#### THE SCHIZOPHRENIC TYPE OF REACTION

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## :: The Schizophrenic Diagnosis and Its Implications ::

The diagnosis of schizophrenia is, on the whole, a serious diagnosis. It carries with it not only a suggestion as to the mechanism, but also a warning as to the possible outcome. Many patients in this group become mentally crippled and are never able to return to their previous social or mental level. The degree of mental reduction is extremely variable; the exact nature of the mental reduction is of considerable interest and sooms to consist essentially in a permanent and disturbing predominance of factors which could already be traced in the personality of the patient before the enset of the disorder and which were manifest in the behavior and thought of the patient during the early phases of the psychosis. Under the influence of Kraepelin there has been a tendency to make the outcome of psychoses a basis for their classification, and in view of the serious outcome of many schizophrenic cases the term "dementia praceex" has for a period been widely used to denote this whole group of cases. The use of this term has done serious injustice to many patients and both in physician and nurse it has tended to paralyze therapeutic effort.

The separation of the benigh and mild from the severe and malignant cases has been somewhat arbitrary, and it seems illegical to make the serious outcome of the latter group into a criterion for the group in general. In an infectious disorder which involves the heart we do not draw a sharp line between those cases with complete recovery of heart function and those which are left with a valvular lesion, but we do not use the permanent handicap of the latter as a fundamental criterion of the general disorder. Very heterogeneous disorders may lead to permanent impairment, while the same disorder may under certain circumstances leave a patient crippled, and under other circumstances may be followed by complete recovery. The Kraepelinian concept of demontia praceex has not done justice to these considerations, and has favored a fatalistic attitude towards this whole group of cases.

It is gratifying, therefore, to see that the conception of demontia praccox is loosening its grasp on the psychiatric world, allowing physicians to come to the complex clinical material with open minds and free from a rigid schema with the subtle suggestion of an impersonal disease process, running its insidious course regardless of the life situation and of the personal problems of the individual. At the same time it must be admitted that for the patient who takes the schizophrenic road there is danger of finding himself seriously involved and of romaining permanently at an inferior level of adaptation. The schizophrenic type of reaction to life is one fraught with great risk. Why there is this risk, why the individual patient should get hopelessly fixed in an inferior mode of reaction, why different patients descend to different levels, are interesting problems. At this stage, however, it is sufficient to state that we are not entitled to make the very important assumption that mental deterioration means an imporsonal tissue process, or that it can be looked upon as an indication of either structural damago or chronic intoxication. It is important to keep clearly in mind that there are other possibilities, and that a man may deteriorate in his efficiency, may develop distorted attitudes, may give up his previous scheme of values for an inferior one, owing to the limitations of his own personality and the stresses of the life situation, and not to factors of impersonal nature. The term "demontia"

suggests the presence of factors analogous to those which we meet with in demontia paralytica and senile demontia, and in the present setting may have to be abandoned.

## :: Types and Degrees of Adaptive Reactions ::

Man through his mental processes deals with experience in two ways. In one way, by the claboration of his impressions through the higher thought processes, he is able to grasp and modify the forces of the outside world, to adapt himself to the structure of his environment and thus to win comfort and make it easier for others to de likewise. As this realistic function of thought has progressed, man has come more and more to understand the physical forces of the world which surrounds him and to control them. A man completely dominated by the realistic function of thought would see in this world little but a physical-chemical system devoid of meaning, over which he had ever-increasing control.

The other function of thought deals with the meaning of experience and with the individual's scheme of values. In virtue of this function man sees the world as permeated by those forces of which he is conscious in his own personality, and not merely as a meaningless system of physical-chemical forces. Through this mental endowment man does more than merely register and elaboratingers and stimuli: he sees the world in the light of his individual desires, and through his creative imagination he may derive satisfaction from subjective accomplishments, while the objective accomplishment demands toil and pain.

In his adaptation to the world of his experience the emphasis laid by the individual man on either of these two functions of thought will vary with the level of his culture, the nature of his temperament, the condition of his bodily systems and the satisfaction accruing to him from the environment. There is the utmost range of adaptation, from the energetic, matter-of-fact, objective efficiency engineer, to the dreamy and imaginative poet or philosopher. The Latent to which the individual turns to the real world for satisfaction, the extent to which he throws himself heart and soul into the objective tasks of the environment in which he lives, is an important measure of the efficiency of the individual from the standpoint of the group. Perhaps the most characteristic feature of the schizophrenic type of reaction is the reduction in the amount of energy expended in this direction. There is a diminished interest in the real world, in the world as objectively conceived, in the world as seen by the ongineer; there are limitations of the energy expended in productive activity, reduced sensitiveness to those situations which normally stir us to action, reduced desire to express the personality in the social setting which is the usual medium of self-expression. Such reduction need not necessarily be due to impersonal destructive factors, such as toxic or degenerative processes. It is again important to omphasize the possibility that the personality may cease to release energy for real adaptation on account of external difficulties, or on account of being thwarted and baffled. Failure and environmental thwarting may lead to disuse of cortain aptitudes, and even without any striking lack in the external situation, cortain innor limitations of the personality, frequently associated with the sex life, may prevent the utilization of external opportunities with consequent less of interest in reality.

