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I

MENTAL DEFECT AND DISORDER FROM THE TEACHER'S POINT OF VIEW[1] (I)

GENERAL SIGNIFICANCE OF THE STUDY OF MENTAL DEFECT FOR THE TEACHER

In the present discussion I propose to deal with a topic of much theoretical and practical interest; a topic moreover that, at first sight, apparently belongs to the province of the physician rather than to that of the student of psychology. I shall show you, however, before I am done, that as teachers and as students of human nature, we can reach useful psychological insights in relation to certain phenomena of mental defect and disorder, without trespassing at all upon the province that will always remain that of the physician.

Young people who are distinctly recognizable as hopelessly or as very heavily defective or disordered in brain are, under modern conditions, commonly assigned to special institutions, or are guarded at home under medical care, and so do not ordinarily come under the notice of the general teaching profession. But it is also true, and is daily coming to be more widely recognized, that nearly if not quite all of us must sooner or later have to try to teach not a few young people who are quite distinctly mental sufferers, pathological cases, burdened by heredity or by ill fortune with sensitive, ill-working, or constitutionally deficient brains, and yet not

[1] The following paper formed part of a course of twelve lectures on "Topics in Psychology of Interest to Teachers," delivered at Harvard University in the early months of 1893.

sufficiently diseased to find, under present social conditions, any more expert educational care than we can give them. I am, in what follows, to speak, then, in a practical way about the attitude that a teacher ought to be ready to take toward such cases—cases which lie, in general, in that wide and ill-defined borderland region, which separates the world of the sane from the wildernesses of insanity.

The limitations of my task are meanwhile obvious. I speak as student of human nature. In medical matters, as such, I am the humblest of laymen.

The layman in medical matters, however, can neither learn nor teach how to deal independently with complex disorders that have a physical basis, unless he once for all resolves to make himself an expert, and takes a long time to become one. But what a studious layman can do, in dealing with nervously and mentally defective pupils, is to supplement his ordinary knowledge of human nature by such psychological insight and reading as will make him keen in watching for the symptoms of mental disorder, cool and free from foolish panic in making his provisional estimate of such symptoms when he meets them, and apt to judge a burdened pupil in a psychological rather than in a merely censorious or moralizing spirit. The art of giving advice to our fellows in distress is notoriously an attractive and also a perilous art. Every teacher, however, has to exercise this art, on occasion, as he can. And in this paper I have indeed no especially novel suggestions to make as to the general principles that are to guide a good adviser. These principles are old: Before giving advice, try with patience to comprehend the situation before you. When the situation involves elements (such, for instance, as disorders of health) which it belongs to another's province to estimate, consult that other before you come to a decision. These are very commonplace considerations. They apply, however, to the cases where we have to give advice to mentally defective pupils, as well as to all other cases. And the rest of the adviser's art, whenever he is called upon to guide the general conduct of his fellows' life, is always a matter of native tact, of

personal experience, of knowledge of the world. And these things everyone must either possess or acquire for himself. The one thing, then, that this paper can attempt to accomplish, is to help the teacher a very little way in the first portion of his task as adviser; namely, in his effort to comprehend a particular class of cases that will come before him. The more, however, one learns to comprehend the mechanism of mental defect and disorder, the less one is tempted to be presumptuous or self-sufficient in giving advice to burdened pupils without taking proper counsel of the experts, wherever such counsel is needed. And so I have no fear that the psychological student is likely to become a meddlesome bungler in the medical province. Such meddlesome bungling is much more likely to result from an entire ignorance of psychology, coupled with a disposition to regard all mental defects as more or less sins, and to treat the nervously disordered with nothing more humane than routine discipline and censorious exhortations. It is especially against such unenlightened methods of procedure that my paper is directed.

Meanwhile, before I am done, I want to make you feel how much, after all, a teacher can learn from a study of his mentally defective pupils; what interesting beings they are to any lover of minds, and what a mine of instructive facts, elsewhere concealed, they reveal concerning our common human nature. It is in fact the mission of the mentally defective and disordered to give us, as we watch them, object-lessons in psychology.

THE NORMAL MENTAL MECHANISM, AND THE DEFINITION OF MENTAL DEFECT

A study of defect has to depend on at least a general insight into the conditions of health. The normal mind, as the psychologist knows it, is a very complex conscious process that accompanies the activities of the nervous system, and that is to be analyzed with constant reference to the analysis of nervous functions. The general character of normal nervous functions is, however, that they bring the organism into a

constantly renewed "adjustment to its environment." This adjustment depends upon sensory, central, and motor processes, some of which we have had occasion to discuss in our previous lectures in this course. The normal sensory processes involve intact sense organs. The normal central processes involve the past establishment and tenacious retention of very elaborate nervous habits. Some of these we have found to be comparatively literal routine habits, such as those concerned in our less intelligent functions, which are repeated over and over in precisely the same form. But other and more important nervous habits we also possess, corresponding to our intelligent mental life. The character of these latter habits is that they are essentially plastic or "generalized" functions, and give us the power to adjust ourselves to novel conditions by reactions which are perhaps never twice precisely alike. Accordingly, it is such "generalized" functions that, as we have seen, are accompanied by rational general ideas. The habits of a professional man furnish a case of this sort. Or again, the habits of one who knows how to converse intelligently in a given language are extremely complex and plastic, and are of the sort which the grammarians try to describe by means of the rules of syntax. But the point to be remembered here is that an intelligent and plastic nervous habit, of the sort now in question, is none the less a habit of our nervous centers, because it happens to be varied and manifold in its expressions. The rules of syntax subconsciously followed, as one speaks, are, for the fluent speaker of a language, as much established fashions of reaction, dependent upon the physical condition and the past training of his higher nervous centers, as sneezing and coughing are dependent upon established physical dispositions (inherited or acquired) of certain of his lower nerve centers. The law that habit determines our present normal reactions to our environment is as true on the highest as on the lowest nervous levels. The higher habits have a fixed range of plasticity, the lower their fixed routine.

The normal motor reactions of our organism are thus physi-

cally dependent upon what normal sensory impressions are received, upon what centers are thereby excited, upon what normal habits (due to the temperament and to the past training of our nerve centers) are thereby aroused to expression, and also upon the existence of intact connections between our centers and our motor organs. In general, our nervous system may be said to do nothing of a more complex sort in any strictly or purely "spontaneous" way. Deprive me of all sense-impressions, and in general, I shall normally do nothing of any note and shall think no significant thoughts. My nervous life is throughout a series of fitting adjustments to conditions. My mental life accompanies these adjustments to conditions. These conditions get manifested to my centers in the form of sense-impressions. Whether I sneeze or address an audience; whether I answer a letter or pay a bill, or choose a profession, or meditate on philosophy, or write a book, or start at a loud sound—what I do has, on the nervous side, always the same character of involving a series of adjustments dependent on an enormously complex sequence of sense-impressions, upon a prodigiously manifold collection of more or less plastic habits of nervous centers, and upon the normal connection between these habitual central processes to which my sensory disturbances constantly appeal, and the organs of motor expression through which these habits get themselves embodied in my conduct.

