INTERPRETATION OF SCHIZOPHRENIA

Disorders of Gesture, Action and Volition

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I
Introductory Remarks

The behavior of the schizophrenic patient is usually described as bizarre, odd, peculiar, strange, in many cases unpredictable, or vice versa, predictable and stereotyped. These descriptions are appropriate, but refer only to the manifest symptomatology at a behavioral level.

The manifest behavior of the schizophrenic patient was studied in Chapters 3 and 4. Habitual patterns of regressed patients will be studied in Chapters 23, 24, and 25. The present chapter, in an attempt to go beyond overt behavior, will cover topics of great practical relevance, such as unusual actions, self-mutilation, suicide, and homicide, and issues of fundamental practical and theoretical importance, like the disorder of the will, especially in catatonic patients.

We shall study separately gesture, action, and volition. By *gesture*

we mean a motion of the body (or of parts of it) that expresses a special psychological state of the individual. By *action* we mean a purposeful or meaningful behavior, even if the purpose or meaning is not known to the subject. Behavior becomes action when it is connected, consciously or unconsciously, with some symbolic processes. Action has a content that reflects the psychological condition of the subject and a form or structure that reflects a state of normality or pathology. *Volition* is the process of choosing and of initiating, continuing, actualizing, interrupting, or terminating the chosen action. Volition deals with actions. However, when we study action *per se,* we refer to its form and content. When we study volition, we refer to the process of choosing and putting into effect the action.

These three functions (gesture, action, and volition) undergo alterations in schizophrenic patients. At times the alterations are so inconspicuous as to be recognized only with difficulty even by the expert. At other times they are so obvious, especially in catatonic patients, as to leave no doubt about the diagnosis.

II
Gesture

Among the many functions of the human body there is that of presenting the person to other people. The body, with its movements, tone, postures, becomes a vehicle of communication, a language. We shall avoid discussing here whether these bodily changes are intended to constitute a language or whether they are spontaneous activities that express a meaning to the observer, even though the individual may not intend to express it. Usually the gestures of the body are used in dance, pantomime, all theatrical arts, and are represented in the visual arts. They can be profitably studied in psychiatric patients too. Petiziol and Sanmartino (1969) have devoted an entire book to the expressions and gestures of mental patients. The schizophrenic, especially the chronic schizophrenic, seems to have a special style of gestures. At times a schizophrenic or quasi-schizophrenic style is recognizable also in preschizophrenics and, temporarily, in people who are close to, but succeed in averting, schizophrenia.

Mannerisms, affectations, repetitions of movements, especially in particular situations, are schizophrenic and, less frequently, preschizophrenic characteristics. Even more characteristic is the presence of new and unusual movements and peculiar mimic expressions, such as grimaces, movements of the head, shaking of

parts of the body, twitching, and so forth. Bobon (1955) has coined for them the name "neomisms," thus indicating that they are related to neologisms and neoformisms. At times an abundance of movements, reminiscent of what is observed in extrapyramidal syndromes, is observed while the patient talks. In some cases the movements and motions seem uncertain, definitely not wanted, and indicative of a search for the required behavior. At other times, especially as the illness advances, the unusual movements become more stereotyped. The repetition seems to eliminate accessory details and to reduce the motion to the essentials.

The theatrical aspect of patients' motions has been remarked by many authors. Are the patients eager to communicate something new, unusual, not easily expressed? In spite of what seems to be the case in certain instances, the patient does not assume a special expression for the purpose of hiding his feelings. He has no poker face. However, the peculiar motions may stand for a combination of contrasting feelings, fusions of ideas, and identifications that are similar to those appearing in his verbal language. For instance, the movement of an arm may not be in accordance with the movement or posture of the trunk or of the legs. Perhaps the patient tries to represent at a motor and muscular

level something that cannot be written or spoken and that has no standard symbolic expression. Perhaps the peculiar movement and gesture are ways to express and partially mitigate the patient's pain. He may want to assume a role that does not exist in common life. Some authors do not see only theatrical characteristics in the attitude of the schizophrenic but a surrealistic style of life (Roi, 1953; Barison, 1948).

