, a truly subjective factor in the nature of a bias, a mental set, a conviction.

Certain evidence of an experimental nature has been offered in support of the auto-suggestion theory. Young and Foote [1] carried out a series of experiments to determine the nature of *rapport* and the relation of auto- to hetero-suggestion. Easily hypnotizable subjects were requested to decide, before coming to the experimental room, upon certain suggestions which they were not to carry out during the hypnotic period. That is, they were instructed to make up their minds beforehand not to obey certain commands or suggestions. These suggestions they were to write down on a piece of paper and place in their pockets, leaving the experimenter in complete ignorance as to what suggestions they had decided to carry out and what they had decided not to carry out. For instance, the subject might decide, and subsequently record in writing, "I shall obey or accept all suggestions while under hypnosis except that of becoming insensitive to pain and tactual stimulations." The experimenters then observed that certain suggestions were not accepted by their subjects and furthermore that these suggestions were always found to coincide with what the subjects had indicated in writing that they would not accept. From their results the experimenters con-

[1] See *Psychology Bulletin*, Vol. 23, 1926, pp. 511–513.

cluded as follows: "The results show that the subjects, by prior auto-suggestion, could exhibit whatever degree of *rapport* they decided upon, ranging all the way from being out of *rapport* with the experimenter on only one suggestion to being out of *rapport* during the whole séance, and responding only to another person's raps." It is the opinion of these writers that *rapport*, together with amnesia and catalepsy, is not an essential aspect of hypnosis.

Here again we have something which, at first glance, it seems might better be termed auto-suggestion than hetero-suggestion. But, once more, let us see if an analysis of the factors involved seems to support such a view. The subjects were *instructed* to decide before being hypnotized as to what suggestions they would not accept. And this act of deciding is termed "auto-suggestion" by the above writers. Obviously it is questionable usage of the term; for after all it would be difficult to distinguish between it and such acts of decision as where to eat dinner, or to buy a new hat. Yet we would not want to say that one's everyday acts are the result of auto-suggestions. One can usually supply a reason (cause) for deciding to buy a new hat, or for deciding to eat dinner in a certain place. Can we find any comparable reason, in the above experimental study, for the subject's deciding not to obey certain commands or suggestions? Certainly! *They were instructed to do so by the experimenters.* Thus we are led to infer that a certain degree of *rapport* was established even before the subjects were hypnotized; and the experimenters merely observed the fact that their earlier commands—given in the waking state—outweighed those later antagonistic or contrary commands which were given during hypnosis. But there is nothing particularly new or surprising about this. It has long been known, for instance, that if the subject is told to try to remain awake, the experimenter may find all his efforts to bring about a condition of hypnosis fruitless. But here again the subject is simply obeying a command of the experimenter. Furthermore if the subject is told that he cannot possibly remain awake but that he is to try his best

to do so, many subjects will pass into a state of hypnosis if the experimenter makes a serious attempt to hypnotize them. There is another interesting fact which has been observed in this connection. If the subject is given a post-hypnotic suggestion to the effect that when he wakes his arms are going to be completely paralyzed, he will be unable to use them. If the experimenter requests him to write his name on the board, he will reply that he cannot lift his hand. The experimenter insists, but still the subject is unable to gain control of his paralyzed limbs. In short, the subject is out of *rapport* with the experimenter for certain suggestions, due, obviously, to an earlier suggestion which he accepted. But now if the experimenter takes a *sufficiently convincing attitude toward the subject and assures him he can use his arms, the subject immediately regains control of them.*

All of these facts seem to point unmistakably to a certain definite conclusion; namely, that the fundamental aspect or essence of hypnosis consists of a definite mental set or mental attitude on the part of the subject toward *something.* This something may be either a present objective fact or influence (usually another person), or it may be the recall, or thought, of such a fact. Moreover, the recall (or memory) of such a fact may itself exist in the form of an attitude or sentiment or conviction.

The relation of auto- to hetero-suggestion should now be clearer. Whether we view it as the former or as the latter depends, apparently, upon which factors we emphasize. If we always relate the mental set or attitude to the objective influence which was instrumental in bringing it about, and if we lay particular stress upon this objective factor, we shall have no difficulty in seeing all suggestion as hetero-suggestion. On the other hand, if we ignore or overlook this objective factor—particularly in those instances where it is not so obvious—and concern ourselves only with the conviction, belief, or attitude which it establishes (or has already established on a former occasion), then we might conceivably be inclined to view suggestion as auto-suggestion, at least in

certain cases. But then we should be neglecting to take cognizance of this very fundamental factor in the total situation.

Perhaps an example will help to make clear what has just been said. Coué, one of the advocates of the auto-suggestion theory, sometimes instructs his patients to repeat to themselves each day such expressions as, "Day by day in every way I am getting better and better," assuring them that when they do so they will find this very effective in regaining their health and happiness. That it often does prove effective we do not hesitate to admit. This is cited by Coué as an example of auto-suggestion and, since it works, as evidence in support of this theory. But now let us see just what we have. In the first place, how many patients would repeat such an expression if they had not been more or less convinced from the start that it would help them? Very few, we must assume. Then it merely amounts to the patient's carrying out a suggestion or command which has been given to him and which he has accepted. It seems safe to assume that the matter of repetition owes its potency to the fact that it tends to revive over and over the original experience, the experience of receiving and accepting the suggestion. And if this is so, then we are confronted by nothing in the matter of so-called auto-suggestion that is fundamentally different from the clearest-cut case of hetero-suggestion.

Other Aspects of Hypnosis. Besides the various aspects of hypnosis which we have brought out so far, there are still others which must be mentioned.

What change, for instance, occurs with hypnosis in the realm of sensory or perceptual acuity, of association and the ability to learn, or in relation to prolonged mental and physical effort? Unfortunately, experimental studies in answer to such questions have been very scarce—but a few have been made. We might say in the beginning that these studies have offered no support to such contentions as the following, made by an enthusiastic "animal magnetist" (hypnotist) near the middle of the nineteenth century. "An ig-

norant young man is magnetized and forthwith converses with a 'mental activity which put to blush men of superior education and intellectual endowments.' An eminent lawyer is astonished at his learning and his quotations from legal authorities. He speaks Greek, Latin, French, Polish, all perfectly, and without accent; though when awake he knows no language but English." [1]

Most of the experimental studies of hypnosis have not been done in such a manner as to permit of drawing conclusions that are at all certain. Too often the individual has been tested only during hypnosis, without carefully determining his performance in the same test in the waking state. Two or three studies, however, seem to have been properly carried out. Nicholson [2] studied the efficiency of his subjects as measured by the ergograph, both in the hypnotic and in the waking state. He found that under hypnosis there was an increase over the results of the waking state in the amount of work done, in the endurance of the subject, and a decrease in fatigue, both subjective and objective. In a series of experiments conducted by Young [3] there was no appreciable difference in performance during hypnosis and in the waking state in the fields of sensation, perception, finer discrimination, present memory (learning and retention), and physical work which did not involve fatigue. Gray [4] studied the effects of hypnosis on learning to spell in six college students. His results were essentially negative, showing but slight difference in ability under the two conditions.

In a series of unpublished experiments conducted by the writer, there was little if any difference in the efficiency of the six subjects tested under hypnosis and in the waking state, when identical instructions were given in the two conditions. The experiment involved the following tests: Strength of grip, speed in card sorting, simple addition, and

[1] Jastrow, Joseph, *Fact and Fable in Psychology*, p. 219, Houghton, Mifflin.

[2] Nicholson, N. C., *Johns Hopkins Hospital Bulletin*, Vol 31, 1920, pp 89–91.

[3] *Amer. Jour of Psychol* , No. 36, pp. 214–232

[4] Gray, W. H., "The Effect of Hypnosis on Learning to Spell," *Jour. of Educ. Psychol.*, Vol. 25, 1934, pp. 471–473.

steadiness as measured by the ability to hold the arm steady when extended in a horizontal position. But studies of such a nature should always be supplemented by further tests of the same nature upon the same subjects, involving positive suggestions during hypnosis to the effect that the subject is going to do much better, and also including post-hypnotic suggestions to the same effect. And it is perhaps largely because any experimental study of hypnosis involves so many different factors, many of which it is difficult to isolate or control, that more work in this field has not been done.

The writer made a second experimental study,[1] on hypnosis and the "conditioned reflex." The knee-jerk was conditioned to the sound of a bell and after the conditioning had been fairly well established the response (reflex) to the bell was observed under a number of different conditions. The most significant fact observed was that the subject (particularly in the case of one unusually good hypnotic subject) was unable voluntarily to control the knee-jerk when the bell was rung either during the waking or hypnotic state, whereas following a post-hypnotic suggestion to the effect that she would not hear the bell there was not the slightest demonstrable response. This appears to lend support to the age-old contention in psychology that, at least under certain conditions, if a stimulus is not consciously perceived there will be no response to it.

Many of the experimental results on hypnotic phenomena have been of questionable value because many experimenters do not obtain an actual state of hypnosis in their subjects. There is a decided difference of some sort between the subject in whom a somewhat heightened degree of suggestibility has been induced and the subject who is hypnotized. To the writer it appears that hypnosis involves going beyond a certain point with respect to self-perspective in which self-perspective is completely negatived except wherein the commands or suggestions of the experimenter are of such a na-

[1] "Hypnotic Suggestion and the Conditioned Reflex," *Jour. of Exper. Psychol.*, Vol. XV, No. 2, 1932.

ture as to arouse an intense self-concern and consequently the dormant self-perspective. The difference between mere increased suggestibility and hypnosis is somewhat analogous to the difference between tasting a substance and swallowing it. In all modes of reaction there is a point beyond which the reaction may be said to be complete. The young woman who wonders if she is in love with the man is not yet in love with him; she is still making reservations, reacting incompletely. Once her interest reaches a certain intensity, all doubt disappears, her reaction is essentially complete, and she has fallen in love. Of the hundreds of persons the writer has hypnotized or tried to, perhaps not more than fifty have actually been hypnotized. If we are to study the phenomena of hypnosis we must be careful not to confuse mere heightened suggestibility with the hypnotic state.

Many casual and semi-experimental observations have been made on hypnotized subjects, and these have fairly well established certain facts. It is generally accepted that at least certain hypnotized subjects show a heightened sensory acuity (hyperesthesia). One of the writer's subjects was able to hear the ticking of a watch at fully twice the distance, when under hypnosis, that she could in the waking state. Many such cases have been observed. They are perhaps to be explained in terms of a greater concentration of attention under hypnosis than is possible in the waking state. It has also been quite well established that some individuals are able to recall many events of their past life, frequently events of early childhood, when they are hypnotized that they are absolutely unable voluntarily to recall in their waking state, sometimes even after they have recalled them in hypnosis and they (the events) have been recounted to them by the experimenter. Again, this may be due simply to the fact that in hypnosis the mental activity of the subject may be given a particular bent or direction to a far greater extent than seems possible in the waking state. Thus he responds only to a certain class of stimuli, ignoring all others, or, in other words, being set to respond (think) along a single line

the associations are therefore more relevant to the central purpose.

Perhaps the most interesting single aspect of hypnosis is the *post-hypnotic suggestion*. Certain writers have contended that in carrying out the suggestion the individual relapses into a state of hypnosis. Some cases seem to bear this out, as, for instance, the following, while others do not. A young woman was told (while under hypnosis) that upon being awakened she would go to the back of the room—which was very large—and bring a chair to the front, place it at a certain spot, and sit down in it. Amnesia for the suggestion was commanded and she was awakened. She immediately went to the back of the room, got the chair, and sat in it as she had been told. In carrying out the suggestion she had very much the appearance of the sleep-walker, looking neither to the right nor left, and appearing to be quite oblivious to the whole general situation. As soon as she sat down she seemed to "come to" with a start and exclaimed, "Well, why in the world did I ever do such a silly thing as that!" But another subject who was told that after being awakened the experimenter (instructor) would completely disappear and she would be unable to see him, reacted very much as anyone might were he to have a similar experience in his normal waking state. The subject suddenly became quite alarmed and called out to one of the students to ask if the instructor had left the room. She afterward reported that the instructor completely vanished. From this she inferred that he must have left, but she was puzzled by the fact that she could still distinctly hear his voice. Moreover, she was struck by the fact that the other students seemed to have their attention fixed upon someone in the front of the room, whereas she was unable to see anyone there. Consequently the whole thing alarmed or excited her somewhat for the moment.

Also it is well known that the subject may carry out the post-hypnotic suggestion even though he recalls very clearly that the suggestion was given to him; and while doing it he

may appear fully cognizant of the general situation and, perhaps, of the irrational nature of the act which he feels impelled to perform. This does not indicate that there is a return to the hypnotic state. A husky man student was told that upon being awakened he would want the seat occupied by a certain young woman. He clearly recalled the suggestion but nevertheless immediately demanded the chair. When the occupant refused to give it to him, he threatened in no uncertain terms to throw her out of it unless she complied with his request. No one in the audience doubted his word in the least. At the same time he showed unmistakable embarrassment at his own words and actions.

But perhaps we go too far in denying that the individual necessarily returns to the hypnotic condition. For if we deny that he does so to any extent whatever, how are we to account for the potency of the post-hypnotic suggestion? We have said that in hypnosis there is an arousal of a strong inherent tendency or disposition; and that it is because of this that the individual responds to the suggestions of the experimenter. Now in giving a post-hypnotic suggestion, we must assume that the idea or thought of the suggested act, and also the stimulus which is to call it forth, become strongly linked up with the motivating force or tendency to carry out a certain act and that when this stimulus occurs it arouses the tendency which dominates the attention and, to an extent, the activity of the individual until the suggested act is carried out, even though the individual may be quite conscious or cognizant of the total situation and the irrational nature of the act. If he does not recall the suggestion, then only the impulse or desire and the thought of the act are conscious. In either case it amounts to a condition of partial temporary dissociation. As we have already learned, impulsive acts and obsessions, seemingly not fundamentally different from the post-hypnotic suggestion, are by no means uncommon abnormal mental phenomena.

A matter of considerable interest is the wide range of variability found among individuals with respect to susceptibility

to hypnotic suggestion. Viewing hypnosis from the standpoint of dissociation, the extroverted individual, who is assumed to be more prone to mental dissociation, is ordinarily the better hypnotic subject. Again, alcohol, which normally results in varying degrees of mental dissociation, conduces to hypnotization. Thus, on the one hand, we may make the observation that the extroverted individual is the more susceptible to hypnotic suggestion, more prone to mental dissociation, and is more readily intoxicated by alcohol; while, on the other hand, the introverted individual is less susceptible to hypnotic suggestion, is less prone to mental dissociation, and is less easily intoxicated. These observations point to a very close relationship between extroversion and hypnotizability.