On the side of my consciousness, there correspond, in the first place, to the primary central effects of the mere disturbances of my sense organs, my Sensations, which, to be sure, never exist alone. My consciousness, in so far as, in the second place, it corresponds both to these primary sensory disturbances and to the complex central processes secondarily aroused by them, is as various in the classes of its mental phenomena as the types of my nervous habits themselves are various. To consider some of these classes in order: My current sensory disturbances are normally associated, by nervous habit, with processes whereby the traces of multitudinous past sensory disturbances are at once aroused;

and the combination of past with present experience, that then very swiftly and unhesitatingly is brought to my consciousness, may take form as my Perceptions, wherein my present sensations coalesce almost indistinguishably with my past sensory experiences obtained from outer objects similar to those that are now affecting my senses. Where the present sensations get lost in the consciousness of the images revived from the past, I have Imagination instead of perception. Or again, once more by virtue of nervous habit, my present sense-impressions may be associated with processes that correspond to the traces left in my nerve centers by the immediate results of my past motor acts themselves. In such cases, on the side of my consciousness, my present sensations or perceptions will remind me of my own past behavior in the presence of such objects as are now before me, and I shall be conscious of various suggested motor Impulses, to which the objects will seem to solicit me. So the sight of my pen may suggest writing, or seeing a pack of cards may dispose me to play. As a fact, definite perceptions and definite impulses always more or less obviously go together in our developed consciousness. Perceptions and images are elementary Intellectual processes. Impulses of the sort mentioned are elementary facts of Will. Accompanying still more complex central reverberations, which are more or less indirectly aroused by our current sense impressions, and which involve more and more generalized, complicated, plastic, and hesitant nervous habits, we have such consciousness as gives us, on the side of the intellect: general ideas, groups of organized general ideas or Thoughts, and whole trains of Reasoning. On the side of the will, similarly complicated, plastic and hesitant nervous habits, aroused by the train of present experiences, and, on the other hand, determined in their nature by the whole course of our past experience, and by the inherited tendencies of our nerve centers—such habits, I say, are expressed in our acts of Deliberation, of Choice, and finally of rational Self-Direction. The life of the intellect and that of the will, meanwhile, can be sundered only by artificial abstraction. What is all the while

going on is the adjustment of this organism to this environment, under the influence of these stimuli, and by virtue of these central dispositions or habits—the adjustment always expressing itself by these motor responses and inhibitions which constitute our more or less highly intelligent conduct.

To a portion of this process our conscious life corresponds. It is an intellectual life in so far as it involves insight into some aspect of the actual situation in which our experience places us. It is a voluntary life, so far as it involves consciousness of our intended reactions themselves. As a fact, the two sorts of mental life go together. We never think without willing, or will without thinking. The dependence of all our thinking upon our past experience is, meanwhile, an expression in conscious terms of the intellectual significance of the law of nervous habit. The same law is notoriously of paramount significance in the life of the will.

Accompanying all the foregoing mental and nervous processes, and so in addition to intellect and will, there is still a third great class of facts, namely those of the Feelings and the Emotions. The importance of these is as great as their psychological theory is still obscure. But on the whole one may venture to sketch their significance in some such way as the following:

My organism reacts by virtue, we have said, of its established nervous habits, and of its current masses of sense-impressions. But this account omits, indeed, one important factor, namely that dependent upon the current physiological state of my nerve centers themselves. When I am weary, one set of nervous habits may, under given sensory conditions, manifest themselves. When I am well rested, very different sets of nervous habits will, under the same conditions, be brought into exercise. When I am merry, a given sport may suggest only the most joyous ideas. When I am gloomy, the same sport may remind me only of tedious or of painful events. The best formed nervous habits may fail in moments of excitement, of terror, of exhaustion, or of grief. All nervous habits are determined, as to their actual expression, by what we call

our general state of present Interest. In all such cases, however, the habits whose exercise is temporarily diminished or suppressed, are not lost; nor are the stimuli absent which might, at other times, irresistibly appeal to them; but the current central condition prevents them from coming into operation. What we actually do at any moment is but a selection from a vast number of habitual deeds, any one of which under other central conditions, might be done. Thus then our perceptions, imaginations, general ideas, impulses, trains of thought, and lines of conduct, are modified and determined, not only by present sensory experience and by our past habits, but also by the current state of nutrition, or of exhaustion, or, in general, by the transient physiological susceptibility of our centers.

Now through processes, many of which are very complex and indirect, it is this our passing central condition of exhaustion, of excitability, or, in general, of preparedness for experience and for a response to it, which in a large measure gets expressed to our consciousness by means of our current emotional states, *i. e.*, by means of our feelings of interest, of well-being or of ill-being, and by our still more complex emotions of love or of hate, of pride or of humility.

It is true that this formula gives us but a very slight expression of the actual complexity of the tangled facts of the world of feeling, as distinguished from the world of intellect and of will. In part our elementary feelings of pleasure and pain are very probably due to specific sensations of the special senses; but these indeed are sensations which are of service rather in telling us how present sense-experiences are affecting our organism for good or for ill, than in telling us of the qualities of the things outside of us. There are probably, for instance, pure pains of the sense of touch. In part a very important source of our states of feeling is to be found, furthermore, in a mass of rapidly varying sensations that we constantly get from our own internal organic conditions. But these, again, have to do with our passing organic condition, rather than with anything else. Even so complex an emotion as fear, for

instance, can apparently be produced almost or quite directly by certain sensory disturbances whose source is in the alimentary tracts. So at least it sometimes seems to happen in cases of "nervous dyspepsia," although the mechanism of such pathological fears is still obscure. These passing organic sensations themselves, however, are not only the independent result of the state of our internal organs, but are also subject to constant modification through the fact that the current excitations of our nervous centers from our organs of outer sense, as well as all the resulting secondary central processes, may and often do lead to changes of circulation, respiration, and the like, and these organic "reverberations," due to our present experiences and activities, are once more felt at the centers as part of our current emotional state.[2] Meanwhile, it is probable that the actual states of nutrition and of exhaustion of our active nervous centers themselves are also more or less immediately represented in our current emotional condition.

But however complex the factors that thus enter into the nervous conditions of our feelings and emotions, the actual influence of feeling and emotion on our current trains of thought, and upon our acts, is in all probability due to the fact that in these emotional experiences, both by direct and by indirect means, the present internal condition of our organism, and especially the current state of susceptibility of our nervous centers, finds an expression in consciousness. So, then, to sum up the matter once more, we may say that, as our external sensory disturbances bring to pass our motor adjustments, each one of these, in its turn, either involves or leads to a changed state of our organism itself, while this changed and endlessly changing organic state (of circulation, of respiration, of gland-secretion, of muscular tension, of central nervous nutrition or exhaustion) not only continually modifies the present exercise of our habitual nervous functions, and determines at each moment what habits

[2] On all the foregoing, the reader may consult Professor James' now well-known hypothesis concerning the emotions, as discussed in his *Psychology;* and the essays on *Pleasure and Pain*, by Dr. Herbert Nichols, in the recent numbers of the *American Philosophical Journal.*

shall get expression, but also is a secondary source of states of consciousness which color and usually alter our trains of thought and of will, just as the accompanying changes of organic state affect all our central nervous processes, and make them other than they would be were it not for these endless internal reverberations. The life of Feeling forms thus a third distinguishable region of mental life, intimately related to the Intellect and the Will—yes, inseparable from them and affecting all their phenomena.

Of the normality or abnormality of the mental process as thus outlined we have no objective test (such as we can apply to our fellows) better than is furnished to us by a consideration of the success of the adjustment of the organism to its environment, *in so far as this success depends upon the processes that embody the habitual functions of the highest or mental grade of nervous centers themselves.*[1] Not every failure to adjust organism to environment involves such abnormality as we here have in view. For instance, defects of sense organs do not count as mental defects in the stricter sense. Motor paralysis, as such, belongs elsewhere in the natural history of defect; although, if its cause is a central lesion, that lesion may easily *also* involve a mental defect, and will often do so. But it is that defective adjustment which is due to a disorder of the *central* nervous processes as such, and in particular to a defect of those processes in so far as they are the direct embodiment of *significant habitual functions*—this sort of defect it is which we regard as giving the objective sign of the presence of a mental defect.