Manneristic theatricality, stereotypes, and neomisms are three characteristics that often contrast with one another. Most of the time a meaning can be found in them that is valid only for the patient involved. On the other hand, some special movements recur in several patients. One of them is *twiddling,* or rapid shaking of one or more of the fingers. Several authors, but in particular Bettelheim, have described twiddling also in autistic children. Bettelheim writes: "In lieu of an unbearable reality he [the autistic child] creates a private one whose visual appearance he controls through the speed of his twiddling" (1967). Other primitive habits to be differentiated from mimic activity will be discussed in Chapters 23 and 24.

III
Action

Stereotyped action will be discussed in Chapter 23. Here only unusual action, which may be found in all stages of the illness, even the initial ones, will be considered.

It will always be possible to find a meaning in a patient's unusual action that transcends the action itself and is representative of his general psychopathology. Action has to be differentiated from gesture or expression, inasmuch as it is aimed at producing a change that is not limited to the appearance of one's body. A pathological action may indicate (1) decontrol or disinhibition, and (2) putting into effect actions, orders, or thoughts suggested by special cognitive processes, such as "active concretization," delusions, hallucinations, paleologic thinking, and so on.

Among the purely disinhibited actions are those that have an obvious or indirect sexual content. At the onset of the illness the patient may give vent to unrestrained sexual urges, being unable to inhibit them as he used to. At the beginning of schizophrenic episodes several male patients who came to my attention had what they called an irresistible impulse to touch or bump into girls who would walk by on the street. When the patients were hospitalized, they had the urge

to touch with sexual intentions female patients and nurses. Some patients in the initial stage of the illness do not refrain from masturbating or exhibiting themselves in public places or on the wards of the hospital. Raping is rare; but promiscuity is relatively frequent in both sexes.

If the illness advances, however, sexual activity other than masturbation decreases and eventually becomes by far less pronounced than in normal persons. In a certain number of patients excessive masturbation persists even when the patient has reached the advanced, preterminal, and terminal stages of regression. It seems almost as if masturbation has remained one of the few (or perhaps the only) means of experiencing at least a part of life. We find, however, marked differences in hospitalized patients as far as sexual life is concerned. Often these differences are related to the period of time when the observation was made and to the type of hospital administration. In the years 1941-1945, when I was working in Pilgrim State Hospital (New York), sexual activities among chronic patients were relatively rare. In later years in psychiatric hospitals in general these activities have become more common. Again it could be that the policy of restrictiveness or permissiveness, which varies

according to time and place, is one of the factors responsible for the difference. In recent years it has also become a practice in many hospitals to have patients of both sexes reside in the same wards. In addition to increased difficulty in controlling sexual urges, desire to defy or to seek power are reasons for increased sexual activity. The eventual marked decline in sexuality in patients who continue to regress must be considered as partially due to hospitalization, lack of stimulation, detachment, and so on. Contrasting with the decreased activity in overt sexual life, however, is the persistent and occasionally even increasing role of sexual symbolism in the delusions and ideas of reference of some chronic patients. In these cases, sex symbols, often expressed in unusual and bizarre ways, refer to life in general and not only to sexual activity.

The process of *active concretization* can be easily recognized in many apparently senseless and bizarre actions of patients. A professional man, after a long history of apparent neurosis and maladjustment, manifested psychotic behavior all of a sudden. He exposed himself nude to relatives. While he was walking on the street, although accompanied by his father, he insisted on walking on the edge of the sidewalk in a conspicuous and ridiculous manner. Later in

the treatment the meaning of these bizarre acts could be established. His exhibiting himself in the nude meant showing others how he really was, in spite of the fact that he could not express himself verbally. When the therapist asked him why he walked on the edge of the sidewalk, he replied, “I was in danger; my condition was unstable.” Apparently he had to translate his feeling of danger and instability into a physical situation, which could be more easily controlled. In fact, he obviously succeeded in walking on the edge of the sidewalk without falling by carefully placing one foot after the other, but he had not been so successful in the journey of life. This patient, like many others who indulge in this bizarre type of action, did not know the meaning of his actions when he was carrying them out, but he was able to retrieve the meaning later at an advanced stage of therapy.