Although the present writer's experience does not entirely bear out the above conclusions, still he is inclined to think that they are perhaps correct in most respects. That they may not hold for any given case may be due to other factors. Viewed from another angle, it is the writer's belief that hypnotizability in any given subject is partly dependent upon that individual's childhood training or experience. In checking up, he has observed that his best subjects are usually those who have grown up in congenial surroundings; whereas the individual who is a poor or difficult subject often reports an over-harsh treatment at the hands of his parents or that he has been greatly humored and petted. That such a correlation or relationship might exist is not at all inconceivable if we remember, first, that the individual never fully outgrows his childhood habits and attitudes toward others, and secondly, that becoming hypnotized involves, on the part of the subject, the assumption of a submissive attitude toward another individual. The child who matures in a pleasant and congenial home is obviously required to conform to, and to obey the commands of, others only to an extent which is more or less compatible with his own nature, i.e. with his own wishes, viewpoints, etc. Thus he does not unduly suffer at the hands of others or because

he takes others more or less at their face value. He grows up with a fairly wholesome impression of human nature, of the integrity and good intentions of others. But, on the other hand, if the child is harshly treated in the home and finds himself employed as a means to the ends of other individuals, if he is deceived and mistreated, and led to doubt the good intentions of others, then it is quite conceivable that he might develop an antagonism and distrust of the statements and reactions of other individuals. Hence he is not in a position to accept what another says without first giving it critical thought—frequently liberally colored with suspicion—and this attitude is just the opposite of that which it is necessary for the individual to assume if he is to be readily hypnotized. But we do not mean by this that it would ever be possible to determine the hypnotizability of a given individual by merely studying his past home environment. The really fundamental question is how he reacted to his environment, what it meant to him. One of the writer's subjects had undoubtedly had an unusually harsh and even severe home environment, and he was rather introverted, but still he was a fairly good hypnotic subject. The significant fact in his case was that he early gave up trying to "hold his own," he simply gave in to the impositions of others and for years had been obediently carrying out their commands without stopping to question, even though he clearly perceived that they were in the wrong. In popular terminology, we might say that his spirit was broken early in childhood and had never even started to mend since. In a very general sense one must still be fighting for what he considers to be his just dues, if one is to be actively antagonistic or critical or suspicious of the commands of others. Or the individual may be so petted and humored as to permit him to grow up with an overinflated impression of his own importance; and to such an individual the very notion or idea of submitting in any way to another person is repellent.

Then there is the question, which is always asked, as to how much influence the experimenter has over the subject.

Can he make the subject do anything he desires, within the physical limitations of the subject? The first answer to this question is No. For obvious reasons very few actual experiments or observations bearing upon this question have been reported, but there is very good reason for believing that the hypnotized subject will not carry out any command which is strictly against his moral nature. Thus when one young woman was given the suggestion, before a mixed audience, that she was going to disrobe and go in bathing, she became hysterical and awoke. Sometimes the subject will openly refuse to accept a suggestion which he is strongly opposed to carrying out, and if the experimenter insists, the subject simply wakes. At the same time it is most probable that some subjects could be induced to depart further from their waking morals and standards than others could. Certain writers, recognizing this possibility of influencing the subject against his moral nature, have come out strongly opposed to the use or practice of hypnosis except in mental hospitals and clinics, and then only by medically trained men. Obviously, there is danger in a surgeon's knife in the hands of a careless or designing person, to say nothing of guns and automobiles and poisons and a great many other things. The whole point of the matter is that the more we know about such things the better able we are to protect ourselves against them; and this is the proper attitude to take toward any possible danger which may arise from the practicing of hypnosis.

Some Interpretations and Explanations of Hypnosis. Earlier in the chapter we failed to discover any adequate reason for rejecting the factor of *rapport* as an essential aspect of hypnosis, and we likewise failed to find any distinction of a fundamental kind between auto- and hetero-suggestion. Accordingly, we may return to McDougall's assumption that hypnosis is based upon, or involves, a specific instinct (innate disposition) and that hypnotic phenomena are primarily but an expression of this motive. There are various facts which lend a high degree of tenability to this hypothesis. To begin

with, the reactions of the hypnotized subject are clearly of a submissive nature as regards the experimenter. He is told to get down on his hands and knees and to crawl about the room, and he immediately obeys; he is told that he knows nothing, and he readily admits it; the experimenter declares that two and two are five, and the subject agrees. In short, he submits, at least within certain wide limits, to any imposition to which the experimenter elects to subject him. Consequently, whether or not we see fit to assume that an instinctive disposition is brought into play and is the basis or motivator of his behavior, we must agree that his reactions to the experimenter are distinctly of a submissive nature.

That an inherent disposition is definitely and strongly aroused when the subject is hypnotized is suggested by the fact that although the experimenter may arouse a considerable degree of anger in him, this does not usually alter the state of *rapport*, except that the subject's reactions may lose some of their spontaneity. This certainly indicates that there is some force or tendency, operative in the subject, which tends to inhibit an outward manifestation of his anger. And such a force, it seems, could hardly be anything but some inherent tendency, since we have no evidence whatever that such a force or agency is of a rational or moral nature. One of the writer's subjects became so angry, following a suggestion that one of her eyes was itching most painfully but that she would be unable to raise either hand, that upon being awakened she reported that she had experienced a very strong desire to strike the experimenter. And upon awakening she vented her anger quite as far as a young woman might be expected to do under similar circumstances. Yet, while hypnotized, she continued to be readily susceptible and submissive to the writer's suggestions and commands.

The work of Sidis on sleep and "hypnosis" in the lower animals also supports, to an extent, McDougall's interpretation. Upon being placed on their backs or sides with their movements restrained, the animals became passive (i.e. sub-

missive) to the manipulations of the experimenter. Incidentally, Sidis concludes from this that hypnosis in man is a partially developed instinct, both it and sleep having been derived from a primitive rest-state similar to that observed in the lower animals. However, the resemblance between sleep and hypnosis seems to be, upon closer study, largely superficial. Hypnosis is strongly characterized by a definite mental attitude or set toward some fact; so far as is known, there is nothing of this nature in normal sleep. On the other hand, the assumption of a peculiarly passive attitude or state—frequently in the presence of danger or a restricting agency—which has been both casually and experimentally observed in many of the lower animals, is closely similar to the submissive behavior of man, there being considerable evidence that both are instinctive in nature. And since hypnosis is characterized in its objective aspect by a definitely submissive attitude and behavior, it is merely in keeping with certain facts to assume that it involves, or is based upon, an inherent tendency or motive.

Although this is perhaps as near as we can come at the present time to the true nature of hypnosis, still we should not permit this explanation of it to predispose us to overlook other interpretations which have been offered. We will recall that the earliest attempt at a scientific explanation of hypnosis was couched in terms of a physical force, a fluid, which passed from the body of the experimenter to the subject. This, it was held, accounted for the influence of the experimenter upon the subject; in other words, for the *rapport* between the two. This explanation has been entirely rejected by more recent authorities with the exception of a very few.[1]

Charcot believed hypnosis to be an artificially produced neurosis, closely allied to hysteria, and that only subjects of a definitely neurotic (hysterical) make-up could be hypnotized. Janet, a pupil of Charcot, also makes considerable of

[1] Alrutz, S., "Zur probleme der Hypnose," *Zeit. f. psyther. und med. psychol.*, Vol. 5, pp. 31–41.

the similarity between hypnosis and hysteria, holding that both are based upon a narrowing of the field of consciousness. According to Janet, the personality is a synthesis, depending upon *psychic energy* for its maintenance. Anything which tends to lessen the amount of psychic energy consequently results in a partial or complete breaking down of the mental synthesis and in an inevitable narrowing of the field of consciousness. Such a condition, if it is extreme, is termed *hysteria*. Now, since the hypnotizable subject is a potential hysteric, according to Janet, possessing an "unstable" personality, it is relatively easy, by having him fix his attention on a particular object or thought, by giving him suggestions, commands, etc., in keeping with the direction of his attention, to bring about an actual narrowing of the field of consciousness—and this is hypnosis.

Coriat and certain others conceive of hypnosis as a state of mental dissociation. Thus any impulse, sentiment, or emotion, any thought or "idea," may be aroused by the suggestions of the experimenter. This implies an inability, or failure, on the part of the subject to react critically to the statements, commands, and suggestions given. Since one's critical thinking involves both his past experience and a recognition of the various aspects of the present situation, we must conclude that associations and perceptions involving these factors are not aroused. In other words, the subject follows out a given perception or thought in actual acceptance of it or in overt behavior without referring the perception or thought to his past experience (knowledge) or to the various relevant aspects of the present situation. It seems then that hypnosis might be viewed as a condition or state of mental dissociation.

But the primary objection to "dissociation-theories" is that they do not explain hypnosis; they merely describe it. As purely descriptive concepts, they may all be quite correct; at least there seems to be no obvious objection to them as such. Hypnosis perhaps does amount to a state of mental dissociation; and there does undoubtedly result a narrowing

of the field of consciousness; and it is somewhat similar to the condition known as hysteria. But why should giving an individual suggestions, having him concentrate his attention, etc., result in such conditions? It is only when we conceive of some force, some tendency or instinct, being aroused, put to work, as it were, that we can begin to account for such conditions arising. Another objection to these theories—and this is primarily an aspect of the one already made—is that they go too far in viewing hypnosis as a passive condition. The hypnotized individual is submissive but, in a strict sense, he is far from being passive (i.e. inactive). Even though he sits perfectly quiet with his eyes closed, in the absence of any suggestions from the experimenter that he react in an overt manner, we must conclude that his assuming such a "passive" attitude or state is itself a definite reaction. Moreover, so far from being truly passive, i.e. indifferent to stimuli, we find that he is strongly inclined to react, and that very readily, to certain stimuli. Thus, since we are dealing with a particular kind of activity, or with a proneness toward such, instead of with an absence of activity, we must assume some force, presumably an inherent tendency or disposition, operative in the individual if we are to *explain* the facts.

Freud's theory of hypnosis is, naturally, sexual. The libido (sexual energy) of the subject becomes directed toward, or transferred upon, the experimenter. More than this, hypnosis is in a sense and to a certain extent a regressive phenomenon. The subject tends to regress toward an infantile level, and the experimenter therefore becomes a surrogate of the parent (usually the father). We then have essentially the original fixation upon the parent revived, which accounts for the submissive type of behavior which we observe in the subject toward the experimenter. At the same time this original fixation or attachment of the child to the parent is fundamentally sexual, and likewise the attachment (*rapport*) of the subject to the experimenter is sexual.

It seems unnecessary to rehearse the criticisms which have

already been made of Freud's views, which apply here in very much the same manner as elsewhere. That the relationship between the subject and experimenter is fundamentally sexual, when viewed from either side, is highly improbable. At the same time it is very probable that sex attraction may, and sometimes does, enter into the situation, and in part accounts for the particular attitude which the subject assumes toward the experimenter.

The Relation between Hypnosis and Suggestion. Before concluding our chapter a word is in order concerning the relation of hypnosis to suggestion. The writer has already pointed out that although he believes that hypnosis is a state of suggestibility, it is different from all other states or degrees of suggestibility in that it constitutes a complete negativing of self-perspective and volition whereas any other degree of suggestibility is but a partial negativing. In other words the writer regards hypnosis as the consummatory reaction of a sequence of suggestible reactions.

Much has been written about the extreme suggestibility of children. But it seems very likely that many writers have badly confused suggestibility with ignorance. The child, as compared with the adult, is extremely ignorant, and therefore is more prone to accept the statements and suggestions of those whom he recognizes to be his superiors. It seems not to have been observed that children are particularly suggestible to other children of their own age. We must be careful, therefore, to distinguish between suggestibility and ignorance. By suggestibility we mean the tendency which is found in most individuals in varying degrees to accept statements and suggestions of fact which are contrary to their own knowledge and experience. If they have no knowledge which they may bring to bear upon the statement made and therefore accept it as being true and act accordingly, we should hardly call them suggestible. But if an individual is told that his right arm is going to become paralyzed and it does, in the absence of any former experience of a similar nature or any condition which might lead him to suspect that he is

going to lose the use of his arm, then we might properly characterize him as being suggestible.

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CHAPTER XXII

THE FEEBLEMINDED INDIVIDUAL

Orientation. In most of the preceding chapters we placed principal emphasis on the motives, the dynamic aspects of personality. We saw that functional or mental disorders were the result of conflicting, exaggerated, and distorted motives. And in the earlier chapters of the book we considered various ways in which individuals endeavor to solve, to be rid of, or to overcome their difficulties. And as we went along we further saw that many of the ways in which persons try to solve their difficulties prove largely maladjustive and that frequently the individual is left a victim of a network of persistent non-adjustive reaction patterns. But in no instance did we attribute the development of these non-adjustive reactions to a lack of intelligence. Rather we saw that they resulted from such subjective processes as repression, emotional infantilism, projection, regression, etc. In other words we regarded them as the result of profound disturbances within the motive and affective life of the individual.

In the present chapter we shall consider a group of persons who are also maladjusted, or unadjusted, to their social-economic environment, but who are quite distinct from the psychoneurotic and psychotic classes. The persons to be considered may or may not in any given case be emotionally unstable; but in all cases they are deficient in intellectual capacity; they lack the necessary intelligence capacity for making adequate adjustments in their social-economic lives.

Some Terms and Definitions. The term *feebleminded* means literally, of course, "having a feeble or weak mind"; and the term *mind* when used in this connection refers particularly to the cognitive functions, such as perceiving, thinking, judging, remembering, and imagining. Consequently a feebleminded person is one who perceives only the more obvious

aspects of a situation, whose thinking (if there is any) is of a very simple order, who judges poorly, and who is likewise deficient in memory, imagination, etc. *Feeblemindedness*, then, connotes an inferior cognitive capacity. Instead of feeblemindedness, the terms *mental deficiency*, *mental subnormality*, and *amentia* are sometimes used. With one or two exceptions to be noted later, these terms all have the same meaning. The reader must be careful to distinguish, however, between the terms subnormality and abnormality and the terms amentia and dementia. A subnormal individual, technically speaking, is one who is considerably below the average intelligence of the group; an abnormal individual is one who is simply considerably different from, but not necessarily below, the average person in any one of many different respects. The neurotic individual is abnormal but not necessarily subnormal, although he may be in any given case. If he is, then we simply have an individual who is characterized both by subnormality and abnormality; he is both subnormal and abnormal. *Amentia* means "without mind" and is properly used only with reference to those individuals who never have had, at least not since a very early age, normal or near-normal intelligence. The term *dementia* is applied not to the individual who never has been of normal intelligence but to the person who has deteriorated mentally, who has suffered a loss of mental capacity. An example would be the psychotic individual who has become demented. Now since these various terms have technical meanings, the reader should be careful to use them in their proper sense. It is incorrect to speak of the demented individual (the individual who has lost his mental capacity) as feebleminded, inasmuch as the feebleminded person is technically one who never has had a normal (or near-normal) degree of intelligence. We shall come across certain other technical terms later in the chapter.