For example: A blind man fails to possess certain of the highest of the brain-habits by which we who see manage to adjust ourselves to our environment. But the defect is here due to the failure of a sense organ, not to the brain centers; and we do not speak of it as a mental defect. A traveling Frenchman, ignorant of English, fails to adjust himself to an English-speaking environment. Here there is defect; but it

[1] This definition is but slightly modified from the definition of mental disorder and its opposite, very skillfully developed by Dr. Charles Mercier, in his excellent text-book, *Sanity and Insanity* (New York, 1890). The immediately following illustrations of the definition are also suggested by his.

is due to an absence of a set of habits which the traveler's brain-centers, although normally very fairly capable of acquiring the habits of a foreign tongue, have never been set to acquire. Hence this is, once more, no mental defect as such, only a limitation of training. A soundly sleeping, healthy man, or again, a man who has suddenly fallen in an ordinary fainting fit, fails to understand you when you speak, and does not respond. Here the temporary defect no doubt involves processes in his brain centers and depends upon a suspension of their waking functions. Here, if you like, is a present central defect. But this suspension, whether itself normal, as in healthy sleep, or due to physical disorder, as in the passing fainting fit, we do not regard as indicative of defective brain-habits, because as soon as these centers begin once more their functions at all, the old intelligent habits will at once reassert themselves. But now, over against these various sorts of failing adjustments, one may easily set the case of the man who, while wide awake, should be found to have forgotten his native tongue, and who should fail to comprehend it or to speak it. Here would be a failure of adjustment which would belong to the high-level nervous processes in so far as they embody significant habits. Here would be mental abnormity as such. This may serve as an illustration of the general definition of mental defect.

In all the foregoing, I have but dealt, for the most part, with the commonplaces of recent psychology, and have, of course been confining myself to the definitely limited outlook of the empirical psychologist as such. In philosophy one gets at a very different aspect of human nature from the one here presented, and in speaking of our mental functions as altogether parallel to those of a nervous mechanism, I must be understood as using terms whose significance, from a higher philosophical point of view, would appear entirely different. In the phenomenal world we must speak in phenomenal terms, and descriptive natural science, as such, seeks to know only the mechanical aspect of things.

From the point of view now reached, mental disorders may

in general be defined as those nervous disorders whose dominant primary symptoms are to be found in the psychical region of our life; such symptoms giving evidence of deeply defective habitual functions of the highest nervous centers. Nervous diseases involving lower centers may exist, and may run their whole fatal course, without seriously affecting the mental processes until the very end. Even some brain diseases may show their presence by symptoms that remain to the end predominantly physical, rather than mental. But on the other hand, there is no mental disease that is not also a nervous disease.

A brain disease, functional or organic in origin, and sufficiently pronounced to be attended with very grave mental derangements, constitutes an insanity in the proper sense; and the types of pronounced insanity fall into certain generally recognizable groups, whose minuter classification indeed is a matter about which experts differ widely, but whose better known and more frequent types have received familiar names. If the dominant and primary mental symptoms belong to the field of the feelings and the emotions, as happens in a very great number of cases, then you have such comparatively frequent disorders as Melancholia and Mania. If the dominant and primary symptoms are found in the intellectual sphere of mental life, and so appear as hallucinations and morbidly false opinions, then you have the groups of the so-called "Delusional Insanities," and of the various forms of Delirium. When the mental disease has, as its context, some recognizable nervous disease with marked physical symptoms, then these physical symptoms are often made use of to classify and to aid in characterizing the type of insanity in question, and so we are told of an "Epileptic Insanity," or hear of the important type of disease described under the name of "General Paralysis of the Insane." But the asylum insanities concern us here, of course, no further. In their pronounced forms, the teacher will not see them, except by accident.

But now there are numerous more or less disordered mental

conditions that are remote enough from what it is practically worth while to call insanity. We must never forget the vastly significant fact that the borderland, the doubtful or intermediate land between sanity and insanity, is a very wide region indeed. A recent habit of popular speech has led many to call the persons whom they conceive as dwelling in this borderland by the general name of "cranks." Well, as we have all of us found since we learned to use the word, this current popular term "crank" is one of a very extended application. One in about every five or six hundred of our population is an insane person, in the sense of being in an asylum or of needing some equivalent care. Were a census taken of all persons who have been called by somebody at some time, and with considerable justice, "cranks," who would venture to estimate the proportion that would result? Nay, when one chances to remember the endless oddities and inconveniences of our common human nature, the burdens of heart, of conscience, of defective purpose, of halting intelligence, of over-confident blundering, of morbid and cowardly shrinking from duty—burdens that we all in some measure carry or have carried—does one not find one's self occasionally reflecting: "I said in my haste, all men are cranks?"

Seriously, of course, the lesson here is that the term normal is a relative term; that absolute normality of mind, as of body, is an ideal by which to regulate our conduct, rather than a fixed possession to boast of, and that by the phrase "disordered man," in the practical sense, we mean one sufficiently disordered to need any sort of consideration or treatment as such. Now of those who are mentally disordered enough to deserve our sympathy, and to need more or less care and advice as suffering persons, there are a great number who are very remote indeed from being insane, in the sense in which the word is used in the asylums. My plea in this place is therefore not for any loose use of words, but for an open-minded recognition of the signs of any mental disorder, even the least, whenever, under given circumstances, it is more humane to recognize and to deal with them as morbid symp-

toms than to treat them as we do when we fail to take into account their morbid quality.

Having completed our introductory definitions, we have now to proceed to some illustration of the borderland cases, of the more or less mildly and mentally disordered individuals, such as may easily come under any teacher's notice. And these cases at once admit of a general classification, into the cases that occur in Childhood, and those that occur in Youth.

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II

MENTAL DEFECT AND DISORDER FROM THE TEACHER'S POINT OF VIEW (II)[1]

If one omits from consideration the important but highly technical topics of Idiocy and Imbecility, one may say that insane children, in the strict sense of the word, are very rare. But, on the other hand, childhood is a great region of life for the sprouting and first springing of the young weeds of future mental disorder. The full-grown maladies of the asylums need older brains to live in; but child psychology is often full of elements from which future troubles may come. It therefore behooves the teacher of young children to be, if possible, psychologist enough to know, and by sight too, those symptoms of instability of brain which are so common in early years. Many of these symptoms are relatively insignificant in themselves, if isolated, and one may then safely leave time and growth to weed them out. Special groupings of such symptoms, however, may be at the least very suspicious facts, such as no teacher who by chance learns of them should ignore. You must never forget then that it is the grouping, and not the elementary defect, which is in childhood psychologically significant. Let me already try, even without time for a more careful psychological analysis, to illustrate this distinction, and to show how a group of mental symptoms may be decidedly important, even when the single factors are relatively insignificant.

There is a very familiar type of elementary pathological mental symptoms, which occurs in many sorts of disorder, both in children and in adults. I refer to what is technically called an Hallucination of one of the special senses. An hallucination of the special senses is a false external perception to which nothing outside of our own organisms really corresponds. A patient in a fever delirium falsely sees, for instance, people

[1] Begun in the October issue, VI: 209.

or animals or evil spirits in the room about him. Another patient, suffering from a complicated delusional insanity, hears the voices of mysterious adversaries making comments upon his fortunes and his character. Now in adults occasional and single hallucinations may occur, a few times in a lifetime, without implying anything of note. But, on the whole, frequent and massive hallucinations, occurring in an adult, are always likely to have a pretty grave import, sometimes with regard to his temporary nervous condition, sometimes with regard to his more permanent mental disorders.

In the life of a child, on the contrary, hallucinations of the special senses occur more frequently, and may have a far less significance than in the adult. On the wide borderland of sleep, hallucinations of vision, in some children, may be for a while almost or quite normal incidents, and may have to be judged as such.