The lessening of interest and the lessened output of energy in relation to the real world are, as a rule, accompanied by the endeavor to get satisfaction through the other function of thought. Thus we have an increased tendency towards the formulation of the world under the influence of the desires of the individual. Those desires are not necessarily the official and conscious desires of the normal individual but represent partial strivings which are the residuals of repressed tendencies that were evert at a more immature level. In many other types of psychosis, it is true, we get distorted beliefs and attitudes but those are often in the setting of a diffuse, unsystematized disturbance of the higher

functions due to structural damage or toxic influences; in such psychoses the symptoms are an indication of the weakening of the higher integrations, and are a more or less casual revelation of the undercurrents in the patient's personality. In the group of patients in whom the schizophronic reaction is the prominont feature there is frequently no demonstrable excuse in the way of structural or toxic influence for the withdrawal of energy from the real world and for the relapse into the more primitive and imaginative attitude towards experience. development of merbid ideas and attitudes seems in these patients to be part of the same process which shows itself in the loss of interest in the real world. The reduction of the realistic function and the development of a more subjective and often fantastic cosmic picture are morely complementary aspects of the new adaptation of the individual to the environment. This new adaptation can be considered inferior in the sense that it corresponds to a more primitive level of thought and that it roduces the social usefulness of the individual. Whether this new adaptation indicates merely a transitory difficulty, whether there are enough assets in the personality and in the situation to make a readjustment possible may, in the individual case, be difficult to foresee.

#### :: Significance of Hallucinations ::

In the schizophrenic type of reaction the presence of hallucinations is very frequent, and one may utilize their presence for diagnostic purposes as one utilizes in a provisional way the presence of plasma cells in the cortex of a patient suffering from general paralysis. In many other conditions hallucinations are present and frequently they cause little concern. Hallucinations in the course of an infectious or toxic delirium do not alarm us; hallucinations during a phase of intense emotional disturbance, as in an agitated depression or an hystorical delirium, are not necessarily of serious significance. The presonce of hallucinations in the schizophrenic group, however, appears to be closely related to the more primitive level of adaptation represented by the total schizophronic reaction. The interpretation of hallucinations in the individual case is a problem of considerable interest. Hallucinations are much more common in ordinary life than are usually supposed, but in a utilitarian atmosphere of strict objectivity where they have no cash value they find it difficult to survive and rapidly fade. The average person in our modern environment does not chorish his hallucinations, try to cultivate them, swell lovingly on them, onproider them and embalm them in his memory. They disappear so rapidly and are so out of keeping with the rest of our thoughts that they leave little trace. It is different at a level of thought where the world is still full of meaning, permetted with mysterious influences, imbued with high personal values. To thought at this level, whether that of the spiritualist, the enthusiastic visionary, the schizophrenic, or the primitive, hallucinations are material of great value and are fully utilized. When a patient talks of seeing visions or hearing voices some physicians would discuss the phonomenon in terms of localized cortical stimulation, as if the experience were very closely related to the actual auditory or visual experience of a normal person or of an individual in a toxic delirium. The real experience, however, referred to under the term hallucination is frequently a very complicated experience in which the sensory element is perhaps not a very important component; the latter may be present more or less incidentally, owing to the special endowment of the individual, and Galton has emphasized the great variety of individual endowment in this respect.

#### :: Schizophronic behavior and Speech ::

In the schizophrenic type of reaction the behavior of the patient is an outstanding component. It is in part the expression of the loss of interest in the actual world, of the diminished response to ordinary social demands, of the