Since the individual's intelligence, or his lack of intelligence, is revealed, broadly speaking, only by his reactions to his environment, and inasmuch as the individual's reactions may be considered from various angles, it naturally follows

that we should have different conceptions or definitions of intelligence and feeblemindedness. Let us forget for the moment the general definition of feeblemindedness which we have given and consider some of the various criteria which have been suggested. It will be sufficient to mention five of these: Legal, medical, social-economic, pedagogical, and psychological.

Legal definitions of *idiocy* have existed since ancient times, indicating that it has long been recognized that certain individuals, because of mental deficiency, are less responsible than the average person in a legal sense. An example of early definitions of this sort is that given by Lord Coke who says, "An idiot, or natural born fool, is one who from his nativity, by perpetual infirmity, is *non compos mentis*." [1] A more recent definition, given by Blackstone, is. "An idiot, or natural born fool, is one that hath no understanding from his nativity, and is therefore by law presumed never likely to attain any." [2]

These definitions are fairly in keeping with our present sociological concept of individual responsibility. It is generally assumed that the individual who has the intelligence to distinguish clearly between social and anti-social acts and who is able to foresee the probable consequences to himself of committing anti-social acts is legally responsible. More than this, it is generally assumed that such an individual is responsible in every sense of the word for his actions, that he is actually free to choose between "right" and "wrong." On the other hand, it is assumed that if an individual does not have the mental capacity to distinguish between social and anti-social acts and is not able to foresee the probable consequences to himself of his actions, he is feebleminded (or insane) and therefore is not responsible for his actions. Such a concept when put into practice may, and perhaps does, have a very definite social value, since, to the extent that a belief in one's own responsibility is inculcated in the individual, to a like extent will it act as a deterrent to anti-

[1] Hollingworth, Leta S., *The Psychology of Subnormal Children*, p. 40, Macmillan.
[2] *Ibid.*, p. 41.

social behavior. But the student of abnormal psychology should recognize the fact that from a psychological standpoint there can be no such thing, strictly speaking, as responsibility for one's own actions. For we have seen that the individual's reactions are determined by his basic motives, his past conditioning, and the sentiments and attitudes which characterize him at the time; and that the control of an antisocial impulse always consists of nothing more or less than the simultaneous arousal of some other impulse (sentiment) which is antagonistic to the one which we speak of as being controlled. Only if we were to reintroduce the old philosophical concept of *free will* could we speak of the individual as being responsible for his actions. But we have yet to find either a need or a place in psychology for free will.

Hence we see that legal conceptions of feeblemindedness are really outside the realm of psychology. Before dismissing them, however, we must mention a second objection to such definitions. The feebleminded person differs from the normal only in the matter of degree; between the most intelligent and the most feebleminded there is a continuous gradation of degrees of intelligence. Now although we might, and actually do, draw an arbitrary line through this graded series, calling all below the line feebleminded and all above the line not feebleminded, yet to make any such arbitrary distinction the sole basis for holding an individual legally either responsible or irresponsible for his actions becomes a gross absurdity. Supposing we decide to label the individual with intelligence $X - 1$ feebleminded and the individual with intelligence $X + 1$ not feebleminded, then what shall we do in the case of the individual with intelligence X when he commits a crime? This is a question of great importance to society and of grave importance to the individual; but as yet its solution is hardly begun.

Perhaps the most authoritative *medical* criterion of feeblemindedness is that given by Tredgold. "The condition is a psychological one, although the criterion is a social one, and we may accordingly define amentia as *a state of restricted*

potentiality for, or arrest of, cerebral development, in consequence of which the person affected is incapable at maturity of so adapting himself to his environment or to the requirements of the community as to maintain existence independently of supervision or external support." [1]

There are various objections to such a definition as a sole criterion of feeblemindedness. The *first and greatest* comes from the fact that the definition really involves two variables. The potentiality for "cerebral development" varies of course a great deal among individuals, and likewise the social-economic environment of different individuals varies greatly. An individual living in New York City, London, Paris, or any other large city might be a social-economic failure and yet have a higher degree of intelligence than a fairly successful Kentucky "moonshiner." We cannot of course study or evaluate the individual except in relation to his environment, and therefore if we are to compare different individuals with respect to any capacity obviously we must measure this capacity in terms of a common environment (objective measure).

In the *second place*, we are confronted with the troublesome matter of drawing a line between the individual who barely succeeds in adapting himself (after a fashion) to his social problems and in maintaining himself without external support, and the individual who barely fails to do so. Shall we call the one feebleminded and the other normal? The definition really implies a sharp distinction between the mentally deficient and the normal; whereas it is well known that no such sharp distinction exists.

Thirdly, the definition fails to provide us with any satisfactory diagnostic criterion. Many individuals of normal intelligence do not make an adequate adaptation to their social and economic environment; and it is often extremely difficult in any given case to determine the nature of the difficulty which has kept the individual from succeeding. It has been quite generally assumed in the past that a well-

[1] Tredgold, A F, *Mental Deficiency*, Fourth Edition, pp. 8–9, Baillière, Tindall and Cox.

trained physician, by giving an individual a physical examination and asking him a few questions, could in this casual manner determine whether the person were feebleminded, and Tredgold seems to make some such assumption. But we may say here, and most emphatically, that except in the case of the individual who is extremely low in intelligence only a most painstaking examination by means of proper objective tests by one thoroughly trained in administering such tests, plus other equally careful examinations (to be mentioned later) will enable one to say with any degree of certainty what the person's intelligence status is.

In 1904 the Royal Commission of Great Britain adopted a *social-economic* definition of mental deficiency which was as follows: "A feebleminded person is one who is capable of earning a living under favorable circumstances, but is incapable, from mental defect existing from birth, or from an early age, (a) of competing on equal terms with his normal fellows; or (b) of managing himself and his affairs with ordinary prudence." [1] The same objections are to be made to this definition as have just been offered against Tredgold's which, as the reader has observed, adopts a social-economic criterion.

Many communities adopt a *pedagogical* criterion of feeblemindedness in the case of school children. If a child is three or more years retarded in his school work, he is assumed to be mentally retarded and he is placed in a special class. Before the advent of psychological methods of examination this pedagogical criterion was frequently the sole basis for determining the mental level of the school child. Obviously such a criterion would fail to distinguish between the feebleminded child on the one hand and the child who was retarded because of sensory defects, or past illness, or mental deterioration resulting from organic disease, or who had been unable to attend school regularly in the past or who was handi-

[1] Among English writers the term "feebleminded" is used to designate the highest grade of mentally deficient individuals, termed in this country "morons," and the term "amentia" is used instead of the term "feeblemindedness" to include all degrees of mental deficiency.

capped because of emotional instability, improper conditioning, etc.

In 1904 a special commission was appointed in Paris for the purpose of segregating the mentally defective children for special instruction. Alfred Binet, Professor of Psychology of the University of Paris, was requested by this commission to undertake the provision of a *psychological criterion* of mental deficiency upon the basis of which defective children could be identified. Thereupon Binet undertook to develop an objective quantitative measure of intelligence. The Binet Intelligence Test is the result of many years of work by him and his collaborators. Now that it was possible to get at the individual's intelligence by means of objective measures it became a simple matter to formulate a psychological definition of it. Binet's measuring scale gave the intelligence of the individual in terms of his mental age (M.A.) and therefore a definition in terms of mental age was formulated. Children of nine years or less who showed a mental retardation of two or more years; children above nine who showed a retardation of three or more years; and adults who had a mental age of not more than twelve were classed as mentally deficient, provided of course that it could be clearly shown that the defective intelligence in each case was a matter of retarded development and not a loss of capacity.

Following the work of Terman and others in this country, the expression "Intelligence Quotient" (I.Q.) has largely supplanted "Mental Age" as a way of stating the individual's intelligence quantitatively. The I.Q. is obtained by dividing the M.A. by the chronological age (C.A.); and the quotient is customarily expressed in terms of 100. Hence if an individual is eight years old and has a M.A. of eight, his I.Q. is 100; if he is eight and has a M.A. of six, his I.Q. will be 75; if he is eight and has a M.A. of ten his I.Q. will be 125, etc. Consequently it is now possible to use the I.Q. as our criterion in defining feeblemindedness. A recent definition on this order by Hollingworth is as follows: "A feebleminded person is one who has originally an intelligence quotient of 70 per

cent or less, and whose status falls in the lowest two per cent of human intellect." [1]

What Is Intelligence? We have spoken of feebleminded individuals as being characterized by a considerably lower degree of intelligence than the normal person possesses; but we have said very little as yet concerning the nature of intelligence. It is assumed that the reader has a fairly clear notion of what is meant by intelligence and therefore we shall touch upon it here but briefly. Intelligence is usually studied and defined as the ability of the individual in respect to two general types of adaptive activity: Namely, (a) to the extent to which an individual has the capacity for acquiring adaptive habitual modes of reaction to his environment, and (b) to the extent to which he has the capacity for adapting to *new* situations, other things being equal,[2] he is intelligent. If we are to consider intelligence as a natural capacity of the individual, then obviously we can study it only as it manifests itself in the person's reactions. The question now becomes, in what way does the feebleminded individual differ from the normal in his reactions to his environment? We may begin by saying that to a large extent the feebleminded individual is characterized by an absence of reactions; many aspects of his environment are not, and never become, potent for arousing reactions in him. This fact results because of his inability accurately to perceive and to deal with the less obvious aspects of his environment, with symbols and relationships. He may learn that an apple is good to eat and react accordingly when an apple is placed near him, but be absolutely unable ever to associate the word "apple" with the fruit itself. In other words, he is unable to perceive the word (apple) as a symbol of the fruit, as something which signifies or stands for it. The feebleminded person is likewise deficient when it comes to reasoning in terms of causal relationships. He may recognize the rain as water but be unable

[1] *Op. cit.*, p. 52.

[2] It must be kept in mind that other factors than a lack of intelligence may keep an individual from acquiring adaptive modes of reaction or from adequately adapting himself to a new situation.

to deduce from the fact of the falling rain the further fact that if he goes out without raincoat or umbrella he will get wet; and, if he is sufficiently feebleminded, he will be unable ever to make this deduction regardless of the number of times which his getting wet may immediately follow his seeing a cloudy sky, wet streets, falling rain, etc.

Not only does the feebleminded individual fail to react to the more subtle aspects of his environment but he fails to react adjustively to the more obvious aspects. If given a form-board test he may try again and again to make a circular block fit a triangular depression. He fails to perceive the dissimilarity between the two facts. If asked to reproduce a line of a given length he may draw a line of only half or twice the length of the one before him. He is similarly obtuse to his social environment and therefore usually becomes the butt of practical jokes among his playmates. Or he may be readily induced to play some rude prank on his teacher, failing to perceive correctly the nature of his act.

Classifying the Feebleminded. Between the most intelligent individual and the most feebleminded there is, so far as is known, no absolute distinction; the one differs from the other only in degree. Next to the most intelligent there are others who are almost as bright, and next to the most feebleminded there are others who are almost as dull, and next to these there are others, and so on till our gap between the two extremes is completely filled in. Theoretically no two individuals have exactly the same degree of intelligence, but since we are able to measure intelligence only approximately, and furthermore, since in practical life we are able to deal only with fixed values differing from each other considerably, it is customary to distinguish only a few different levels of intelligence instead of eighteen or twenty hundred million. The reader should try to keep in mind, however, that although we speak of all individuals who come within a certain range as having the same degree of intelligence, we are really confronted by a continuous series of gradations the size of which is so small as to be immeasurable. And it then

follows that if we adopt some fairly large unit of measure and proceed to divide our continuous series into any number of segments, such a division becomes largely arbitrary and practical, the different segments being separated from each other by no natural line of demarcation.

Terman and many others following him distinguish nine ranges of intelligence as follows:

Classification	*Score in Terms of I.Q.*
Genius, or near genius	Above 140
Very superior	120–140
Superior	110–120
Normal or average	90–110
Dull or backward	80– 90
Borderline deficiency	70– 80
Definitely feebleminded:	
(a) Moron	50– 70
(b) Imbecile	20– 50
(c) Idiot	Below 20

A second classification is in terms of mental age: An idiot is an individual who upon reaching maturity does not exceed in intelligence (or mental age) the normal child of three; the imbecile is one who has the intelligence of the normal child between three and seven; and the moron is one whose intelligence is equivalent to that of the child between seven and ten. English law designates these three classes of mental defectives as follows:

"*The feebleminded* are persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility, yet so pronounced that they require care, supervision, and control for their own protection or for the protection of others, or, in the case of children, that they by reason of such defectiveness, appear to be permanently incapable of receiving proper benefit from the instruction in ordinary schools.

"*Imbeciles* are persons in whose case there exists from birth or from an early age mental defectiveness not amounting to idiocy, yet so pronounced that they are incapable of managing themselves or their affairs, or, in the case of children, of being taught to do so.

"*Idiots* are persons so deeply defective in mind from birth, or from an early age, as to be unable to guard themselves against common physical dangers."

Some writers subdivide these three classes, speaking of high-grade, middle-grade, and low-grade morons, imbeciles, and idiots. It is obvious that there would be a greater difference in intelligence between a high-grade and a low-grade imbecile, for instance, than between a high-grade imbecile and a low-grade moron. Consequently to speak of an individual as an imbecile or as a moron is not to speak very definitely of his intelligence status. Theoretically at least it would be more exact to state his I.Q. (which many writers do not hesitate to do), but even after giving a person a thorough psychological examination, many of us would hesitate to say dogmatically that he has exactly this or that I.Q. The writer personally believes that an individual's intelligence might properly be stated, once he has been thoroughly examined, in terms of his I.Q. score ±; that is, as I.Q. 50±, I.Q. 60±, etc. If the individual's intelligence were stated in this manner, it would indicate that his mental level had been determined in accordance with the usual methods, but it would also indicate a free (or forced) admission on the part of the person who had done the testing that in the present state of our knowledge of intelligence testing, determining one's mentality is not as simple or as certain a procedure as, for instance, determining one's height or weight. It might even act (and this would be very desirable) as a partial antidote to the unsavory enthusiasm of those many amateur "intelligence testers" who have become firmly convinced as a result of a course (usually during summer school) in mental measurements that equipped with a Binet test blank they are able within an hour's time to determine accurately the intelligence status of anyone.

Identification of the Feebleminded. But the diagnosis of feeblemindedness is far less simple than these enthusiastic "intelligence testers" would lead us to believe. It is not so difficult to recognize an idiot or an imbecile or even a low-

grade moron, provided, of course, the individual has first been given a careful medical examination, his school history (if any) checked, and his social and economic adaptability carefully studied. But in the case of high-grade morons and the borderline group, the examining committee (social worker, nurse, physician, and clinical psychologist) is often very hard put to it to decide whether the individual is to be labeled feebleminded and handled accordingly, or to be labeled a borderline case and handled quite differently. For, after all, an intelligence test is not a mechanical device which automatically records an individual's intelligence as a pair of scales records his weight; the test must be administered by another individual, and all of us, however well trained, are prone to err. Indeed, as Pressey points out, "Diagnosis must then be recognized as very largely a matter of expert judgment, based on the facts in their totality rather than on any particular set of symptoms." [1]

Moreover it must be remembered that the determination of intelligence among the moron and borderline classes is first of all a matter of practical and only secondly of theoretical importance. Most states now have fairly rigorous and exact laws relating to the disposition of their feebleminded population. Consequently if an individual is diagnosed as feebleminded, it may mean institutional confinement the rest of his life for him and the cost of his up-keep to the state. And in certain states even sterilization of the mentally defective is approved by law.