Here, for instance, is an apparently quite healthy child, five or six years old, who nightly, as soon as he is put to bed, and before he has shown any other sign of sleepiness, begins to talk of the various things that he sees about him. These things are largely unreal, but are on the whole amusing to him. He prefers to have a light left in his room to go to sleep by; but in case the light is left, he shows no alarm at being alone. He falls asleep slowly, but quietly. The waking dream easily glides over into the sleeping dream. He sleeps all night well, and makes little of the experience next day. Here are evidently hallucinations of visions on the borderland of sleep, but still very distinct from the true dreams of normal sleep. Before the child in the least loses his consciousness of his actual surroundings, he begins to be aware of many unreal surroundings. Horses, women in white dresses, possibly angels, or fairies, derived from picture books—such is the stuff of his waking dream. You can sometimes be sure from his speech that these experiences are to him quite real and irresistible facts, and are in no wise waywardly invented topics of idle talk. The experience, then, is one that, in a person so nearly wide awake as the child is, would be more or less pathological at any other time

of life. But the case, as described, may be one practically indistinguishable in all other respects from normal child life. Here is a sensitive but so far not at all a disordered brain. In general, one may say that even a very healthy childhood is a perfect curiosity shop of elementary mental symptoms which, in an adult, might be grave, but which, if unsystematized, may have little importance for child life.

But here, let us say, is another child, of more unstable and flighty general temperament. He too has nightly hallucinations on the borderland of sleep, but they are painful ones: threatening figures, tall black men, fierce dogs. He objects to being left alone at all at this time. Later in the night he often wakes with the well-known and characteristic nocturnal terror of the nervously burdened child. This little nervous storm begins with a screaming fit, followed by a time in which the child remains long stubbornly half awake, with wide open eyes, complaining excitedly of what he sees, namely crawling or otherwise painfully moving objects, large or small. As to temper, he is at such times either ragingly fierce, rebellious, intractable, or else is overwhelmingly profuse in his tender demonstrations of agonized affection. He talks wildly, or even becomes wholly inarticulate in his fright. Slowly he comes to himself and quiets down again. The next day he may have wholly forgotten the incident. Such scenes are fairly common in his life, even when other signs of specific ailment are absent. The child's doctor looks for irritating causes of a physical sort and perhaps finds nothing definable.

Here one already has a relatively pathological case of cerebral excitability—though not yet necessarily a case that is immediately grave; but in considering the chances that the child will outgrow this disorder, one must now look for other signs of similar brain conditions. If this is a decidedly burdened child, such additional signs may, for example, ere long appear in the form of frequent, definite nightmares of a fixed type. These mean an already somewhat systematized and organized mental enemy, although a good many reasonably healthy people have had such bad nervous

habits, ever since childhood. If such nightmares retain a peculiar meaning during the child's waking life, that is also a matter to be noted. Painfully insistent thoughts of possible calamities may also harm the child's waking life, and be exaggerated every night at bedtime. Of these a favorite example is the dread of some time being buried alive—a dread which somehow gets suggested to certain sensitive children astonishingly early, and which remains, as an inconvenient "segmented" nervous habit, to vex the souls of a considerable number of very sensible adults. Other such insistent thoughts common in childhood are the dread lest one's bed should catch fire, and the feeling as if a wolf or other wild animal were under the bed, perhaps about to bite one's toes. In considering all such inconveniences, all such capriciously "segmented" bad habits of the sensitive young brain, the important question of course is, not whether they merely chance to exist, but how well they are grouped, systematized, and how large a part they play in the growing life. Do they really poison it? Are they more than innocuously segmented suggestions? Do they organize themselves, and form a little system inimical to the general peace? Do they recur again and again in the same shape? If they have these two latter characters of organization and fixed recurrence they are important specimens of the properties of just these nervous tissues, and they need watching accordingly.

The really burdened child, moreover, the child inclining to what is called the "degenerate" constitution, often adds to numerous inconveniences of this sort various physical signs of abnormality. He shows also a general predisposition to grow very easily delirious whenever he has a light passing physical ailment. He may early appear as a born pessimist, brooding much over the sorrows of life, long before he has any clear ideas of what his brooding really means. If to all the foregoing he adds very active and precocious wits, and any noteworthy signs whatever of general physical instability, well, then, one has probably on one's hands a case where careful mental treatment is of the greatest importance, and where such care will be needed for many years. To be sure, this may be really a

child of promise. He may in the end turn out to be a man of extraordinary ability. But none the less is he likely to prove, to the end of his days, a decidedly burdened person. For high ability and heavy burdens often go together. And now what he needs, in addition to the physician's occasional care, is what no physician can undertake to give him, namely, a careful and continuous mental treatment and training, deliberately adapted to his special case, by persons who, through instinct and study together have learned in the psychological world to know a hawk from a handsaw. Of course it will not do to prejudge any case from a few symptoms. But I speak of warnings; and I say that whenever a group of morbid mental symptoms has begun to be systematized and recurrent in a child's life, then his advisers, without being foolishly frightened, must beware.

In estimating such a case two well-known considerations may also be borne in mind, although it is not well to be very dogmatic as to the force of either of them. The first consideration is that a bad nervous heredity, where the family history proves its presence, is an important factor in determining the future of such sensitive cases. This consideration is important, but, as I say, it must not be misused by an adviser in too dogmatic a spirit. Nobody is to be condemned to ruin merely because his family has a questionable nervous history, even if he himself shows in childhood signs of decided instability. Nervous heredity often takes very Protean forms. The descendants of the nervously burdened need not develop the particular disorders of their ancestors, but may suffer in decidedly new ways, which may prove to be either less or more manageable. Nervous anomalies, moreover, like other variations, often tend, in heredity, to "run out," and to disappear in a healthy mediocrity. In other cases, the descendants of the nervously burdened show their heredity chiefly in the form of extraordinary ability of mind. The hereditary chances are, then, on the whole, in a great number of cases, fairly balanced. I have in mind a case of a family of six children, brothers and sisters, whose heredity, on both sides, was decidedly neurotic, and whose early care and education were highly capricious and

accidental, just as often happens in such families. Of the six children, three have proved (up to the present time, and in so far as I have been able to learn) apparently quite normal, and have developed into marked and very individual, but decidedly good personal types. Just three, however, growing up under the careless and unwise conditions of their early life, turned out abnormal cases; but they were of highly contrasted sorts—one insane, one harmlessly degenerate in wits, one brilliant but hysterical. Such is this world of chance, even under unfavorable educational conditions. The lesson is: respect heredity, but never despair on account of it, since its caprices are simply endless.

The second well-known consideration is that great precocity of brain is a suspicious functional anomaly. Suspicious, I say, but only suspicious—no certain sign of future disorder. Biographies show that a very respectable number of healthy and distinguished persons were precocious in childhood. Medical literature shows that many precocious children later go wrong, The obvious result is that great precocity in many respects demands especial caution in training, but calls in itself for no foolish despair. In such cases watch narrowly, but not at all hopelessly.