Another patient used to go into stores and put the light on and off repeatedly, to the consternation of all people who were there. At a time when he felt powerless, this act gave him a feeling of power and reconnected him with the world that was escaping him.

Reitman (1951) reported a patient who thought that as a private in the army he had a dog’s life. While on a parade he disclosed his

manifest outbreak of schizophrenia. He suddenly went on all fours and started to bark. His thought “I am treated like a dog,” became, “I am a dog,” and consequently he acted as a dog.

Many regressed patients have the habit of staying most of the time either in a comer of a ward if they are hospitalized, or of a room if they are living at home. In some cases they do not actually stay in a comer, but they always remain close to a wall, away from the center of the room. They also cannot express verbally the reason why they are reluctant to move to other parts of the room. In many cases the patients, by resorting to the process of active concretization, feel that the walls protect them from the threatening feelings, from the ineffable hostility and danger that they sense all around. In some other cases the patients seem to treat the walls as their friends, the only friends they have. A patient standing in a comer is “in the company of two friends,” the two walls. He would feel too threatened by friendship with human beings.

Another recurring symptom, even in patients who are not regressed, is the *scream.* At times unexpectedly, or after a period of acute disturbance, the patient explodes into a loud, horrifying scream,

a symptom that for centuries has been represented in literature as a symbol of madness. The scream stands for the lifelong whimpering that was never heard. From patients who later were able to verbalize their feeling, I have learned that the scream is a protest. The scream means, “Stop, stop, surrounding malevolent forces. Don’t overcome me, don’t drown me. I want to live, I am alive, I scream” (Arieti, 1963a).

A certain number of hospitalized patients have a record of repeated bizarre behavior. Some smashed furniture, others broke mirrors into pieces, threw jewelry into the toilet, burned rare books or other valuable objects, rang fire alarms, threw plants and other solid objects out of the windows, and so on. Some of these actions, like, for instance, throwing the marriage ring into the toilet, have an obvious meaning. Others have been interpreted merely as acts of rebellion against the mores of the established society, the habits of the family, parental authority, and so forth. In quite a large number of these actions we can detect a more subtle symbolic meaning, one that is expressed through active concretization. The clinician must always remember that the bizarreness of an act is not sufficient to warrant the diagnosis of schizophrenia. The bizarre act has to be evaluated in its

meaning and in the context of the whole symptomatology. Nonpsychotic people also occasionally perform bizarre actions.

Self-mutilation is a socially unacceptable alteration of the body inflicted by the individual upon himself. It is carried out by actions that aim at cutting off, removing, destroying, maiming, or impairing one or more parts of the organism. Phillips and Alkan (1961a, *b)* have found this practice in 4.29 percent of a hospital population. The female patients constituted 6.10 percent, and the male patients 2.17. Thus nearly three times as many females as males engaged in self-mutilation. The authors did not classify the patients, but probably most of them were chronic schizophrenics.

A large number of these patients want to substitute a physical pain for an emotional one. Perhaps in these cases we may consider again the self-mutilating act as a concretization or an embodiment of the mental anguish. The patient, however, does not succeed in obtaining what he wants because the physical pain is considered less disturbing than the mental one, and so the act is repeated. A few patients, in the course of treatment, told me that they used to hurt themselves because the pain then became real. They wanted to escape

from what they vaguely perceived as unreal pain.

In many cases the self-mutilating act has a more specific symbolic meaning. Castrations play a prominent role (Hemphill, 1951). By cutting, or burning, or injuring in any way the arms, legs, fingers, toes, penis, and testicles, often male patients want to castrate themselves in order to punish themselves or because "they prefer to belong to the other sex." I have found that self-inflicted injuries to testicles and penis are not necessarily castration attempts but symbolic expressions of preoccupation with birth, being born, being one's parents' real son, or the father of one's children, and so on. At times these acts of self-mutilation carry out commands received from auditory hallucinations. At other times they are determined by delusional beliefs.

Fenichel (1945) compares the self-castrations, as they occasionally occur in catatonic conditions, to the "auto-castrations" performed by religious fanatics, who, by such radical denial of their active sexual wishes, try to regain "peaceful unity with God," that is, an extreme passive submissiveness, less a feminine nature than an early infantile "oceanic" one.