Inseparably associated with the matter of identifying the feebleminded is the far from settled question as to who shall and who shall not be considered technically mentally defective. Even though we were to assume that the Binet or any other test is as accurate as many claim, we would still be confronted by the troublesome question of where to draw the line between the feebleminded and not-feebleminded. Formerly all adult individuals with a mental age of twelve

[1] Pressey, Sidney L., and Pressey, Luella Cole, *Mental Abnormality and Deficiency*, p. 224, Macmillan.

or less were generally held to be technical mental defectives. However some writers have favored a M.A. of ten as the upper limit, while quite recently Goddard, a well-known American writer, has suggested seven as the upper limit, re-defining morons as comprising "that large group of people whom we recognize as of dull intelligence." [1] He goes on to say that they should not be considered as mental defectives since with special training they are capable of becoming to an extent regular members of the social group. If this criterion suggested by Goddard were accepted and universally applied, it would undoubtedly all but remove the danger of a normal or near-normal individual's ever being labeled feebleminded, for the upper limit is very low. But this, we believe, would do little toward solving the social problems presented by the feebleminded population. Rather we agree with the stand taken by Wallin, Pressey, and others that a diagnosis of an individual suspected of being mentally defective should never be made on the basis of a single criterion—psychological or otherwise—but always in the light of all criteria which have any diagnostic value in enabling one to estimate the person's adaptability to his environment. Pressey states that "(1) educational inadequacy, (2) economic inefficiency, (3) social inadequacy, and (4) a distinctively low rating in a carefully conducted series of tests, are essential for a satisfactory diagnosis." [2] And Wallin forces our attention to the fact that although an individual may rate in an intelligence test (the Binet test) only the intelligence of a high-grade defective, he may nevertheless prove beyond the possibility of a doubt his competency to meet the problems of his social-economic environment. Thus, to mention only one of the cases which he cites, a man who made a rating of 10.6 years had nevertheless raised a family of nine, all high-school graduates and all but one of whom had been one-time students in college, two taking higher degrees. For ten years

[1] Goddard, H. H., "Feeblemindedness, a Question of Definition," *Proc. and Addr. Amer. Asso. Stud. Feebleminds.*, Vol 33, 1928, pp 219–227.

[2] *Op. cit.*, p. 225.

he was president of the board of education in the small town in which he lived; was a very successful farmer, retiring on a competency of $30,000; and had always been a law-abiding citizen. This man had made this success despite the fact that he rated only as a high-grade defective, as measured by the intelligence test.[1] A single case of this kind should put the reader on guard against a too ready acceptance of the enthusiastic claims made by some that an intelligence test is an infallible measure of an individual's mental capacity and that it affords a means whereby his future social-economic adaptability can be accurately predicted.

The Number of Feebleminded. It is generally assumed—and the assumption appears to be fairly well supported—that when the intelligence of a large unselected group of individuals is measured and the individuals are arranged in the order of rank, they will be found to be distributed essentially in accordance with the normal curve of distribution. From this fact it will readily be seen that there are fewer idiots than imbeciles, fewer imbeciles than morons, fewer morons than borderline cases, and so on till the individual (or group) representing the median score is reached; and from this point on the number of individuals for each successive score will become increasingly less till the individual (or group) having the highest score is reached.

A second fact which becomes obvious is that the number of feebleminded individuals will be determined primarily by the criterion of feeblemindedness which is in use. If we designate as feebleminded only those individuals who have a mental age (or a potentiality for attaining a mental age) of seven or less we shall, of course, have only a fraction of the number we would have were we to use as our criterion a mental age of twelve or less. As we have said, it is customary at the present time to classify all individuals as feebleminded who have an I.Q. of 70 or less. Terman found, in 1000 school children whom he tested, that 1% had an I.Q. of 70 or less, 2% had an I.Q. of 73 or less, and 3% had an I.Q. of 76 or

[1] Wallin, J. E. Wallace, *Problems of Subnormality*, pp. 223–224, World Book Co.

less.[1] But these were school children and apparently did not include the idiot, the imbecile, and the lower part of the moron group. Perhaps we can safely say that according to the present psychological criterion of mental deficiency, one-half of one per cent of the population is feebleminded.

Clinical Types of Feeblemindedness. Most writers distinguish two general types of feeblemindedness or amentia: Primary amentia, and secondary amentia. Until more recently it has been quite generally assumed that primary amentia was the result only of defective germ plasm (heredity), while secondary amentia was the result of extraneous or secondary factors of various kinds. But more lately this largely theoretical etiological distinction is tending to disappear because different writers have seriously questioned the assumption of a sole hereditary factor as the cause of so-called primary amentia. Leaving the matter of causation to a later page, we may distinguish, in accordance with the present trend, a number of different types of feeblemindedness on the basis of clinical features alone.

The great majority of feebleminded individuals (perhaps 90%) present no characteristic clinical features. There is nothing about their external appearance which indicates that they are mentally deficient. As a group they are not quite as heavy or as tall or as strong as the average for normal individuals; but the difference is not great and does not in any sense provide us with a diagnostic criterion. Some writers speak of this group of individuals as *primary aments*, implying that the mental deficiency is primary, that is, due to heredity.

The remaining 10% of mentally deficient individuals comprises a fairly large number of different clinical varieties; the person being characterized in each case by one or more physical features (stigmata of degeneracy) which in general and to a certain extent are indicative of feeblemindedness. We shall mention only a few of these clinical types.

1. *Cretinism.* A typical cretin, one several years old and who has never received treatment, presents very definite

[1] Terman, L. M., *The Measurement of Intelligence*, p 82, Houghton, Mifflin.

clinical features. He is infantile in appearance, short in stature, usually very fat, short legged, slow in his movements, and apathetic in general. His skin is yellowish, dry, thick, and wrinkled; his head is large, lips thick, tongue large and often protruding. Unless he is given treatment he may never grow to be more than thirty inches in height and he never completely loses his infantile appearance. Upon reaching maturity (in age), his intelligence may be anywhere between moronity and low-grade idiocy.

It appears to have been thoroughly established that cretinism results from an absence of or deficient thyroid secretion. If the condition is recognized early and the extract of thyroid glands is administered, the individual may develop fairly normally both physically and mentally. Some believe the thyroid deficiency to be hereditary in origin, while others believe it to be the result of infection.

2. *Mongolism or Mongolian Amentia.* Individuals belonging to this type strongly resemble in certain of their physical features the Mongolian race, hence the name. The features of which anomalies most commonly exist are the skull, the eyes, and the tongue. The skull is small, diminished in its antero-posterior measurement, and round. The back of the head is considerably flattened. The slits (palpebral fissures) formed by the meeting of the eyelids slant downward and the eyelids are usually red and inflamed. The tongue is marked by deep transverse fissures and is usually large. Besides these features, which are almost always present, the mongolian usually has dry, wiry hair, rounded ears, a short, flat nose, and loose ("double") joints.

Up to the present time mongolism has remained incurable and the cause is still unknown. Different writers have suggested almost everything from syphilis to an abnormal pressure upon the fetus as a result of an unusually small amniotic sac to account for it. One theory appears to be as good as another. All mongolians closely resemble each other, two very rarely occur in the same family, and they seldom live very long, the average life-span being fourteen years.

3. *Hydrocephalus* or *Hydrocephalic Amentia.* The outstanding clinical feature of this condition is an extremely large skull. And the largeness of the skull is unquestionably the result of an over-accumulation of cerebro-spinal fluid, which may amount to several pints. As a result of the great pressure exerted by the fluid, the brain tissue adjacent to the ventricles is gradually thinned and destroyed. Naturally this causes mental enfeeblement and an impairment of mental development. Apparently there are all degrees of hydrocephalus; if the accumulation of fluid is not too great the mental impairment will be correspondingly less; if the fluid is very excessive death may result. Most cases of hydrocephalic amentia belong to the imbecile and moron levels. Apparently where the condition is sufficiently acute to have caused idiocy, death soon results.

There is no known satisfactory treatment for this condition. Draining off a part of the cerebro-spinal fluid does not have any lasting effects. Likewise the cause of the over-accumulation of the fluid is unknown.

4. *Microcephaly* or *Microcephalic Amentia.* In certain respects the clinical features of this condition are the opposite of those found in hydrocephalic amentia; the skull is usually very small in circumference, averaging about 17 inches. But, according to Tredgold,[1] the shape of the skull is a more reliable diagnostic feature than its size. The back of the head is flattened and there is a marked recession of the frontal region. Also, these individuals usually, if not always, have a markedly receding chin. Naturally the brain weight, along with the skull capacity, is appreciably deficient. One individual has been reported whose brain weighed only 170 grams (the average weight for males being 1374 grams and for females 1244 grams). Aside from their small and peculiarly shaped skull, these patients are characterized (usually) by a short stature, few of them attaining a height greater than five feet.

The cause of the condition is not yet established. One

[1] *Op. cit.*, p. 230.

view is to the effect that it results from a premature closing of the cranial sutures. This theory has been largely discredited, however, since it has been observed that cases exist in which the sutures are still open. A second theory is that it is a matter of atavism, a reversion to a simian type. This theory likewise appears to have been quite conclusively disproved as a result of careful studies and examinations of a large number of cases. Tredgold contends that the condition is due to defective inheritance, and therefore he includes it under primary amentia.[1]

5. *Syphilitic Amentia.* An individual belonging to this class may or may not present stigmata of degeneracy (clinical features). Those stigmata which are most commonly found are Hutchinson's teeth (deeply notched front teeth usually somewhat fan-shaped and widely spaced), "rose-bud" mouth (mouth with radiating lines or fissures), cleft palate, flattened nose, missing digits, club feet, strabismus, asymmetrical face, etc. However, since none of these signs may be present, a diagnosis is frequently made on the basis of a positive Wassermann, a history of syphilitic infection in the parents, and an absence of other etiological factors. In the absence of stigmata of degeneracy it is impossible offhand to distinguish between these patients and ordinary mental defectives (simple aments). They usually range in intelligence from imbecility to high-grade moronity.

This form of amentia results from the contraction of syphilis *in utero*, that is, from congenital syphilis. At least it is assumed that syphilis is an essential factor. Inasmuch as not all cases of congenital syphilis are feebleminded, there are perhaps in any given case certain other factors of a predisposing kind. The syphilitic ament usually suffers mental deterioration, develops various complications, and frequently dies of paralytic dementia.

6. *Feeblemindedness Associated with Epilepsy.* A very appreci-

[1] We might point out that Tredgold also includes mongolism under primary amentia, contending that it too is a matter of inheritance. We shall have more to say concerning heredity as a causal factor when we take up the causes of feeblemindedness.

able number of feebleminded individuals are subject to fits and convulsions of an epileptic nature. There is usually apparent a very noticeable degree of mental deterioration; and from this fact many writers assume that the feeblemindedness (really dementia) results from the epilepsy. However, our knowledge of the whole matter is very uncertain, due primarily to the fact that very little is really known about the cause of epilepsy. Although it appears fairly probable that in the case of a feebleminded epileptic there is a causal relation between the two conditions, it appears equally probable that they are both manifestations or results of the same morbid process, whatever its exact nature.

There are many other varieties of feeblemindedness from an etiological point of view, but the ones we have mentioned are the more common and outstanding clinical forms. We shall allude to, or at least imply, other types in our discussion of causation.

Causes of Feeblemindedness. Despite the many statements of mathematical exactness to the contrary, there is really no topic in the whole field of psychology concerning which less is actually known than the causes of mental deficiency. And we can perhaps do no better by way of helping the reader to a healthy skepticism toward any one of these various dogmatically stated opinions than to quote a few lines from one who has spent years in the study of feeblemindedness and who is probably as familiar as anyone with all the pros and cons of the question.

"Many theories of feeblemindedness have been advanced. It is a spontaneous generation, a sport, a mutation; it is an atavistic phenomenon, a reversion to a primitive type; it is an 'uninterrupted transmission,' 'a direct inheritance,' 'through two hundred generations or more' of defective strains 'from our animal ancestry'; it is a variation due to hereditary taint, transmitted either according to the Galtonian or Mendelian formula; or some cases represent formative defects, some are due to disorders of the endocrine glands, etc.

"Amid this welter of discordant views and in the present

stage of enlightenment, it would seem bold indeed to attempt to formulate a consistent, adequate, workable theory of causation. Certainly the facts are not yet all in; we do not yet have a sufficient body of incontestably established facts to warrant anything in the nature of a final formulation. Anything like finality will have to await the further development and extension of the technique of experimental genetics." [1]

In connection with our mention of the different clinical forms of feeblemindedness we spoke briefly of some of the different theories of causation. However our discussion of clinical forms left out of account that great mass of feebleminded, the "primary aments," and it is specifically with respect to these that we shall now speak.

We may distinguish, at least theoretically, four classes of causation: (a) Hereditary, (b) prenatal, (c) postnatal, and (d) multiple.

It appears to be the opinion of most writers that the most important, or frequent, factor in the production of feeblemindedness is heredity; but exactly what the frequency and importance of this factor is, is a matter of considerable disagreement. Tredgold holds that 80% of mental deficiency is due to a "neuropathic inheritance," Goddard estimates at least two-thirds of cases to be a matter of inherited defect, while Hollingworth remarks, "There is now no competent student of the heredity and transmission of mental traits who would dissent from the statement that feeblemindedness is hereditary. . . . Heredity is the source of most of the mental deficiency with which the social order is burdened." [2] Others have found evidence of hereditary taint in only 45 or 50% of their cases. The disagreement among these findings is undoubtedly due in part to the different criteria adopted by the different investigators of hereditary taint. For instance, Goddard has contended that feeblemindedness is the only hereditary antecedent of feeblemindedness, while

[1] Wallin, J. E. Wallace, "Studies of Mental Defects and Handicaps," *Miami University Bulletin*, Series XXII, No. 5, Jan., 1924, p. 112.

[2] *Op. cit.*, p. 213.

a second writer, H. C. Marr, has argued that the "inheritance is chiefly insane"

The chief difficulty at the present time is our lack of knowledge concerning the extent to which the psychoses, neuroses, emotional instability, etc., are hereditary, and secondly, the genetic relationship between these conditions and mental deficiency. In other words, shall we in a given case of feeblemindedness consider insanity in a grandparent, or emotional instability in a parent, or epilepsy in a brother or sister, or "mental peculiarity" in aunts and uncles as evidence quite conclusive of its hereditary nature? Obviously to do so would be very questionable procedure in the present stage of our knowledge of the complexity of inheritance.