THE BORDERLAND OF SANITY IN YOUTH

If one passes to the period of youth, one gets to a time when the development of definable insanities is very much more common. The mind is now well enough formed to be able to go markedly astray. The anomalies of the hereditarily burdened begin really to come to the front. An adviser has to deal, in borderland cases, with defects, which whether grave or light, are much more describable. Some of the more elementary mental disorders, such as hallucinations of the special senses, become, in borderland cases, less frequent than in earlier years. In case these rarer elementary derangements appear in the youth, they have, however, a relatively graver import than in childhood. In general, however, even the casual observer is, in case of the youth, more likely to have his

attention first attracted by the often rather subtle signs of deranged mental habits than by the more dramatic, but more elementary symptoms that usually excite our sympathy for the burdened child. The anomalous youth has more of the arts of concealment. Meanwhile, however, he has long trains of thought and elaborate habits of conduct that are not what one ought to find at his age. These false systems of mental life must be comprehended before he can be helped. In one case a youth may be even excessively conscientious, and very well-meaning, but somehow his conduct is seen to be hesitant, painful, ineffective. Another burdened youth is exceptionally perverse and willful. Or yet another may appear to be helplessly plastic, and without will of his own. All of these disorders may of course coexist in the same brain, and may alternate or combine in exhibiting themselves to the observer. Morbid stubbornness often goes along with a helpless plasticity in the presence of certain temptations, companionships, or moods. Morbid conscientiousness is often linked to serious defects of conduct. Mental defect often first exhibits itself in the form of an incomprehensible doubleness or multiplicity of life, a "segmentation," as we have already called it, whereby many mutually contradictory tendencies find room in the partially disorganized habitual life of one organism, and many "segmented" selves are present instead of one Self.

But now comes the real problem of the teacher as it appears in case of youth. One has before him either such an industrious and conscientious or such a perverse or self-contradictory being. One sees, in any case, that one's pupil is going wrong. Perhaps he broods, lives too much alone, works feverishly, means well but fails, takes no good physical care of himself, profits little by ordinary advice, shuns companions and healthy sport. Or again, he is rebellious, disposed to bad company, weak, wayward, malicious. Now one asks, what shall I do for this youth? Is he merely a normally constituted person making bad blunders, or is he a sick man in need of treatment? Is he a fool, or a sinner, or a patient? Shall I trust to my routine and to life to teach him the right; or shall I regard him as an

exceptional being, needing tender care? Am I to train him to hard but wholesome service, or am I to seek to cure him as one diseased? Ought I to upbraid him or to nurse him? Ought I to try to urge him out of his faults or to appeal forthwith to the physician? How am I to define to myself what constitutes the morbid as distinct from the naughty in his conduct? How am I to distinguish between the crudities of defective moral education and the abnormities of real mental disorder?

As we have said, in estimating the degree to which the nervous mechanism is deranged, we have to bear in mind the purpose that this mechanism normally accomplishes, and the processes that are necessary to such normal accomplishment. Since the brain is busy, like the rest of the nervous system, in directing our motor adjustments to our environment, it follows that when you analyze the state of a man's mind you ask: (1) What are his habits of action? and (2) Why has he formed these habits? If it is defect that you are considering, you must then carefully seek to distinguish mere defects of sense organs, or physical burdens that limit a man's powers of motor expression, from defective habits of his higher nervous centers as such. Deafness or myopia, or even mere awkardness may at first sight be easily confounded, by superficial observers, with mental disorder. And as to the defective habits of the brain itself, you must again distinguish between defects due to mere lack of training (such as our above-mentioned quite normal and commonplace inability to speak a foreign tongue) and such defects as reveal the characteristically bad quality of these nerve centers themselves, when they are set in function under normal conditions of training. The boy trained to theft from infancy might or might not prove to be a morbid subject; but his thieving habits would of themselves prove little. The well-trained boy from a good home, who at the earliest chance stubbornly runs into gross crime, is presumably likely to be found a mentally defective person.

Furthermore, in examining the mental condition of any given person for the sake of getting results as to the foregoing

problems, one must of course also bear in mind the successive grades of mental facts that can be analyzed. These are,[1] as we have already in general seen in our previous study: (1) Sensations; (2) Feelings, pleasures, pains, interests, of an elementary sort, together with general emotional states such as cheerful or gloomy moods; (3) Perceptions, involving both present sensations and recalled facts of sensation; (4) Mental Images, or groups of recalled sensations as such; (5) General Ideas of the classes, qualities, and abstract relations of things; (6) Elementary Impulses to Action, such as form the basis of all higher voluntary processes; (7) Organized series of General Ideas, or trains of Thought and of Reasoning; (8) Organized series of impulses to action, such as make up the Will in its higher sense; (9) Organized types of Emotion of higher grade, such as appear in a man's general estimates of life, of himself, and of his fellows. It is seldom possible or even desirable to examine into all these classes of mental states. Nor is my present grouping meant to be of more than tentative value. The reason for drawing such distinctions is that the condition, normal or defective, of the processes in any of these groups, is by itself positively significant, for the whole mental state as such, in proportion to the degree to which organized central functions are involved in the processes in question. Defective sensations may or may not indicate abnormal central conditions of importance. Genuine abnormities of intellect or of will always must indicate relatively grave central defect. On the other hand, one must never forget that, unless one carefully takes into account both the previous training and the merely momentary emotional condition of the person under consideration, it will generally be quite impossible to distinguish clearly between a mere defect of education, or a vagary of mood, and a truly abnormal defect of central habitual function. To illustrate from the effects of education: A professional astronomer of modern training who should suddenly announce his conversion to the Ptolemaic theory, would

[1] I restate the classes of mental facts in a somewhat different order, closer to the order in which, as will soon appear, it is practically convenient to inquire into them.

probably be insane. But for some, though indeed not for all of the ancient astronomers, to have first conceived and then accepted, in their day, the Copernican theory, would very possibly have involved an alteration of their own mental processes which would not have been easily consistent with sanity.

For the various possible disorders of the foregoing classes of mental processes, there exist, in several cases, well-recognized names. False Sensations (Paræsthesia), and morbid Emotions, are familiar phenomena. Illusions (distorted or misinterpreted perceptions with a genuine basis) and Hallucinations (*i. e.*, false perceptions with no external basis), are the two distinguishable disorders of Perception. The first notoriously may be nearly or quite a normal affair under certain conditions. Whoever looks into a stereoscope with normal eyes gets an illusion of sight. The second, the hallucination, as involving important alterations of normal central functions, is, if occurring in an adult, a much more suspicious thing Abnormal elementary Impulses, under the name of "fixed" or "insistent" impulses, have played a large part in recent psychological literature. For false ideas and abnormal trains of reasoning, of very various degrees of complexity, the general name Delusion has been employed, although it should, strictly speaking, be confined to abnormally false judgments as such. Such then are the names of some of the possible disorders that analysis may find. Upon the basis thus laid, I must next proceed to give some hints as to procedure and as to the estimation of cases.

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IV

MENTAL DEFECT AND DISORDER FROM THE TEACHER'S POINT OF VIEW (III)[1]

Let us return again to our supposed case of a problematic youth who is under your care. The problem is to try to estimate how far his defects are of a morbid type.

The signs of mental disorder which will first attract a teacher's attention in a youth will generally be, as I have already said, some seemingly inexplicable incoherence or instability of conduct, existing to a degree that, at any given age, is exceptional. It is in incoherence or instability that our complicated reflex mechanism first shows its failure. To be sure, all growing boys and girls have indeed unformed habits, and may, therefore, often seem flighty and capricious of will. But a really extraordinary form of naughtiness, if often recurrent, or any other very marked anomaly of conduct, needs at once a closer scrutiny. This scrutiny will first get on the track of the mentally abnormal, where it exists, by a somewhat simple device, founded on the psychological considerations now before us. A relatively normal boy may do very odd or very intolerable things. But then, on the whole, he has already formed a good many orderly habits, and these may be appealed to with success in contending against his defects. He wants to be approved, to be socially possible, to fit in with his fellows, and to be in his way good. The matter with him is that he simply does not yet see how inconsistent with such actual and normal plans his ill conduct is. Show him this inconsistency in reasonable ways, by instruction, by reproof, or if need be, by penalties, and he easily responds to your treatment. Or again, if he still remains stubborn, you can ere long learn why he does so; and then you will find the cause to be something intelligible, quite apart from the peculiar quality

[1] Begun in October, 1893, VI : 209

of his nerve centers. His home training may explain the thing. He formed bad habits there. Time will be needed to work a change. Or the bad habits, this whole false system of life, may be due to evil companions. These must be changed. Then you can hope to deal with him. You have sound nerve centers to train. The task is long, but the way is clear. Such is your discovery with the normal youth.