domination by certain subjective beliefs and by hallucinatory experiences. Still more characteristic is the odd and occuntric quality of the behavior. its peculiar impulsiveness and inappropriateness, its lack of explanation by just those factors enumerated above. We are no longer dealing with behavior correlated with conscious purpose or of obvious, though not clearly conscious adaptive value. In the conduct of the schizophrenic the purpose and the value may be obscure but the springs of action can often be seen. The individual fragments of activity are not adapted to an actual world but they are the ill--adapted expression of important tendencies. These tendencies represent a more primitive level of adaptation; their adaptive value is only intelligible at a much more immature and archaic stage, and intruding at a higher level of adaptation they are futile and incongruous. The behavior of the schizophronic is incoherent but full of fragmentary meaning. Here and there we can see to what pattern of reaction cortain fragments of behavior owe their origin, just as in the chaos of a choroiform disorder one may still pick out components belonging to decorebrate postural attitudes. The eccentric behavior of the schizophrenic may therefore be looked upon as a reduction of the higher adaptive behavior with the incoordinate and wayward assertion of primitive tendencies which have boon lurking boneath the surface of the normal life as the sign of Babinski and the mass reflex lurk beneath our integrated motor activity. The term "regression," thorofore, is appropriate to the schizophronic type of reaction. The presence of regressive elements does not mean that there may not at the same time in at work in the individual case texic factors which are interfering in a more diffuse way with the various mental functions.

As in the behavior, so in the talk of the schizophrenic there are not only changes due to the factors referred to above -- absence of interest in the real situation, dominance of phantasies, hallucinatory experiences -- but there may be the same erratic and perplexing quality, the same impulsive and incongruous note, the comparative indifference to consistency or logic or the orderly arrangement of data. The material of thought is thrown at one, not arranged in a series of orderly propositions, or in concepts carefully defined; it may lack any such suitable preparation of an adaptive nature. Here again, one may think in terms of merely disordered certical activity or one may see in such utterances the expression of trends, formulated in a childlike or even primitive way; again the conception of regression seems to be useful.

### :: Somatic Components in the Schizophronic Reaction ::

In regard to the schizophrenic reaction in general, the problem arises whether there are somatic components which are to be looked on as of primary and independent origin and not as part of the more complex integrations already referred to; much work has been done along this line both in the study of the physiological and biochemical reactions and in the histological study of the structure of the brain. There may be cases where some simple congenital or acquired physiological inadequacy contributes to the disorder and where structural evidence of this inadequacy may be observed after death. One would not be entitled, however, to generalize from cases of this type; it is quite intelligible that a person may be crippled in his adaptation to reality partly through some fundamental inadequacy of his simple mechanisms and partly through the inadequacy of the more complicated mechanisms of personality, modified by training and experience, to deal with situations of a certain degree of difficulty.

# :: Schizophrenia and Abnormal Interaction of Environment and the Individual ::

The schizophrenic type of reaction seems to be characterized by diminished interest in subjective creations or fantasies which are emancipated from the

control of ordinary logical or scientific thought, the frequent occurrence of hallucinations, odd and fragmentary behavior and utterances of little adaptive value in relation to the real present situation, representing fragments of modes of thought and behavior intelligible in the setting of the child or of primitive man. The schizophrenic type of reaction is soon in individuals of a cortain type of personality. If we start with the dogma that, on account of later deterioration, in some cases there must be a disease process, then with Kraepelin we may be tempted to go the whole length and say that the predisposing special type of personality is an indication of an early attack of the disorder and we can place the period of enset of this hypothetical disorder as early as we desire. On the other hand, we may accept the statement that the psychosis and the special personality are of the same cloth, without assuming that the persomality is an early indication of a disease process which becomes more explicit in the psychosis. It is equally legitimate to assume that, if the psychosis and personality are of the same stuff, the psychosis can be looked upon morely as an extreme degree of the difficulty of adaptation of a person with a cortain make-up confronted with the major issues of life; even in the later detorioration we may see not a gross diffuse disturbance of mental function or even a specific involvement of certain partial functions, but rather the extreme limit of an inferior or risky type of adaptation characteristic of a certain type of corsonality. The concrete difficulties of the life situation may have finally led to the evert psychosis and even to the permanent abandonment of mature adaptation and the acceptance of an inferior level of adaptation into which intrude all sorts of insistent primitive tendencies. It was possible, some years ago, to think of those accumulated failures as cases of dementia in the same sense as cases of paralytic or sonilo domontia; that is to say, prosenting a deterioration which could be adequately understood on the basis of the impersonal study of the isolated individual and of his component systems. It is impossible to think in these terms at the present time when an adequate clinical study takes for grantod a systematic review of the environmental situation and when a detailed analysis of the individual personality and its evolution is included in any satisfactory study of case material. Patients with deterioration and patients who recover, patients whose difficulties are elicited by the stresses of the environment and patients whose difficulties are elicited by metabolic or toxic disorders have all to be considered as presenting a problem in adaptation; the disorder is never to be considered as merely a function of the isolated individual but as a runction of the individual in relation to the actual environment, and in estimating final failure or deterioration the role of the environment is not to be noglocted.