Within recent years several studies of the inheritance of feeblemindedness have been made; but none of these affords a safe basis for generalization. In the first place the methods employed in these studies—although they may have been the only possible ones—leave much to be desired; secondly, there is the problem of the criteria of mental deficiency and how much weight should be given the individual's I.Q. in the absence of a complete social-economic history; and thirdly, there is the matter of the diagnosis itself and the competency of the individual who makes it. An example of such studies is the "Kallikak Family" by Goddard. Investigators were trained in the gathering of relevant facts and in the making of diagnoses and then sent out to collect data on the descendants of Martin Kallikak (a fictitious name, of course) and two women by whom he had children. Martin Kallikak was a soldier in the Revolutionary War who, we are told, had a son by a feebleminded girl. From this union 480 individuals have been traced, of whom 143 are said to have been definitely feebleminded. Martin later married a normal girl and of the 496 descendants from this second union not one has been feebleminded, while educators, lawyers, physicians, land owners, etc., predominate among them. The study sounds not only interesting but quite startling in its revelations. But we must remember that many of the individuals reported

in this study, inasmuch as they were already dead, were never seen by the investigator; that the data were necessarily far from complete in the case of some who were living; and that while Dr. Goddard interpreted these data, other individuals collected them (made the observations). We must also take note of the great difference in environment and opportunities which inevitably existed between Martin's son by the feebleminded girl and his children by his wife. Finally, as a young woman college student recently asked, "How do we know that Martin Kallikak's so-called son by the feebleminded girl was really *his* son?" Indeed, although the court may see fit to accept the word of an unmarried mother as to the father of her child and although to do so is quite in keeping with certain traditional ethics, science is usually more exact in its methods—and then, too, we are told this girl was feebleminded!

We come back to our statement that it is not known to what extent feeblemindedness is a matter of inheritance. If intelligence is a natural trait or a number or composite of natural traits, we should expect to find a considerable amount of variation among individuals with respect to it. But there appears to be both a greater number of variations and a greater degree of variation below the average intelligence than above. This suggests that natural variation might be the prime factor in the case of the moron and perhaps the higher grade imbecile, whereas there are possibly always additional causative factors in the case of the lower degrees of deficiency. A second fact which seems to support such a view (additional causative factors) is that in the lower animals there is apparently no such wide variation in intelligence. The writer has been around domesticated animals a great deal and he has observed that they certainly differ considerably in their learning capacity but he has never known one that was unable to learn to a very appreciable extent; a horse that could not learn, for instance, to stop at the command "Whoa!" Yet this is beyond the learning capacity of the low-grade idiot. In harmony with this observation is the fact that as

compared to man the lower animal is subjected to very few unnatural environmental influences both prenatal and postnatal, such as drugs, disease, emotional disturbances, accidents at birth, and physical trauma.

Of the *prenatal causative factors in feeblemindedness* we shall mention only two, *syphilis* and *alcohol*. It appears to be quite definitely established that syphilitic infection of the embryo or fetus may result in mental deficiency. The reader should bear in mind, however, that this is a matter of true syphilitic infection and that we should therefore speak always of congenital and not of inherited syphilis. There is some evidence, however, that the toxins produced by the life activity of the syphilitic germ may affect the germ plasm and that the damage done may be passed on essentially as a matter of inherited defect.

In any case of syphilitic amentia there is always the possibility that the syphilis is not the sole cause of the deficiency. For after all, not every case of congenital syphilis is feebleminded, and moreover syphilitic aments differ considerably in degree of defect. Consequently it appears that the nervous system of one individual may be more susceptible to syphilitic infection than that of another, and this matter of susceptibility may itself be a matter of inheritance, or it may have been determined in part by other factors. It is likewise probable, however, that the degree of defect will depend largely upon the age of the fetus at the time of infection. Finally, we may point out the fact that if intelligence is to be considered a matter of native capacity and if we think of the individual as coming into existence at the time of conception rather than at the time of birth, then syphilitic amentia is, strictly speaking, syphilitic dementia.

Is alcoholism a cause of feeblemindedness or is feeblemindedness a cause of alcoholism? Those who consider heredity to be *the* cause of mental defect are inclined to answer the first question in the negative and the second in the positive, and those who believe in secondary causes of mental defect tend toward the opposite view. There seems to be no obvious

reason for not accepting both views, not with respect to a single individual but to a number of successive generations. If alcohol has the vitiating effect upon the germ plasm that some contend, it might be at least partly responsible for feeblemindedness in the offspring, and feeblemindedness in the offspring might, and perhaps is, conducive to excessive use of alcohol. Consequently we might have a sort of vicious cycle.

Most of the experimental work in genetics with alcohol has, naturally, been done with lower animals, and the results have not always been in agreement. But after the evidence pro and con has been weighed, the balance appears to be in favor of the contention that the embryo or fetus is not immune to alcoholic poison in the mother and also that the germ plasm is not immutable to the forces which act upon the individual. That alcoholic poisoning of the mother, or any other poisoning, should affect the embryo, at least temporarily, seems very probable. As Wallin says, "The embryo of a drunken mother is like another drunkard, for both are nourished by the same blood stream." [1] With respect to the influence, if any, of alcoholization upon the germ plasm we are unable to speak with any degree of certainty. Experimental work on the genetic effects of alcoholization of guinea-pigs over a prolonged period of time has shown that a male which has been treated in this manner begets defective offspring even when mated to a healthy female and that the effects carry over to the second generation. This may not mean that analogous results would be obtained in the case of human beings or that if defects were produced they would involve intelligence. Nevertheless the long-honored tenet that the germ plasm is immutable and unmodifiable by environmental agencies appears to be giving way in the face of experimental studies.

We can be no more definite with respect to the *postnatal causative factors in feeblemindedness* than we have been with respect to hereditary and prenatal influences. Tredgold mentions four types of postnatal factors which he contends may

[1] Wallin, J E. W., *Problems of Subnormality*, p. 446, World Book Co.

result in feeblemindedness; these are: Traumatic, toxic, convulsive, and nutritional factors.[1]

An example of evidence of a physical trauma causing feeblemindedness would be somewhat as follows. When the child was two or three years old he fell from a two-story window and struck on his head. Although he did not appear to be seriously hurt, nevertheless he required medical attention and was not himself again for a number of days. We are told by the parents that up to the time of the fall the child was perfectly normal but that soon after the accident he began to grow dull or failed to learn as he should and became more obviously defective as time went on. There is no history of hereditary taint, alcoholism, or syphilis in the family. In short, no causative factors can be discovered other than the fall, and therefore it is assumed to be the cause of the mental deficiency. But just how safely may we make such an assumption? Not every child who has a severe fall or in some other way receives a blow to the head grows up mentally deficient. Moreover there is often in addition to the traumatic episode a history of syphilis or alcoholism or evidence of hereditary taint, making it impossible even inferentially to assign any definite significance to the trauma or to any single one of the different factors. We can only say that in any given case a physical trauma to the head during infancy or early childhood may reasonably appear to have been the cause of the mental defect if it exists in the absence of other assignable causes, or as a partial cause when it exists together with other probable factors. Along with traumatic causes we may include protracted labor during birth and instrumental delivery.

It has been held by some that feeblemindedness may result from toxic poisoning of the brain due to scarlet fever, diphtheria, measles, rhinitis, and other diseases of childhood. Needless to say the mother can always account for the mental retardation of her child in this way if the physician cannot. Let it suffice to say that feeblemindedness perhaps rarely if

[1] *Op. cit.*, p. 40.

ever results solely from such factors. On the other hand it appears not at all improbable that an excessive use of alcohol or other drugs during early childhood may have a deleterious effect upon the development of the brain as upon the body in general.

Some writers have contended that "teething convulsions" as well as convulsions of an epileptic nature may result in mental retardation. But Tredgold argues that in the first place no sharp line can be drawn between these supposedly different types of convulsions, and secondly, that both the convulsions and the mental deficiency are probably due to a neuropathic predisposition, that a child of good heredity does not have convulsions during teething even though his gums are very swollen and painful.

With respect to the influence, if any, of malnutrition upon mental development, little that is definite can be said. Doctor Smiley Blanton [1] and others of the Medical Corps of the United States Rhine Army of Occupation made a study of the nervous and mental conditions of school children between the ages of five and a half and fourteen years and endeavored to determine to what extent these conditions were the result of malnutrition. Their conclusions were to the effect that the dull, borderline, and feebleminded children had been made more defective by malnutrition but that normal children had not been affected. It seems hardly likely, however, that normal children were not affected (or only "rarely") if, as the author of this study states, "The feebleminded drop to lower levels of intelligence. The borderline defectives become like the definitely feebleminded, and the normally dull children become like borderline defectives." Perhaps there was an effect upon the normal children but not, in most cases, to an appreciable extent. Experimental work upon lower animals has conclusively shown that a too restricted diet may have a very injurious physical effect, and may even in some cases cause death.

[1] Blanton, Smiley, "Mental and Nervous Changes in the Children of the Volksschulen of Trier, Germany, Caused by Malnutrition," *Mental Hygiene*, July, 1919.

Perhaps most cases of feeblemindedness are results of a *multiplicity of factors*. It is indeed very probable that our customary assumption that a given potentiality for mental development is something which is fixed and absolute is entirely wrong. We believe that it is both illogical and incompatible with all known facts to speak, with respect to a number of individuals, of different potentialities for development (different hereditary constitutions) *unless we have in mind strictly similar environments, including both prenatal and postnatal influences*. None of us believes, for instance, that the physical development of an individual is independent of the environmental forces in which he grows; an insufficient and too restricted diet results in stunted growth both in man and in the lower animal, and once the individual has reached maturity or near-maturity his retarded development cannot be completely overcome. An extreme lack of physical exercise results in poorly developed muscles and in poorly coördinated movements; isolation from the environment because of sensory defects leaves the individual stunted both physically and mentally. Hence it seems only logical to suppose that environmental influences have an effect upon the individual's mental development which after all, we must believe, is but an aspect or certain way of viewing his physical development. And it must be remembered that the most important period of the individual's development is during his intra-uterine life and the first few years immediately following birth. Given two pregnant women one of whom has the proper kind of food, obtains the right amount and kind of exercise, is happy and contented, has no strongly emotional disturbances or glandular irregularities, sleeps well, and does not use alcohol or drugs, and the other of whom does not have wholesome food, works too hard and rests too little, is frequently moody and emotionally excited and suffers from "nervous indigestion," is unhappy and worried most of the time, drinks an excessive amount of coffee to keep going, and takes veronal in order to sleep, shall we say that their offspring have had equal chances for normal development up to the time of

birth and that since the child of the latter is mentally defective that it is due to poor heredity inasmuch as a grandfather died in an insane asylum? Is it not at least conceivable that had the child in the latter case been given the same intrauterine environment as the former, it too might have been normal? At least we cannot say that it would not have been. The germ plasm (heredity) is not something which exists in entire isolation from all other facts and forces (certainly not after it has entered into the formation of a new individual). But we are unable at the present time to say in a given case what is due to heredity and what to environment; so we can only reiterate our former statement that perhaps most cases of feeblemindedness are the result of a multiplicity of factors. We believe that it is relatively easy to grow up feebleminded in a "feebleminded" environment.

Some Things Which Do Not Cause Feeblemindedness. It has long been a popular superstition that *consanguinity* results in feebleminded and degenerate stock. However there is no evidence in support of such a contention; the various studies which have been made show that blood-relationship as such has nothing to do with degeneracy. Undoubtedly the superstition grew up as a result of getting the cart before the horse in our reasoning. It is perfectly true that both in this country and in other places there are communities which have an unusually high percentage of feebleminded individuals; and it is equally true that in most cases there has been a great deal of incestuous mating. But then we merely have poor heredity and unwholesome environmental factors producing, inevitably, degenerate individuals. Matings of feebleminded cousins are somewhat more likely to result in feebleminded offspring than matings of unrelated feebleminded individuals because of their greater genetic similarity. By the same token superior cousins are more likely to produce superior offspring than are unrelated superior individuals.

A second superstition which is still with us is to the effect that a mother may "mark" her child; and this has been carried over to the matter of feeblemindedness. Let it suffice

to say that the sight of crippled, insane, or feebleminded individuals will not cause a pregnant woman's offspring to be crippled, insane, or feebleminded. At the same time a severe emotional shock due to such things may, so far as we know, have some effect upon the fetus by way of toxic poisoning. But it is highly improbable that a single emotional shock however severe ever caused feeblemindedness.

The Social Significance of Feeblemindedness. Using the term "social" in a broad sense, we may distinguish three aspects of this problem: The *legal*, the *educational*, and the *economic*. The feebleminded individual is more prone to the commission of anti-social acts, other things being equal, than is the normal individual. This results not from the presence in the former of any criminal or anti-social "instinct," as some have contended, but rather from the simple fact that the feebleminded person is less capable than the other economically, of learning to make social distinctions, of developing moral concepts, and of evaluating the probable consequences of his acts. In other words, the feebleminded individual is more likely than the normal to engage in anti-social conduct for the same reason that the child is more likely to do so than the adult.

Many writers contend that a large percentage of criminals, prostitutes, hoboes, and unmarried mothers are definitely feebleminded and argue that the anti-social conduct is a result of the feeblemindedness. But it is never safe to generalize in such a manner; most anti-social individuals are not feebleminded and consequently, since we have to account for their anti-social behavior in some other way, it is always possible that a similar explanation might fit any given feebleminded case. In terms of our psychology of the normal individual (see Chapter II) we may distinguish two classes of anti-social individuals: (a) Those in whom it has been impossible because of deficient intelligence to develop moral (social) sentiments which would act as inhibitors to anti-social impulses and desires, and (b) those in whom the proper sentiments have not been developed because of the wrong kind of

training (environment). Now the higher-grade defective has the potentiality under the proper environment, for developing moral sentiments to a very reasonable degree, but his environment is often not such as is conducive to the development of them. Consequently we cannot say that his deficient intelligence is the cause of his anti-social conduct; rather his environment or training (society) is to blame. From what we have said it will be clear that the legal definition of individual responsibility has very little indeed to support it from a psychological point of view.

Educationally the problem of mental deficiency is of considerable importance. An attempt is being made at the present time to meet the problem through the establishment of special classes and of special schools for the instruction of those who are too defective to do regular school work. There are now in New York City alone over 250 special classes for backward children.

But of course the lower-grade defectives are unable to profit by instruction in ordinary school work. The idiots and imbeciles and some of the morons present a hopeless problem so far as formal education is concerned. The higher-grade imbeciles and the morons can be taught to use their hands to a fairly efficient extent and consequently are now being trained in simple manual arts such as rug making, basketry, carpentering, and gardening. No attempt is being made any more to educate in any sense the idiots and lower-grade imbeciles.