On the other hand, however, after you allow for all these factors, and have used your best routine methods, an abnormal boy remains, perhaps, intractable. And now you begin to suspect that there is something deep within him that works against the formation of good systems of conduct and ideas. Show him the way of peace, the coherent plan for his life; try to establish by suggestion the coherent system of conscious nervous habits, and either he fails to understand you, or else, understanding, he remains unmoved, or finally he plainly longs to be like other youth, and somehow, as he says, he simply cannot do it, but feels helpless, and grows worse. Penalties make him sullen and impenetrable. Reproof fails to find the right spot in his nature. Either he seems uncommonly indifferent to your efforts, scornful, contemptuous, or he grows weakly and bitterly remorseful, broods, complains, may be whines outright, with that indescribable characteristic nervous whine of despair, but still does not improve, cannot improve. And so you come to say with some assurance, This is a morbid being.

Now surely is the time to take genuine trouble, and really to make up your mind about your charge. To this end you must begin a task for which a good deal of leisure is needed, and to which you had better never devote yourself at all unless you not only can find or make such leisure, but mean to be absolutely patient and receptive until you have really made out what you need to know. Here, then, may be some true mental abnormity, some serious danger for this eccentric being, some impending calamity that ordinary discipline cannot avert. Can you be of help? You cannot know until you have tried.

Your ideal must here be to get a real, or close, a truly psychological insight into this possibly deranged mental mechanism. You must come not now any longer as disciplinarian, but quite sincerely as friend, as humane man offering help to a younger brother in distress. You must furthermore beware of vague explanations, of dim generalizations, of pedantic maxims, of intolerance. You must not be content to call this youth morbid, and to despise him for that. You must not vaguely say, "Oh, he is a prey of imagination." The question may be, "What is his state of imagination, and why is he in this state?" You must be a true naturalist, and study this live creature, as a biologist would study cell growth under the microscope, or as a pathologist would minutely examine diseased tissues. In order to study you must of course love. Minds and their processes must be delightful things in your eyes. I know of nothing more beautiful in heaven or earth than the inside of a live mind, if so be it is only not one's own mind. Of that indeed one often gets weary. You must prize what you learn from all such youth. Believe me, who have tried all this myself, when I say that I have learned very much indeed from such. Your inquiries, they must become, if possible, very specific. You must ask just what are this boy's characteristic reflexes, habits, words, tones of voice, incoherencies, fancies, longings, states of self-consciousness? How does he differ in respect of these from boys otherwise known to you? How does it feel to be what he is? Why does he do as he does? You must learn to feel, if possible heartily, that in his case, with his burdens and his sensations, you would doubtless act just so yourself. This realization of his inner life must become, if possible, a very genuine experience to you. Intolerance and impatience have absolutely no place in such a scrutiny. You must fear nothing. You will be very tender with the sanctities of youthful feeling; but if, in the course of your scrutiny, a poor heart gets open to you, and you find it a very evil heart indeed, you will never show—yes, if you are wise, you will very seldom feel any contempt. Remember that you are now dealing, as it were, with a beauti-

ful wounded bird, with a wonderful mechanism that has got out of order. Your task is sacred. Your own personal feelings of like and dislike must remain perfectly under control. As adviser you may indeed often find the time coming again, by and by, for reproof, and then you will give it, but never because you are excited, and only because that is the best treatment.

Such, then, is your ideal. Your hardest task will be to win your subject's perfect confidence. You must win it by deserving it, by keeping very strictly all that you get of it, and by patiently waiting for it to grow. You will of course absolutely shun all idle curiosity, and will inquire solely for what concerns you as humane student of natural history. You are no prying meddler, but a helping friend. Such privacies of this young heart as do not concern your business, you will of course rigidly ignore. You are looking as well as you can for the mechanism, the nervous basis, and the extent of the deranged habits which have attracted your attention. And now for a very few illustrations of what you may find, and of your further method of work and of estimate.

The easiest to suspect and discover, and one of the commonest of all elementary mental derangements is, of course, the derangement of our general masses of feeling. Above all, in case of the brooding, the shy, the timid, the morbidly conscientious pupil, you would at once look for masses of gloomy feelings. In nervous overstrains of all sorts, from the slightest to the gravest, and even in many physical disorders that are not often viewed, by any but the suffering, as having an important mental aspect, the general state of current feeling often grows morbid, even while all other mental elements remain comparatively intact. The first object of personal inquiry, then, for the student of mental, as of physical disorders, is well expressed by the commonest of queries: *How do you feel?* A deranged state of feeling, if due to localizable physical suffering, belongs, of course, in other categories than the present one. *Mentally* significant, however, a deranged state of feeling becomes, when it appears, upon examination,

as a seemingly causeless general mood, either of morbid gloom, or of morbid and maudlin gayety. Morbid gloom is much the more common of these two derangements. Nearly all of the lighter nervous invalids may be said to know this mood. In grave and persistent forms it constitutes a true melancholia. Morbid gayety, however, if long continued, large but causeless exaltation of feeling, founded upon no clear idea or outer basis, and wholly exceeding the bounds customary to the temperament in question, is generally a still graver symptom than morbid gloom, especially if a long fit of the latter has been suddenly and causelessly succeeded by a luminous outburst of the former. Lighter instances of this sort may, indeed, be seen in some people during the period of convalescence from acute diseases, and under such circumstances may have but transient significance. But in its extremer forms such morbid gayety becomes true mania. Both the melancholic, or gloomy, and the maniacal, or morbidly gay mood are symptoms of nervous exhaustion. Their causes, as you will know from the foregoing, appear to be manifold. Masses of organic sensation, diffuse and unlocalizable, no doubt play their part in forming these states of consciousness. Most nervous pathologists look for their principal causes still deeper, in defective conditions of the nutrition of the higher or highest nervous centers. As for the general significance of a morbid mood, as estimable wholly from the psychologist's point of view, and apart from any complete medical judgment on the case as a whole, one may say that a morbid mood is relatively significant: (1), in proportion as it affects one's actual habits of conduct, *i. e.*, in proportion as it oppresses, and inhibits, or distorts, the organized thinking and expression of the sufferer; and (2), in proportion as it refuses to yield to the normal influences of gentle social suggestion. With a morbid mood, on the whole, you in vain argue directly. But if a sufferer is in question, and you want to estimate in a purely psychological fashion the weight of his particular mood as a symptom, you may first see if his mind, as they say, can be quietly if temporarily "distracted" from his mood by the

ordinary arts of personal intercourse. The easily "suggestible" mood is of course less symptomatic than the more stubborn one. Having tried this preliminary device, you may then, with some caution, resort to a still more important one. A very significant morbid mood will have infected the entire will and intellect, and will so be attended by deeper derangements of the mental process as a whole; and then the sufferer will perhaps be unable, even under your social influence, to give close attention to external things, or to discourse coherently, or to speak long, of topics that lie outside of the range of this mood. But if, as usually happens in lighter cases, the sufferer, despite his keenly painful sensations and all his deep gloom, is actually able, when once entrapped into a long conversation, to show interest and rational clearness in attending to rather complicated topics outside the immediate range of his sorrows, then you may at once reassure him by telling him that whatever may be his dangers or his future, his mental mechanism is still fairly intact, despite his heavy burdens. It is well to bear this obvious consideration in mind, because one of the commonest anxieties of the young sufferer from painful morbid moods takes the form of believing he is already far on the way to insanity, and he likes to get a judiciously worded reassurance.