One may utilize the concept of a schizophrenic type of reaction as one accepts an hystorical or affective type of reaction. An hystorical reaction in relation to a difficult situation is accepted as the expression of a certain type of constitution, while the constitution is not attributed to the action of some special disease. An affective psychosis precipitated by some emotional stress is held to indicate some constitutional instability which is not, however, looked upon as a residual of a special disease. Similarly, the schizophrenic reaction to a difficult life situation is the expression of a certain type of constitution reacting to the stresses of life and there is no adequate a priori reason why this type of personality should be looked upon as the residual flom, or the symptom of, some definite disease process. The latter hypothesis is due to the fundamental assumption that a mental disorder which in many cases leaves the patient at a permanently reduced mental level must, of necessity, be the expression of an underlying disease process. The tremendous emphasis on disease process comes from the comparative neglect of the life situation.

All are familiar with Cannon's work on the bodily changes in the emotions. In his experimental cats he observed interesting physiological changes, increased secretion of adrenalin, increase of blood sugar, alterations in circulation, rapid eletting of blood. In the study of the schizophrenic type of reaction analogous

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studies have been carried out. In studies of this type one might consider the experimental cat as an isolated unit and formulate hypotheses as to the disease process manifesting itself in the changes observed; similarly one may speculate on the disease process underlying the schizophrenic reaction. To understand. however, in any adequate sense the reactions of the experimental cat one does well to introduce into the equation the barking dog and the facts of cat nature in general. It may be advisable to pay attention to cortain characteristics of the individual cat, whother male or female, young or old, with or without kittens. In view of Pavlow's work it may also be necessary to review the life history of the individual cat, and genetics warns us not to neglect to mention the special broad and the qualities of the individual ancestors of the cat experimented on. The cat finds the dog a considerable environmental strain; man responds to a social environment of infinite complexity. The personal history of the cat may have been punctuated by exciting incidents; the personal history of a patient means the exposure through years to complicated molding influences and to innumerable incidents. The evolution of the cat is complex and has required agos, but its culture is imposed upon it; it has not evolved the function of articulate speech, a complicated social life, wide-reaching interpretations of the universe, general laws extracted from a large body of carefully sifted information, a scheme of othical or spiritual values. To the cat the categorical imperative is othical or spiritual values. To the cat the categorical imperative is unknown. Even the simple bedily changes in the cat are part of the wide problem of the adaptation of the animal to the environment, requiring analysis of the special situations of biological significance, as well as analysis of the dotailed mechanisms and internal arrangements by which the organism arranges for mobilization of its forces. So in patients with a schizophrenic type of reaction it is probable that no matter what interesting internal adjustments are disclosed, the condition can only become intelligible when in addition to the detailed mechanisms we bring back into the equation the cultural situation and the organization of human nature in general. The study of a social situation is a much more complicated process than observation of the barking of a dog, and to appreciate the complexity of human nature we must know something of the long history of man's cultural evolution.

#### :: The Variability of the Schizophrenic Reaction ::

The endeavor has been made to present the outstanding elements which together make up the schizophrenic type of reaction. The term is not, however, used so strictly that at present one can say that one or other of the familiar components may not be wanting. As a matter of fact, we have discussed the schizophrenic reaction as the way in which individuals of a cortain type adapt themselves to the varied demands of the human environment. It is intelligible that such a group of individuals should present many varieties, that it should include the impulsive, the egoistic, the protentious, the idealistic, the sybaritic, the dreamy, the fantastic, the lazy, the sensitive, the reticent, etc.; in the infinite variety of human nature now one, now another of the main charactoristics of the schizophronic reaction may be the more prominent, largely dependent upon variations in the individual endowment. There may be serious withdrawal of energy from the real world with little evidence of fantasies. Hallucinations may dominate the scene or may be trivial and episodic. There may be serious mental reduction with little evidence of regressive phenomena; or, on the other hand, there may be a striking intrusion of crude regressive phenomena into a comparatively orderly setting. One of the present tasks of psychiatry is to take up in detail the various types of personality and the various types of life situation, and in the light of such an analysis to study the individual psychosis. This promises more than the discussion of the whole group in a general way under the assumption that there is some unitary disease process lurking beneath

protein manifestations. One will take up the broad problems of prophylaxis and tree ment in the light of actually available data, attentive to the varying needs of individuals, to the formation of habits, to the special stresses and strains of a modern cultural environment. Should further clinical analysis reveal the firstence of some unitary disease process, then the analysis of personality and ituation will, as in general paralysis, have lost much of its practical importance, but in the meantime it will have contributed much to our knowledge of human nature in general.