Economically, the mentally defective class constitutes, according to most authorities, a heavy burden on society. This results not only from the necessity of taking care of the physical needs of the lower grades, their food, housing, clothing, supervision, etc., but also, and to a greater extent, from the special instruction, anti-social behavior, and economic incompetence of the higher grades. For instance, Terman estimates the cost of California's mentally defective class to be in excess of $5,000,000 annually. Two-fifths of this amount is expended in the prosecution and care of criminals and mis-

demeanants, and the other three-fifths is incurred by the diseased, alcoholic, prostitute, and pauper classes of mental defectives.

It seems obvious that a real solution of the legal, educational, and economic problems presented by the mentally defective class is to be sought in the prevention of feeblemindedness.

Preventing Feeblemindedness. There are those who argue that we need our feebleminded, that society has a place for them sweeping streets, hauling garbage, and doing other unpleasant tasks which you or I would not care to do. But such an argument is too absurd and too steeped in self-complacent egoism and sentimentality to require refutation.

We may mention three methods which have been suggested as means of preventing feeblemindedness, or at least of decreasing it: Supervision, segregation, and sterilization. Those who advocate *supervision* have certain strong arguments in their favor. First and fundamentally, feeblemindedness *is a social problem* and only secondly a problem in eugenics, medicine, or psychology. Consequently we see it as a task which the community should take upon its own shoulders; for if there is such a thing as moral obligation, that community (or state) which upholds and fosters the mating of its physical and mental misfits is morally obligated to tolerate and take care of the offspring from such matings. In the second place, it is a well-supported truth that society solves a difficulty only when it is first frankly faced and admitted. Keeping our feebleminded population with us forces our attention to the problems which it imposes, whereas to isolate or ignore or to pretend that we really need and have a place for our mentally deficient is simply to pass the problem on to future generations. On the other hand, there are certain objections to supervision both as a method of handling and of preventing feeblemindedness. From a practical point of view it would entail a great deal of time and money. The proper supervision of a high-grade defective, without a certain degree

of segregation and the imposition of physical restrictions, would require a good part of the time of a normal individual; and from this fact it follows that the expense would be very great. And also it is doubtful if supervision alone could ever be made sufficiently effective to lessen materially the incidence of feeblemindedness.

Some writers advocate *segregation* as the most effective means of handling and preventing mental deficiency. There are at least two serious objections to the method. First, most higher-grade defectives are not identified until after they have propagated, often to a considerable extent, and proved themselves economically incompetent to support their offspring, or until they have committed some crime or are already well along in a life of prostitution or some other anti-social type of activity. In short, as long as segregation waits upon proof of social-economic and moral incompetence of the individual, it cannot prove an effective means of preventing the harmful results which are known to arise from feeblemindedness. Secondly, the last thing which society should take from the individual is his physical freedom, the privilege to live where he wishes and to go and come as he pleases. And although it is sometimes necessary to take from the individual his freedom for the safety and welfare of society, nevertheless if all feebleminded and borderline cases were segregated many individuals who are not anti-social types would be done a gross injustice.

Sterilization is a third method which has been advocated for the control and prevention of feeblemindedness, and more than half of our states now have laws legalizing the operation in the case of defectives. The writer believes that in some such method lies the greatest promise of an ultimate solution of the problem. But at the present time there are various obstacles in the way of its practical application. There is a deep-rooted resentment in the "public mind" against taking from any individual the ability to propagate; and as long as such resentment continues, sterilization of the mentally defective will, of course, be highly impracticable. Although

many states have made sterilization of mental defectives legal, it appears that the law is seldom exercised.

Perhaps, as Wallin suggests,[1] the most satisfactory solution of the problems of feeblemindedness, including its prevention, is to be found in an application of these various methods, the particular method adopted in any given case depending upon the exact nature of the case. Some feebleminded individuals, the idiots and imbeciles, are undoubtedly best off in institutions; many morons and borderline cases are capable of becoming self-supporting and law-abiding if given the proper training and placed under supervision; others of the higher-grade defectives require institutional supervision because of strongly developed anti-social trends; still others are not even in need of supervision *if placed in the proper kind of environment*. But it must be remembered that the proper and most sensible disposition of any high-grade defective should always await the gathering of all the facts in his case: His past training, his past social-economic and educational history, the presence or absence of anti-social tendencies, and finally a thorough psychological determination of his intelligence status.

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[1] *Op. cit.*

CHAPTER XXIII

A WORD ON MENTAL HYGIENE

Definition of Mental Hygiene. Mental hygiene may be defined as the invention, discovery, and systematic application of measures for the preservation of mental health. In other words, its goal is to insure the development and maintenance of normal mental functions. The only fairly comprehensive and systematic mental hygiene movement which the world perhaps has ever known is of quite recent birth. Clifford W. Beers who became a patient at a mental hospital shortly following his graduation from Yale was the prime initiator of this movement. Beers believed, as a result of his experiences as a patient, that there was imperative need of immediate and far-reaching steps toward the prevention and correction of personality disorders and the alleviation of the suffering of disordered minds. The National Committee of Mental Hygiene of which he was the founder now has branch organizations in all parts of the civilized world. The society has devoted itself principally to the discovery of efficacious measures in mental hygiene and to the dissemination of knowledge. It publishes the journal, *Mental Hygiene*.

But broad as this movement is, it has introduced mental hygiene to only a small part of the population as yet. Some of the Eastern States and some of the Pacific States are fairly advanced, relatively speaking, in their mental hygiene services; but many of the remaining States have little that is directly concerned with mental health. Some of our Rocky Mountain States and perhaps some of our Southern States go but slightly beyond the three R's in the education of the individual.

The Pressing Need of Mental Hygiene. There can be no greater value to the human race, its present and future, than the normal and efficient, the undistorted and unperverted,

operation of the mind. Thus the need of mental hygiene is inversely proportional to the stability of the individual, the community, the race as a whole. Or we might say that the need bears a direct algebraic ratio to the number of unstable individuals in a given population. For the effects of personality disorders or instability are not confined to the unstable individuals themselves. Every unstable or maladjusted person affects the stability and efficiency of many others. The morale and social effectiveness of his immediate family are almost invariably severely diminished. A single unstable agitator has been known to destroy the morale of a whole group of workers. Our initially unstable person affects his immediate group, and these in turn affect others, hence our algebraic ratio. Waves of pathological devotion or addiction to some one value or goal have been known to sweep entire nations, as witness the situation in certain European countries at the present time.

Even in our own country, as yet comparatively untroubled by fanatical nationalism, race hatred, etc., the picture is far from bright. With one person in twenty-two or twenty-three becoming insane during his life, with one adult in ten psychoneurotic, with a half million feebleminded, with alarmingly large criminal, indolent, and prostitute populations, the need of a comprehensive and militant mental hygiene program can hardly be questioned. Possibly we shall awaken to the urgent need of mental hygiene once it fully dawns upon us that our maladjusted populations impose the heaviest single taxation drain upon our pocketbooks.

Prevention and Cure. If one wished to grow a tree in a particular manner he would give special attention to it while the tree was young. For as a tree grows larger it becomes increasingly rigid, inflexible, and it becomes increasingly difficult to alter its form and character. The undesirable branches would be pruned early and the nourishment which they had been receiving would thereby be added to that of the desirable parts. Or if one is interested in breeding race horses he will give an unusual degree of attention to the colt. Any slight

deformities will be corrected early and the colt will be broken (trained) to halter, saddle, etc. While still a two-year-old, he will be taught racing. And these things will be taught early because it is hard to teach an old horse new ways.

Many of the insanities, epilepsy, psychopathic personality, and often the more severe cases of psychoneurosis are essentially incurable at the present time. Criminality, indolence, sexual perversions, and prostitution are difficult to correct once they have become firmly established. But most of these conditions could be *prevented* through the proper management of the individual's development during the first eight or ten years of life. Hence mental hygiene finds and will continue to find its most effective application to the problems and development of the child. From all points of view prevention is always preferable to cure even where complete cure is possible.

Mental Hygiene in the Home. The school, the church, and the community are important determining and directing agencies in the personality development of the child. But in the average case all three combined exert less influence than the home. The major part of those extremely important first five or six years of the child's life is spent in the home, under the direct and daily influence of parents and siblings. By the age of six the child's personality and character have already assumed a fairly definite form or mold. It is in the home that the child's motives first come to expression, that emotional responses are first made and repeated, and that his initial orientation toward self and others is acquired. By the end of these first years the child's initial reactions to school room situations, to competitive situations, to superiors and inferiors, to restraint and encouragement, and to various other outside situations have been largely determined, or at least given fairly specific direction.

Psychology is always the study of the individual and all individuals are inherently different. One cannot safely generalize, therefore, in laying down rules for the home-guidance of the child, except in abstract terms. First of all the home environment should be conducive to the arousal and integra-

tion of the child's different motives. Self-assertiveness (egoism) should not be unduly encouraged and neither should self-submission and self-effacement; praise should not be overdone and neither should blame; honesty, fairness, conscientiousness should be taught but not made into fetishes, self-reliance and independence are essential but too great burdens and responsibilities should not be imposed upon the child; a fairly strong ego-identification with the parent of like sex and the avoidance of strong identifications with parent and siblings of opposite sex are extremely important. In two respects, we may safely generalize and at the same time be fairly specific: All of the child's questions should be answered, if the parent is capable of giving correct answers, and *answered honestly;* and, in as far as possible, the child should be taught by example and not by words.

The following case, borrowed from *Auto-Correctivism*, is illustrative of some of the results which come from improper home-guidance. There is little doubt that this boy would have joined either the psychoneurotic or the criminal class upon his arrival at maturity had it not been for the intervention of outside help.

> CASE 63. Donald O., age ten, was the second and youngest child of a middle class Catholic family. His sibling, a sister, was twelve years his senior and his parents were in their middle forties. Donald was of slight build and decidedly small for his age, this fact presenting a sharp contrast to the other members of his family all of whom were of very ample proportions. He was of average intelligence, as were the other members of his family, strongly introverted like his father but like his mother he was excessively timid. He attended the proper grade in school for his age but stood below average in his marks.
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> The parents reported that prior to the age of eight, Donald was a "model" child: He was thoughtful of others, obedient, sympathetic, affectionate, quiet, and

well-behaved in the home. When not at school he devoted most of his time to playing with his mother and his toys in the house. In keeping with his introverted personality, he was particularly fond of a miniature set of toy soldiers.

But during the two years between the ages of eight and ten an extreme change occurred in Donald's behavior, particularly in relation to the members of his family. He developed a habit of calling his parents by "bad names" and of striking them upon the slightest provocation, or, as it seemed to the mother, upon no provocation at all. And the greater their efforts to please him, the more antagonistic and hateful he became. He would kick and scream, refuse to eat except at off-hours, and insist upon staying up till late at night. His mother was forced to see him to bed each night and to sit near him till he had gone to sleep; and frequently she found it necessary to occupy the same bed with him in order to prevent a tantrum. He had acquired a marked interest in gangster pictures and always slept with a pop-gun under his pillow. He quite readily admitted that he hated his father and that he wished his sister were out of the home. He neglected his school work and refused to study at home but would get up regularly for Mass in order to pray that he would get higher marks than his classmates. He said that when he became a man he wanted to be a policeman, and he was afraid to go alone into the basement of his own home or to go a few blocks from the house by himself. He showed a definite interest in sexual matters and at different times he was observed at the keyhole trying to watch his sister disrobe. He was apprehended once or twice in thievery and several times he was detected in lies. Not infrequently, and usually following a tantrum, he would manifest outbursts of intense affection and sympathy for his mother. He finally became so unmanageable that his parents sought help.

If we will recall our distribution curve of intelligence for a moment, it will become obvious at once that many parents cannot possibly be the most suitable guardians of the personality development of their children. The extent to which the State or the community should take an active part in directing the development of the child who comes from incapable parents is a question of vital importance. It is a question, however, the adequate discussion of which would necessitate a book by itself. We shall point out here only the fact that although some twenty-seven states have sterilization laws designed to curtail propagation by the unfit these laws rarely are taken advantage of by the respective communities. At the present time there is little check placed upon propagation by the feebleminded or near-feebleminded, the epileptic, or the syphilitic.

But, mental hygiene is applicable and sorely needed not only in relation to the inferior or diseased; mental hygiene should be and must become an integral aspect of the home training of every child. There was nothing that was seemingly vicious or harmful in the home environment of Donald O., the little boy to whom we just referred. His parents were kind, intelligent, and law-abiding citizens. But Donald's mother was too concerned about Donald's welfare and safety, and the maladjustive trends and reactions which Donald was developing were simply violent protest reactions against a home environment which threatened to smother him with its ceaseless attentions and kindness. Recently a little girl of eleven was brought to the writer. Since the age of two she had indulged in autoerotic practices. Although above average in intelligence, her parents nevertheless had done almost everything that was *wrong* in their desperate attempts to break up the habit. In fact, two surgical operations had been performed by unenlightened physicians in their efforts to correct the habit. But the habit had become steadily worse and at the age of eleven it was in actual fact alarmingly excessive. A few consultations revealed the dynamics of the habit to be egoistic, not sexual. The practice was the only

activity in which the child engaged that demarcated her from parents and school teacher. Otherwise she was slavishly obedient and considerate of others. She would save her pennies for months in order to buy a present for her mother or father or sister. The parents were intelligent enough to come to understand that the child was in need of more freedom, expression of her own particular individuality, frank selfishness. With the withdrawal of the daily surveillance of parent and teacher and the encouragement of a reasonable degree of self-interest and self-concern in the child the habit shortly disappeared.

As Baker and Traphagen [1] point out, even unusual skill in motor control may conduce to behavior problems as may also being too large for one's age or, sometimes, being too intelligent. Hence we see that mental hygiene in the home demands more than mere intelligence in the parents. Parents must come to know more about child psychology, differences in temperament and personality and what these differences imply, the significance of unusual abilities on the one hand and of deficiencies on the other in personality development, etc., etc.

Mental Hygiene in the School. Next to the home the school is perhaps the most influential directing agency to the development of the child. Ideally, all parents (particularly mothers) should be teachers. Perhaps the time will come when mothers will alternate with teachers in the school room, and teachers with mothers in the home. Such a procedure would be highly profitable since the teacher would come into intimate contact with the child's home environment and the mother would become familiar with the problems of the school room and playground. Such a plan would perhaps need to be applied only to the first two or three grades. If it be objected that many mothers do not have the necessary educational background for handling the school-subjects in the lower grades, one might reply that such an objection

[1] Baker, Harry J, and Traphagen, Virginia, *The Diagnosis and Treatment of Behavior-Problem Children*, p. 27, Macmillan.

raises the question of the fitness of such women for rearing children.

Ideally, all school teachers, particularly those of the lower grades, should be reasonably efficient child psychologists. But at the present time we are a long way from such an ideal state of affairs. For the most part, teachers like parents go along exercising their own particular biases and personality quirks on the children they teach.