Above all is it true, however, that you can do very little toward estimating the psychological significance of the sufferer's morbid moods, by merely taking his word as to the intensity of his inner experience. That he suffers, is indeed a psychological datum, but unless he is an old hand at experiencing the course of just this particular disorder, he can do little or nothing to throw further direct light on the symptomatic importance of his mood by simply reporting its inner quality. His report may be discounted in advance. If this morbid gloom is a new thing in his experience, he will exhaust all possible words in trying to tell you how disagreeable it is, and will often end by assuring you that it is something absolutely unique and indescribable. Whereupon, of course, you have to consider the matter from a much cooler external point of view,

and ask two questions: Does this mood yield easily, for a time, to social suggestions? Does this mood so far stand, relatively speaking, off by itself, like a toothache, or does it already infect, determine, or inhibit, all the more organized mental processes of this subject?

As to the way in which the morbid mood may actually determine the current trains of thought of the sufferer, we all have had occasion to notice something. When one is in the sulks, one thinks only of the ways in which one's dignity is to be vindicated, and in which one's false friends are to be brought to scorn. Upon these topics one often employs even a very considerable intellectual ingenuity. The deeper morbid moods of the more melancholic sufferer uniformly have, however, a yet more ashen tinge. It is a profoundly significant fact that the deeper sufferer from such morbidly gloomy moods, although at first perhaps disposed to blame his neighbors, almost always goes on, in the end, if his mood grows worse, to reproach *himself*, to feel a deep remorse, and to fear with more or less vagueness some penalty for his worthlessness. In this way the gloomy mood may, and often does give rise to true delusions concerning imaginary sins or penalties, and that even while the subject still retains a good deal of general coherence of thought. In estimating a sufferer's case, remember then this fact. If your subject complains of deep and irresistible gloom, but feels no remorse, no sense of his own worthlessness, then either his mood is but an incident or a result of some other mental disorder, or else it is an exceptional and probably transient affair. Normal grief may be deep without any self-reproach. Morbid grief, causeless as it is, sends the thoughts seeking for a cause, and nearly always, in the end, relates this cause to one's own fancied guilt.

This important tendency is often the reason why a morbidly grieving nervous invalid may long stubbornly try to conceal his woes from even his nearest friends. Such concealment is itself an important symptom. His situation may thus grow very pitiful indeed. He has an oddly characteristic sense that his secret is a guilty one, and that, although perhaps, as he fears,

everybody reads this guilt on his countenance, he must not, cannot speak of the thing. A morbidly grieving sufferer, once, in confiding his case to me, assured me that he had for some weeks seen in my eye, whenever we met, that I was reading his guilt and his sorrow through and through. As a fact, since he was a man of perfectly self-possessed outward demeanor, and since I had known him but little before this confession, I had indeed perceived that he had affairs of his own which must be giving him some concern, but beyond this I had read absolutely nothing of psychological importance until he chose to speak.

To sum up, then, as to this frequent type of cases. The invalid suffering from any form of nervous exhaustion that affects his highest centers, may often be brooding over such a morbidly painful mood. This mood, owing to the peculiar tinge of guilt that colors it, will generally, in later youth or in adult years, be kept for a long time as secret as possible, especially if the sufferer does not understand the cause. In such cases he may spin in nervous solitude his vast web of tangled thoughts, while he feels at once too helpless and too proud to tell of them, because he associates them with a deep sense of shame, which only increases by feeding on itself. Man is normally a social being, but this man is shut up in a dungeon. He is hiding an unspeakable thing. Nobody shall know of it. Yet alone he cannot bear it. He sees himself on the brink of insanity, plays gloomily with the idea of suicide, and is in danger of a very rapid plunge down-hill. Yet all this disorder may have a decidedly superficial basis, or of course, may again be very deep-seated. What is certain is that the sufferer shuns help and yet can't help himself, and that unless, his case is understood, he is likely to fail of rational treatment until too late. Blame and even punishment often fall upon such poor wounded souls—in vain.

Here, then, is one of the adviser's most humane tasks before him, namely, to win this sad little secret from its hiding place, and so to prepare the sufferer to seek relief where it can possibly be found. Apart from medical advice, which of course should always be sought in such cases, it is always astonishing

what can be wrought for such souls simply by the act of free confession, and by the power of quiet and authoritative sympathy. The horrible loneliness of many such nervous sufferers is characteristic. The temporary relief of free social intercourse with a confidential adviser is often, in lighter cases, almost magical. The morbid sensations are very often, as I have said, suggestible phenomena. Argument indeed is vain. But you can often diminish them merely by a gentle suggestion of their vanity, made a little bit as if to an hypnotic patient. As laymen you can't undertake to cure, but the physician will be glad to have, and to guide, your moral co-operation.

But where the emotional elements are thus deranged, the whole process of course, as we have seen, must suffer. Therefore, associated with such masses of morbid organic sensations, but again also to be found in the context of nearly all other mental disorders, is a further class of symptoms for which the psychological inquirer will early look with care.

One of the best tests of the general state of my mental habits in their wholeness is to be found in discovering what sort of opinion, estimate, and notion I have of myself as this individual, of my "Empirical Ego." When I suddenly am called upon to think of myself, and who and what I now am, I notoriously first direct my attention, in general, to my own body, or to some set of my bodily feelings. If I am called upon, however, for a fuller account of who and what I am, I proceed to develop more or less fully a statement of what I have done, or of what I mean to do, or of my dignities, capacities, rights, or powers, as I conceive them. My "Empirical Ego," then, in addition to a mass of interesting present bodily states of mine, consists, in general, at any moment of my life, of a sort of epitomized and inclusive general idea of my sum total of remembered past and future deeds and powers. To tell who I am is to give in brief a general abstract and chronicle of my sum total of plans of conduct. I am what on the whole I am conscious of having done, and what I propose to do. If I am mentally deranged, therefore, my general self-consciousness will have a morbid flavor about it. All seriously

abnormal mental subjects, whatever their disorder, have at all events an abnormal idea or estimate of themselves. This derangement of self-consciousness may be said to be the most universal of morbid symptoms in so far as one looks, not to the elements, but to the process. To test for abnormality then, apart from special emotional states, examine your youthful pupil as to his general plans in life; his hopes, his personal ideals, his attitude toward others, his type of self-consciousness. If he is normal you will find a certain flavor of wholesome sociality, of submissiveness, in close connection with independence; and there will also be present, despite his normal vanity, an element of cooler self-criticism about him, which will erelong be distinguishable from the wayward, the morbidly stubborn, the flighty, the over-vain, the flippantly haughty, the hesitant, the despairing, or the hysterical self-consciousness of a disordered or degenerate man. Here no definite rules can be given in any brief form. Experience of human nature and tact must guide you in your inquiry and judgment. In the later years of youth, morbid self-examination, uselessly close introspection, the various phenomena of what has been called the "New England" conscience, are frequently discoverable, and may need to be looked for and estimated. A false self-consciousness means stubbornly disordered plans of life. You must comprehend these, or you cannot counteract them. Where a deeply morbid self-consciousness, *e. g.*, a highly pathological vanity, or a diseased obstinacy of self-esteem and of independence, exists, apart from marked, and especially apart from painful emotional states, there the causes are likely to be deep and probably constitutional. Then you have a distinctly distorted personality to deal with, and must simply try to make the best of a bad situation. But if the causes of the deranged self-consciousness are plainly painful sensory states, or the black emotions before sketched, then, especially if the disorder is acute and of recent origin, the outlook for the future may be excellent.

So far, as you see, I have meant to exemplify your method of work as a student of cases rather than to exhaust the possi-

ble classes of phenomena. Your great need is of careful analysis. You always, whatever the case, ask first, What elements of this mental life are disordered? You ask secondly, How is the process as a whole, the formation and the expression of rational habits, related to the discoverable elementary disturbances? Of course the special symptoms thus far mentioned, although common, are but a very few in comparison to the vast range of possible cases. Our borderland of sanity is indeed so wide a region that there is almost no limit to the variety that can be found there, and the more clearly definable clinical types of disease, known in the asylums and named in the text-books, are useful, but very inadequate guides to the study of the live cases of this borderland. A few very brief closing suggestions as to the study of mental symptoms may now still be in place.

Of the elementary derangements, the morbid alterations of relatively simple mental processes which occur in these borderland cases, the most frequent are the following: (1) The Emotional Disorders already characterized. (2) The closely related confession that, as a fact, the patient has no feelings at all, is dull, insensitive, indifferent to everything. This symptom is, I suppose, usually equivalent to a lighter type of morbid gloom, just as a sense of mere numbness in an inflamed wound is one form often taken by the changing pain itself of the wound. (3) The frequent complaint of the nervously exhausted that their heads are confused, that their memories are failing, that their minds simply will not work. These complaints simulate grave confessions of mental disorganization, and are likely at first to alarm you, but often they are as a fact founded on decidedly insignificant morbid states of transient feeling. Some people there are who relieve themselves several times daily by such confessions, and then go on about their business very much as if nothing had happened. In estimating the foundation of such despairing talk, you therefore have to see by actual experiment whether, as a fact, this mind is really helpless, or is capable of doing coherent work, and whether the ordinary memory is really lacking or intact. If,

upon analysis, you find the latter to be true, you may regard the despair as a mere symptom of an elementary disorder of feeling, and as little more significant than any other form of simple psychical pain. (4) The often closely related complaint that one is helplessly indolent and inactive, and cannot "get one's will to work." This confession too is sometimes due to a merely elementary disorder of emotion. Pathological indolence is one symptom of the so-called "morning tire" of the nervous invalid; and it is well, with all these possibly elementary disorders of feeling, to inquire at what time of the day they are most frequently and severely felt. If in the morning on waking, and if they grow better later in the day, they are so much the more probably incidents of a general, but possibly of a comparatively simple, nervous exhaustion. (5) The presence of painfully insistent morbid temptations, "bad thoughts," or foolish self-questionings, or dispositions to repeat simple acts, to be sure that they were rightly done. These insistent fears as to one's acts and thoughts, these rebellious "ideomotor" processes, of a "segmented," but also often of an infectiously inconvenient character, form a very interesting type of bad nervous habits, whose theory would require a paper by itself. It is enough for our present purpose to say that such occurrences are comparatively frequent phenomena in these borderland cases. They very often form part of the burden of the constitutionally weighted or nervously "degenerate" persons, and not long since it was a common dogma of the continental alienists that they were infallible symptoms of the presence of such constitutional degeneracy. This dogma has lately been questioned, with reason (as for instance by Dr. Cowles in this country); and there seems to be no doubt that these insistent impulses can occur on the basis of ordinary nervous exhaustion. At any rate, although they are sometimes very serious foes, still, in other instances, they may exist in considerable and even in decidedly inconvenient number in a given patient without necessarily involving any serious danger of actual insanity, or even (with rational care and training), any tendency to further growth of the distressing malady itself. It

is therefore well not to be too easily frightened upon meeting with these decidedly impish enemies of your patient's peace.

In estimating, provisionally, and from the psychologist's point of view, all such symptoms as the foregoing, it is well always to keep in mind the main rule—an elementary mental defect is significant in proportion as it has already infected and controlled the general processes and habits of your subject; *i. e.*, in proportion as it has organized itself, and has built up a system of false habits and of accompanying general ideas. Search on the lines of this consideration, and you will rapidly grow in insight into the special case. Another good rule is the following: An elementary disorder which is attended by strong feelings of suffering, gives in general a more hopeful outlook for the future than does a painless intellectual or moral abnormity of otherwise equal significance; *e. g.*, Delusions; that is, morbidly false judgments, which do not result directly from strongly colored emotional states, but which are held with coolness and fixity, are very grave symptoms, which will rarely appear in your borderland cases. The morbidly grieving patient is often disposed to believe unreasonably that people hate or suspect him. But a cooler delusion in an unemotional person is likely to be a more serious matter. Just so on the moral side. The wicked youth who suffers constant remorse for his wickedness may be a morbid subject, but there is so far hope for him. But the cheerily morbid sinner, the pathologically corrupt being, who can see nothing wrong in his life, is always in a relatively hopeless case. Of all the abnormal types that will often come under the teacher's notice I therefore know of no less promising type than that of the cheerful, the remorseless, the systematic liar of later youth. One occasionally meets him. But one can do almost nothing for him. His habit is of the deepest kind. His whole mental process, his entire system of self-consciousness, is profoundly deranged. He is necessarily on the verge of true delusions. He is a wretched mental invalid, and he knows it not. The civilization of the future will probably establish special asylums for the care of chronic and incurable liars. At present such a case

is useful to the teacher only as a fearful warning of what may happen when our general ideas have once systematically ceased to be imitative, and have become mere ministers of our passing pleasures. The warning is a deeply significant one. Let us not forget it.

My examples will have wearied you, and you will still have missed the answer to the question, How shall these abnormities be treated? And yet this question is one that no wise teacher needs, in the long run, to have answered for him by any technical formulas. For, in the first place, in graver cases, you will never assume any medical responsibilities, but will act in cheerful co-operation with medical advisers. And for the rest, the mental and moral treatment of minor psychical abnormities is founded on precisely the same principles as those which govern the whole business of mental training everywhere. By patient suggestion train wise habits; take account always of individual limitations; discourage nervous enemies, respect physical soundness, adapt yourself to the current symptoms; these are plain rules. What I have meant to counsel is a wise comprehension of the actual situation before you. First see where you stand, and then you will be able to move in the light as you get it. That is a plain matter.

There is of course, then, no magic about the teacher's art of treating mental defects, any more than about the rest of his business. Humanity, experience, watchfulness, intelligent comprehension of the actual situation, whatever it is, and then, once more, tact; these are the devices. As for what in general you can hope, as adviser, to do, you can try at least to help the suffering pupil to a cooler and a wiser understanding of his own case, and to form in him a system of good habits to contend against the bad ones. The teacher must carefully avoid encouraging by his investigations as psychological inquirer any new false habits of brooding or of diseased self-scrutiny in his pupil. He must not excite but allay false alarms; he must not flatter but must gently reduce, if possible, idle vanity. He must turn the morbid man's eyes outward. He must teach the patient, if possible, that noble habit of duly

ignoring the inner nervous enemy, of coolly turning the back upon the internal demon—that noble habit, I say, which so many heavily burdened nervous sufferers learn and practice all through a busy lifetime of effective and humane activity. The arts of living with the nervous enemy and of daily outwitting his impish cleverness by a deeper cleverness of one's own, these are arts that can be learned, and that can be taught, even to great sufferers. The nervously morbid, by dint of training, often come to be, as we know, among the world's most justly admired and prized leaders of thought, of artistic production, and of public life. It is a noble task to contribute to even the bare possibility of such an outcome, and the teacher should do his best.

In general, he should follow this final rule: In advising a mental sufferer, first learn to look upon his case as if it were your own, and then teach him, on the other hand, to consider and deal with his own case as coolly and dispassionately as if it were another's. For thus it is that we can best learn to bear one another's burdens.

In a fourth paper, supplementary to the foregoing series, I propose to present to the readers of the REVIEW a few considerations on anomalies and abnormalities of temperament which were not contained in my lectures as here printed.

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