A recent study of school teachers made by a psychologist at the University of Texas revealed emotional maladjustment in 33% of the group studied.

Some school systems are aided by social service workers, by universities, or by school psychologists. But in the great majority of schools throughout the country there is little as yet that could be regarded as systematic mental hygiene procedure. In many parts of the country we still stolidly refuse to take a lesson from the tree which if planted at an angle either continues to grow at an angle or in an attempt to right itself, assumes a crook in its trunk which it never loses.

During recent years a number of universities have taken cognizance of the need of mental hygiene within their own confines. It has been learned that more failures in college are the result of emotional and personality problems than are due to inadequate intellectual ability. Yet many universities frown upon mental hygiene clinics for their students. One forenoon while the writer sat with the scholarship committee in a large university he observed that eight of the ten students who came in to petition for reënstatement were obviously victims of emotional problems. One was well advanced in dementia praecox. The committee looked aghast when the dementia praecox student said he did not know the name of the history teacher under whom he had studied for a full semester. This school abolished its mental hygiene clinic, apparently believing that the personality problems of college students should be quietly ignored.

The Child Guidance Clinic. Perhaps the most promising and fruitful direction which mental hygiene has yet taken is

the psychological clinic for children. In certain parts of the country such clinics are becoming quite numerous; in other parts they are essentially unknown. Up to the present time there has been little or no standardization of point of view or procedure among the various clinics. The particular procedure which is carried out in a given clinic is usually a reflection of the psychological or mental hygiene perspective of the person in charge. Thus, whereas Freudian interpretations and techniques dominate in one, behavioristic formulas are put into effect in another. Nevertheless the movement is of prime importance and it is to be hoped that standardization of procedure and methods will shortly take place.

In their recent book, Baker and Traphagen [1] list sixty-six diagnostic items (possible causes) of behavior-problems, maladjustive personality trends, ". . . which are known to be significant in the diagnosis of behavior maladjustments." These items are grouped under the following headings and very nicely indicate the wide range of factors which may enter into personality maladjustments: Health and physical factors, personal habits and recreational factors, personality and social factors, parental and physical factors of the home, home atmosphere and school factors.

Ideally, all children should be taken to psychological clinics for periods of observation, beginning at the age of one, not later than the age of two. These periods of observation should be repeated every few months till the child is eight or ten years old. All too often the parent is too much the victim of his (her) own personality quirks and complexes to be an unbiased judge of the adequacy of his child's reactions and moreover very few parents are sufficiently trained to detect the beginning of maladjustive personality trends. In the clinic the child would come under the eyes of an impersonal and trained observer. The child's reactions would be carefully studied under fairly controlled and varying conditions. Of particular importance would be the observations made upon his reactions to other children, both older and younger

[1] *Ibid.*

as well as of his own age, to adults, to frustration and thwarting, to new and unexpected situations, to simple and complex situations, etc. Following the periods of observation, the psychologist or mental hygienist would consult with and advise the parents. Almost invariably there is considerable work to be done with one or both parents in the case of the child who is developing maladjustive personality trends.

Medieval Attitudes Stand in the Way. The greatest single obstacle to the advancement and spread of mental hygiene is the unwholesome, secretive, and almost pathological attitude of the majority of persons toward all disorders affecting the mind. In a recent article in the *Survey Graphic*, Dr. Thomas Parran, Surgeon General, U. S. Public Health Service, speaks of the general attitude toward syphilis. We quote as follows:

"Until very recently there was little or no discussion of syphilis as a public health menace. When other diseases were mentioned in radio health talks the very word syphilis was omitted by command of the broadcasting company. Only with the past year or two has the word appeared in the headlines of metropolitan newspapers.

"In 1933 the American Social Hygiene Association adapted from the German an excellent moving picture designed to educate high school students as to the venereal diseases. It was in no way offensive either to good taste or to the principles of pedagogy, but its public showing in the State of New York was forbidden by the Board of Regents, who are censors of motion pictures as well as supervisors of education. Only in New England and a few other states was the picture shown freely.

"It is quite possible that if this picture had been exhibited widely we might have had less difficulty with epidemics of venereal diseases during the past several years in the high schools. Several, in New York, were so bad that local authorities applied to the State Department of Health for assistance in suppressing them.

"Obviously, with free discussion thus forbidden, it is very difficult to teach people to avoid syphilis, to look out for early symptoms, and to get treatment. It has been next to impossible to obtain adequate public funds for control along lines proved so successful in the reduction of tuberculosis, for example, where the medical problems actually are more difficult than in syphilis. In fact we can treat five cases of syphilis for what it costs to treat one case of tuberculosis.

"Because of the prevailing ostrich-like attitude, philanthropists have been afraid to donate funds for research in syphilis, though such funds have been readily available for almost every other cause under the sun from leprosy to whooping cough. By the same token legislators have been loathe to appropriate for it.

"A great factor in our sluggishness about syphilis is the attitude of a large group of citizens, many of them public-spirited women, who honestly believe that only commercial prostitutes and their clients are involved in this problem."

Much of what Dr. Parran has to say about the attitude toward syphilis is equally true of the current attitude toward personality disorders. The writer has known of instances where parents disowned son or daughter who became insane and moved to a new locality out of pure chagrin and humiliation. The writer has had educated men and women come to his office and declare that they had been trying to gain the necessary "courage" to come and ask for help for months, sometimes years. There is nothing that could possibly aid the race to a richer and more meaningful future than the development of a franker attitude toward personality problems. Perhaps we should begin by teaching the child that no one is quite perfect (normal), that we all have our particular personal problems, that between thee and me there is always a disparity—the price of individuality—that this disparity demands tolerance, frankness, and understanding, and that the best guarantee of an efficient and happy life is to know thyself.

SUGGESTED READINGS

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GLOSSARY

ABERRATION, MENTAL. Any mental disorder. Episodic mental abnormality.

ABNORMAL. Divergent from the normal.

ABOULIA, ABULIA. Inability to arrive at and execute decisions.

ACROPHOBIA. A morbid fear of high places.

AGORAPHOBIA. A morbid fear of open places.

AKINETIC. Pertaining to loss or weakness of motor functions. Loss of movement without paralysis.

AKOASMS. Ringing or buzzing sounds which the patient localizes in the head or ears.

ALLOPSYCHIC. Pertaining to a relationship which exists between an individual's personality and the external world. In the case of an allopsychic delusion, the relationship is the result of projection.

AMBIVERTED. Pertaining to individuals who occupy the intermediate range between marked introversion and extraversion.

AMENT. A feebleminded person.

AMENTIA. Feeblemindedness, mental deficiency, or mental subnormality.

AMNESIA. Abnormal or pathological forgetting or inability to recall recent events (anterograde amnesia) or remote events (retrograde amnesia).

ANEMIA. Deficiency of blood as a whole or deficiency of red corpuscles or of hemoglobin.

ANESTHESIA, ANAESTHESIA. Partial or total loss of sensitivity.

ANOREXIA. Marked or extreme loss of appetite.

ANOREXIA NERVOSA. Literally, loss of appetite due to nervousness. A condition which occurs in hysteria.

APHRODISIAC. Stimulating the sexual appetite; erotic.

ARCHAIC. Characterized by antiquity; ancient; antiquated.

ARCUS SENILIS. A greyish or yellowish arc, about 1 to 1.5 mm. wide within the boundary of the cornea, due to degenerative changes in the superficial corneal tissue and occurring chiefly in older persons.

ARTERIOSCLEROSIS. A chronic inflammation of the walls of the arteries.

ASCENDANCE. Pertaining to a personality mode. Aggressiveness in social conduct.

ASTASIA-ABASIA. A hysterical condition in which the individual has volitional control of his legs while sitting or lying but is unable to walk. Functional loss of the motor coördinations necessary to walking.

ATAXIA. Inability to coördinate voluntary movements or activities. It may be either of organic or psychogenic origin.

ATROPHY. A wasting away, or lack of growth, for want of nourishment.

AURA. Peculiar "vaporous" sensations preceding epileptic and hysterical seizures.

AUTISTIC. Directed toward oneself; inordinately subjective. Autistic thinking is subjectively determined and directed and is unchecked or uncorrected by reference to objective standards.

AUTOEROTISM. A sexual perversion or neurosis in which the individual is his own sexual object. Masturbation; autoeroticism.

AUTO-HYPNOSIS. Self-hypnosis as distinguished by some writers from hetero-hypnosis.

AUTOMATIZED. Pertaining to non-reflex motor reactions which have become so habitual as not to require conscious guidance.

AUTONOMOUS. Independent; self-directing.

AUTOPSYCHIC. Orientated toward self. An individual's orientation toward some aspect or feature of his own personality.

AUTOSYMBOLIC. Symbolic expression or representation of one's own subjective processes.

BEHAVIORISM. A rigidly objective approach to the subject matter of psychology.

CATABOLISM. Disassimilation; physiological disintegration.

CATALEPSY. Plastic rigidity of the muscles. It is associated with hysteria, hypnosis, and catatonic dementia praecox.

CATATONIC. Pertaining to catatonia, a condition which is characterized by automatism, negativism, and catalepsy.

CHOREA. A functional nervous disorder characterized by irregular and involuntary action of the muscles of the extremities, face, etc.

CLAUSTROPHOBIA. A morbid fear of closed places.

CLONUS. Involuntary, reflex, irregular contraction of muscles when put suddenly on the stretch.

COCAINISM. Addiction to the drug, cocaine.

COMPULSION. An impulsion to perform some act, the performance of which is in opposition to the individual's judgment and volitional intents.

CONSANGUINITY. The relationship arising from common parentage; blood relationship; genetic relationship.

CRETIN. A feebleminded individual who is characterized by mental and physical infantilism. Cretinism is due to congenital deficiency of thyroid secretion.

CYCLOTHYMIC. Pertaining to a personality or temperamental make-up which is characterized by alternation of moods, usually, of despondency and elation.

DAY-DREAMING. Autistic thinking. Mental activity of an imaginative sort which is independent of the checks and limitations of objective reality.

DELIRIUM. A form of mental excitement, often accompanied by illusions, hallucinations, and delusions.

DELIRIUM TREMENS. Delirium resulting from alcoholic poisoning.

DELUSION. A strong and often unshakable false belief; a belief which is incompatible with the individual's intelligence, education, and past experience.

DEMENTIA. Loss of mind; mental deterioration; particularly a loss in the intellective capacities.

DEMENTIA PARALYTICA. Paresis, general paralysis of the insane.

DIFFICULTY. Any fact which tends to block a motive or inclination to activity.

DIPLEGIA. Paralysis of similar parts on the two sides of the body.

DIPSOMANIA. An uncontrollable desire for alcoholic liquors; alcoholic addiction.

DISORIENTATION. Confusion or uncertainty concerning personal identity, time, or place. Loss of, or false perspective on self and others.

DISSOCIATION. A condition in which the different mental processes or functions of an individual lose their relatedness or mutually modifying influence upon each other. Common in dreaming, hypnosis, hysteria, and schizophrenia.

DIZYGOTIC. Double birth: coming from two eggs.

DRIVE. Motive; impulsion or inclination to action.

ECHOLALIA. A mechanical-like repeating by an individual of words or sentences addressed to him. Found in schizophrenia.

ECHOPRAXIA. The mechanical-like repeating or imitation by an individual of the actions of another person.

EGO. An individual's constellation of personal values or meanings and objectives.

EGO-CENTRICITY. A disposition to exaggerate one's self-importance. An inordinately self-orientated perspective. A feeling of one's being the center of things.

EGO-IDENTIFICATION. A meaning, trait, capacity, or objective which is peculiar to a given individual's ego-strivings. An ego-identification may be either positive (acceptable) or negative (undesirable) either in the estimation of the person himself or of others.

EGOISM. The sum-total of egoistic motives. An individual's self-concern and self-interest.

ELATION. A feeling of well-being and satisfaction with oneself.

EMOTIONAL APATHY. Unconcern, indifference; absence of emotional responsiveness.

ENCEPHALITIS. Inflammation of the brain.

ENCEPHALOGRAM. A roentgen-ray photograph of the brain.

ENDOCRINE. Any internal secretion.

ENDOCRINOLOGIST. One who specializes in the study of the endocrine glands and their secretions.

EPILEPTOID. Resembling epilepsy.

ERGOGRAPH. An instrument for recording the extent of movement of a contracting muscle or the amount of work it is capable of doing.

EROTICISM. Sexual desire.

ETIOLOGY. The causation of disease; the science of the causes of the phenomena of life and their relation to physical laws in general.

EUPHORIA. A feeling of extreme well-being and satisfaction with oneself and the world in general.

EXALTATION. Similar to euphoria.

EXTRAVERSION. Outward orientation of attention and interest.

FETICHISM. Sexual interest in an inanimate object or in some non-sexual part of the body.

FLEXIBILITAS CEREA. Catalepsy; a wax-like condition of the muscles.

FREE-FLOATING. Descriptive of feeling or emotional states, particularly anxiety, for which the individual is unable to assign a cause.

FUGUE. A hysterical attack (accident) in which the individual forgets or becomes confused with respect to his personal identity and leaves his physical surroundings.

FUNCTIONAL MENTAL DISORDER. A disorder of psychogenic origin; a disorder which occurs in the absence of physical or organic causation.

GENESIS. Begetting; development; origin; formation; generation.

GLOBUS HYSTERICUS. The "lump" or choking sensation occurring in hysteria.

GONAD. A sexual gland; a testicle or ovary.

GYNECOLOGY. The science of the diseases of women, particularly those affecting the sexual organs.

GYNOPHOBIA. A morbid and uncontrollable fear of women or of some particular woman.

GYRI. The convolutions of the brain. The spiral cavities of the internal ear.

HALLUCINATION. A perception which has no external reality; the mistaking of a vivid mental image for an objective fact, as when a patient sitting in a *quiet room* "hears" voices accusing him of wrongdoing.

HEBEPHRENIC. Pertaining to a form of schizophrenia, sometimes called hebephrenia.

HEMATOPHOBIA. A morbid and uncontrollable fear of blood.

HEMIPLEGIA. A paralysis of one side of the body, often functional as in hysteria.

HETERO-HYPNOSIS. Hypnosis induced by another person.

HETEROSEXUAL, HETEROSEXUALITY. Normal sexuality; sexual interest in the opposite sex.

HOMOSEXUAL, HOMOSEXUALITY. Inverted sexuality; sexual interest in the same sex.

HUTCHINSON TEETH. Deeply notched and widely separated front teeth, indicative of congenital syphilis.

HYDROCEPHALIC AMENTIA, HYDROCEPHALY. A type of secondary amentia (feeblemindedness) characterized externally by an extremely large skull.

HYPERACUITY. Usually referring to unusually low sensory thresholds.

HYPERACUTE MANIA. The extremest form of mania; extreme excitability.

HYPERAESTHESIA. Hyperacuity. Pathological sensitivity to stimulation.

HYPNAGOGIC. Pertaining to the period between sleeping and waking, or waking and sleeping.

HYPNOSIS. A temporary state of mental dissociation, characterized by extreme submissiveness and brought about artificially by psychological techniques.

HYPOCHONDRIA. A morbid or pathological concern about one's health, often accompanied by delusional beliefs of ill health.

HYPOMANIA. The mildest form or degree of maniacal excitement.

HYSTERIA. A psychoneurosis characterized by mental dissociation; dissociation or lack of integration of psychophysical functions.

IDIOPATHIC. Characterizing a disorder or pathological condition as primary, that is, not as the result of some other disorder or the result of accident or injury.

IDIOT. The lowest grade of feebleminded individual, having a mental age of not more than three years upon the completion of mental development.

ILLUSION. A markedly incorrect or distorted perceptual response, as when a mental patient perceives a bed post as a human being or a piece of thread as a snake.

IMBECILE. A person who falls within the intermediate range of feeblemindedness and whose mental age upon maturity lies between that of four- and seven-year-old children of average intelligence.

IMPERCEPTION. Vague or inadequate perception.

IMPOTENCE. Marked inadequacy. Sexual impotence is the inability of a man to achieve a complete sexual response physiologically, and may be functional or organic.

INANITION. Exhaustion from the want of food.

INCOHERENCE. Disconnected, unrelated thoughts, utterances, or actions.

INFERIORITY COMPLEX. An ego-identification with the idea of personal inadequacy or inefficiency. A morbid feeling of insufficiency.

INHIBITION. An act of conscious and volitional rejection of an impulse to action because the impulse or motive is in opposition to the individual's dominant ego-identifications (personal values).

INNATE. Belonging to the inherent constitution; hereditary or congenital.

INSANITY. Any personality disorder, other than feeblemindedness,

which medico-legally constitutes personal irresponsibility and thereby warrants commitment to an institution.

INSIGHT. Refers to the perspective which a mental patient has upon his mental condition. If a patient realizes that he is mentally ill he is said to possess insight.

INSOMNIA. Inability to sleep; sleeplessness to an unusual or abnormal degree.

INTRAPSYCHIC ATAXIA. Incoördination of mental functions; particularly a disharmony between thought and feeling.

INTROVERSION. Pertaining to a personality or temperamental variant and designating an extreme of this variant. A subjective orientation of attention and interest.

KINESTHETIC. Pertaining to the sensations attending movements of any member of the body, the receptors being located in muscles, joints, and tendons and the stimuli consisting of the mechanical effect of contracting muscles.

KINETIC. Active, released, free. Pertaining to motion or change.

KLEPTOMANIA. A strong, often irresistible, tendency to steal. The tendency is a morbid or pathological impulse and not an expression of economical considerations. Compulsive stealing.

LIBIDO. The psychic energy of the individual (Jung); the psychosexual energy of the individual (Freud).

MALADJUSTED. Unadjusted; inadequately adjusted; more properly, negatively adjusted. Falsely orientated.

MANIA. The manic phase of the manic-depressive psychosis is often spoken of as mania. Abnormal psycho-motor excitability usually associated with feelings of elation and an exaggerated feeling of well-being and satisfaction with self.

MANIC-DEPRESSIVE PSYCHOSIS. An affective psychosis characterized by phases of psycho-motor increase or excitement alternating with phases of psycho-motor decrease or depression.

MANNERISM. Any peculiar and apparently purposeless recurring gesture, act, or grimace, found particularly among schizophrenic patients.

MELANCHOLIA. Designating the depressive phase of manic-depressive psychosis. Characterized by psycho-motor retardation or decrease, loss of rapport with surroundings, and often by self-disparagement and accusation.

MENTAL AGE. An individual's mental age is that chronological age of the group for which his mental capacity is the average.

MENTAL COMPLEX. A repressed or subconscious motive-idea constellation.

MENTAL CONFLICT. The simultaneous arousal of two incompatible motives.

MENTAL DEFICIENCY. Feeblemindedness or near-feeblemindedness.

MENTAL DETERIORATION. Loss of mental capacity, particularly intellectual capacity.

MENTAL SUBNORMALITY. Feeblemindedness; deficiency in intelligence.

METABOLIC. Pertaining to metabolism, the energy exchanges in living organisms.

METAPSYCHOLOGY. A point of view in psychoanalysis which regards every mental process under three aspects, viz. the dynamic, topographical, and economic.

MICROCEPHALY, MICROCEPHALIC AMENTIA. A form of feeblemindedness, characterized externally by a very small cranium.

MIMETIC. Pertaining to an act which is stimulated by some act of another creature and which tends to resemble this act in character and form.

MONGOLISM, MONGOLIAN AMENTIA. A form of secondary amentia in which the individual's facial features are supposed to resemble those of the Mongolian Race.

MONOIDEIC. Pertaining to a pathological tendency of an individual to devote himself to a single line of thought and action.

MONOPHOBIA. A morbid or pathological fear of solitude.

MONOPLEGIA. Paralysis of a single muscle or muscle-group. It is often functional.

MONOZYGOTIC. Identical, as in identical twins. Coming from one egg.

MORPHINISM. Addiction to the use of morphine. A drug psychosis due to the excessive and prolonged use of morphine.

MOTOR AGITATION. Involuntary contractions of the muscles; muscular twitching, jerking; choreas.

MULTIPLE PERSONALITY. Two or more fairly distinct and autonomous mental integrations within a single person; two or more personalities within an individual.

NEGATIVISM. Marked or extreme obstinacy to the commands or suggestions of another person; a tendency to react in a manner which is the opposite or contrary of the manner which has been commanded or suggested.

NEOLOGISMS, NEOLOGISTIC FORMATION. The invention or construction

of new terms or the use of a term in a very unusual sense. Neologistic formation is frequently observed in schizophrenic patients and sometimes in individuals who are in dream or trance states.

NEURASTHENIA. Literally, nervous exhaustion. A psychoneurosis which is characterized by sensations of fatigue, aches and pains, self-preoccupation, etc.

NEUROPATHIC. Characterized by a diseased or imperfect nervous system.

NEUROPSYCHIATRY. The branch of medical science which deals with the fields of neurology and psychiatry.

NEUROSIS, PSYCHONEUROSIS. A functional nerve disorder; a minor or non-institutional type of personality disorder.

NEUROTIC. Characterized by, or pertaining to, a psychoneurosis (neurosis).

NIHILISTIC. Pertaining to delusions of self-negation. The patient who suffers from nihilistic delusions complains that he does not taste, or eat, or sense, or feel. He may believe that he does not even exist.

NOMADIC. Pertaining to a tendency to wander from place to place. Nomadism is normal to certain individuals and groups, but constitutes a psychoneurotic or psychotic symptom in others.

NYCTOPHOBIA. A morbid fear of darkness.

OBSESSION. Morbid and involuntary preoccupation with some thought or idea. A psychoneurotic syndrome; obsessional neurosis.

OCHLOPHOBIA. A morbid fear of crowds.

OEDIPUS COMPLEX. A libidinous attachment to or fixation on a parent.

ORIENTATION. Direction of attention and interest; knowledge of time, place, and person; perspective on oneself and on oneself in relation to others.

OVER-COMPENSATION. See over-reaction.

OVER-IDENTIFICATION. Becoming identified with another fact or person to an extent and with an intensity that proves maladjustive or incapacitating.

OVER-REACTION. Attacking a difficulty with extreme vigor and persistence because of feelings of inadequacy or inferiority in relation to the difficulty.

OVERT. Explicit. Objectively observable.

PARALYSIS. Loss of the use of a muscle or muscle-group, as of the muscles of an arm or leg. A paralysis may be functional or organic.

PARANOIA. A serious mental disorder which is characterized by permanent and systematized delusions. A type of psychosis and to be distinguished from the paranoid psychoses and paranoid personalities.

PARAPATHY, PARAPATHIA. Moral insanity; constitutional psychopathic inferiority.

PARAPHLEGIA. Paralysis of the lower limbs. It may be functional.

PARESIS, GENERAL PARESIS, GENERAL PARALYSIS OF THE INSANE, DEMENTIA PARALYTICA. An organic psychosis of which an essential cause is the entrance of the syphilitic germ into the higher brain substance.

PARESTHESIA. Peculiar sensations which are experienced in the absence of any observable stimulus.

PATHOLOGICAL. Pertaining to disease.

PATHOPHOBIA. A morbid fear of disease.

PERSEVERATION, PERSEVERATIVE TENDENCY. The tendency of a feeling, idea, or act to recur with or without the aid of associative processes. The tendency of any mental activity once initiated to run a temporal course. The persistent repetition of a word, sentence, or action.

PERSISTENT NON-ADJUSTIVE REACTIONS. Perseverative reactions.

PERSONALITY. The integrated or unified expression of the sum-total of psychophysical functions.

PERVERSION. Distortion; abnormality.

PHOBIA. A morbid or irrational fear.

PHOBOPHOBIA. A morbid fear of fear or becoming afraid.

POLYIDEIC. Pertaining to two or more ideas, as in the case of a polyideic somnambulism.

POLYMORPHIC. Pertaining to polymorphism, the occurrence of several types of individual animals in a colony or community of individuals derived from the same parent.

POLYMORPHIC PERVERSE. Characterizing the supposed constitutional multiple sex dispositions of the child.

POLYNEURITIS. Multiple neuritis; multiple inflammation of the nerve tissue.

PRODROMAL. Pertaining to prodrome, a preliminary symptom or sign of a disease or disorder.

PROJECTION. The act of attributing motives, feelings, or thoughts to another person because such motives, feelings, or thoughts exist in an unrecognized and vaguely conscious or subconscious state in oneself.

PROTOTYPE. The primitive or earliest form of organ or organism in a line of evolution. By analogy, the earliest forms of response-patterns.

PSYCHASTHENIA. Literally, psychic or mental exhaustion. A psychoneurotic syndrome characterized by obsessions, compulsions, doubts, scruples, etc.

PSYCHIATRY. The branch of medical science which deals with mental disorders.

PSYCHOANALYST. One who accepts Freudian interpretations and who uses Freudian psychotherapeutic techniques in the treatment of personality disorders.

PSYCHOBIOLOGICAL. Pertaining to an integration or coördination of the psychological and the biological, as a psychobiological point of view.

PSYCHOBIOLOGY. A biological approach to the psychology of the individual.

PSYCHOGENIC. Pertaining to psychogenesis. Of psychological origin and development.

PSYCHOMETRIC. Pertaining to psychometry; to the science of psychological tests and measurements.

PSYCHONEUROTIC. Pertaining to a psychoneurosis. A person who suffers from a non-institutional form of personality disorder.

PSYCHOPATHIC. Pertaining to the dynamics of a mental disorder, particularly an insanity. Predisposed to mental disorder.

PSYCHOSIS. A severe mental disorder; an insanity.

PSYCHOTHERAPY, PSYCHOTHERAPEUTICS. The treatment of personality disorders by psychological methods.

PYROMANIA. A morbid or compulsive tendency to start fires. Characteristic of certain insane patients and certain cases of psychopathic personalities.

RALE. An adventitious sound heard over the chest during respiration and indicating some local disturbance.

RAPPORT. An assertive-submissive or ascendance-submission relationship between two persons. The peculiar affective-attitudinal relationship between a hypnotized subject and the experimenter is the best example.

RATIONALIZATION. Unwittingly assigning a false motive or reason for a belief, sentiment, attitude, feeling, or act, wherein if the true motive were recognized by the individual he would suffer from displeasure, chagrin, or some other form of self-dissatisfaction. "Kidding oneself."

REGRESSION. A mode of reaction to a difficulty in which the individual relinquishes or discards the higher level response-patterns which he has acquired and reverts to or re-adopts those of his childhood.

REPRESSION. The outright rejection and denial of a given reaction-pattern (thought, feeling, or overt act) followed by a failure to recognize the true nature, sometimes even the presence or existence, of the motive upon the occasion of its subsequent arousal. Pathological forgetting; functional amnesia.

ROSEBUD MOUTH. A mouth with radiating lines or fissures, usually indicative of congenital syphilis.

SCHIZOID. Pertaining to a certain type of personality variant. Schizoid personalities are prone to the development of schizophrenic disorders.

SCHIZOPHRENIA. A psychotic syndrome. Split mind. The most common form of insanity.

SCOLIOSIS. A morbid lateral curvature of the spine.

SENILE. Pertaining to or caused by old age.

SENSORIUM. The entire sensory mechanism of the organism.

SIBLING. One of two or more offspring, either of the same or different sex, produced by the same parents.

SITIEIRGIA. Hysterical anorexia; functional loss of appetite; anorexia nervosa.

SITOPHOBIA. Morbid aversion to or fear of food.

SOMATO-MOTIVE. Any inherently determined interest which has to do specifically with bodily well-being.

SOMATO-PLASMIC. Pertaining to the somatoplasm, as distinguished from the germ plasm.

SOMATOPSYCHIC. Pertaining to both the body and the mind.

SOMNAMBULISM. A trance-like state in which the individual re-enacts some former experience. A hysterical accident.

SPASTIC. Pertaining to or characterized by spasm.

STATUS EPILEPTICUS. A condition in which epileptic attacks occur in rapid succession, the individual's failing to regain consciousness between attacks.

STRABISMUS. Lack of coördination of the axes of the two eyes; cross-eyedness.

SUBARACHNOID. Beneath the arachnoid membrane. Arachnoid membrane: the membrane of the cord and brain between the dura and pia mater

SUBLIMATION. The redirecting of libidinal impulses or motives to ethical, cultural, and social objectives. A desexualizing of sexual motivation.

SUBNORMAL. Below normal.

SUBPIAL. Situated or occurring beneath the pia.

SUPPRESSED. Repressed; denied. Entirely synonymous with "repressed" in the present book.

SYMBOL. Any fact which signifies for a person a fact other than itself.

SYNDROME. A complex of symptoms. A disease or disorder category.

SYPHILITIC AMENTIA. A secondary form of feeblemindedness of which congenital syphilis is an essential or a contributory cause.

SYSTEMATIZED DELUSION. A delusion in which all adjacent or associated ideas hold a logical or plausible relationship to the nuclear belief.

TACHYCARDIA. Excessive rapidity of the heart's action. It is sometimes functional.

TIC. A more or less persistent or recurring contraction of a muscle or muscle-group.

TONIC. Pertaining to tonus, that is, to the postural contraction of muscles.

TOXOPHOBIA. A morbid fear of poisons or of being poisoned.

TRAUMATIC. Pertaining to a trauma, a blow or injury. Psychic trauma: a mental or emotional shock.

TREPONEMA PALLIDUM. The pathogenic parasite of syphilis.

VERBIGERATION. Continuous repetition of the same word, phrase, or sentence.

VISCERA. The large internal organs of the body.

ZOÖPHOBIA. A morbid fear of animals or of some particular animal.

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