According to Szasz (1957b), in self-mutilating schizophrenic patients the ego needs "to bring the body up to date, so to speak, in order that it correspond to the psychically amputated (new) body image. Since the body part was already lost from the point of view of the experiencing ego, its removal is unaccompanied by pain."

In some cases it is difficult to believe that the patient is telling us the truth when he reports an act of self-injury, and he may be considered as expressing somatic delusions. For instance, Kraft and Babigian (1972) reported the case of a woman who came to a psychiatric emergency room because of pain from needles in her arms. Her history suggested that she was experiencing somatic delusions as part of her chronic schizophrenic condition. Radiological studies showed actual multiple needles in her left arm due to past episodes of self-mutilation.

The clinician is warned again that an act of self-mutilation is not in itself pathognomonic of schizophrenia. It may be ritual, or the result of very unusual motivation as it was in the case of the patient Peter (Chapter 9). At times these self-mutilating patients are diagnosed as suffering from psychopathic personalities, like the one described by

Phillips and Alkan (1961b), or character neuroses, and so on, but it seems evident that all these patients are at least quasi-psychotic or potentially psychotic. The actions of these patients seem to take the place of delusions.

Suicide is another important possibility that has to be taken into serious consideration in schizophrenics, too, and not only in patients suffering from depression. Rennie (reported by Wames, 1968), in a follow-up study of 500 schizophrenics admitted to a mental hospital from 1913 to 1923, found that 11 percent of those who had died, had died as a result of suicide. Suicide ranked third among the causes of death after tuberculosis and respiratory infections. A study reported by Wilson (1968) showed that two-thirds of psychiatric patients who had received hospital treatment and who had committed suicide were schizophrenic and chronically ill. This incidence is not as high as it seems, considering that the majority of hospitalized chronic patients are schizophrenics. Although the majority of authors agree that successful suicide is most common among persons suffering from psychotic depression, they also agree that it is relatively common in schizophrenics (Lewis, 1933, 1934; Jamieson, 1936; Norris, 1959).

Statistics on suicide among schizophrenics are unreliable. Too many variables are involved—the severity of surveillance in hospitals, the policy of admission and discharge, and the difference in the incidence of schizophrenics who are hospitalized or treated in the community. There seems to be no doubt, however, that the incidence of suicide among schizophrenics is considerably higher than the incidence in the general population (which is approximately 15 in 100,000). Warnes (1968) reports that the incidence of suicide in institutions is twenty-eight times higher than it is among the general population. For recent studies on the subject the reader is referred to the works by Warnes (1968) and Wilson (1968).

The increased liberality with which patients are treated in hospitals, the practice of psychotherapy, and the large use of drug therapy, with quick amelioration of symptoms, indirectly increase the possibility of suicide—an increased risk that in the large context of the overall benefits of modern treatment has to be accepted. Worthy of consideration are the words of Bleuler, which appear at the very end of his major work (1950, pp. 488^-89). He believed that the surveillance to which the schizophrenic patient is subjected "awakes, increases and maintains the suicidal drive." He added, "Only in

exceptional cases would any of our patients commit suicide if they were permitted to do as they wished. And even if a few more killed themselves—does this reason justify the fact that we torture hundreds of patients and aggravate their disease?"

Wilson's (1968) five-factor psychosocial evaluation showed that schizophrenic suicidal patients were characterized by "lack of constructive plans for the future, high chaotic energy levels, and general isolation."

I classify suicides of schizophrenics into three categories, according to the dominant psychopathology:

1. Disinhibition of masochistic trends, not necessarily connected with conscious depression.

2. As part of a depressive syndrome or of depressive episodes superimposed on the schizophrenic syndrome feelings of hopelessness, melancholia, unworthiness, inner disintegration, and so on.

3. As acting out of commands or ideas suggested by the delusional ideas, hallucinations, new ways of thinking, and so forth.

In my experience the third group is the largest. However, in many cases the suicidal act is the result of a combination of these three factors (see, for instance, the suicide of the patient Gabriel, described in Chapter 9).

In a considerable number of patients we find a history of suicidal attempts prior to the onset of the illness. Reichard and Tillman (19506) postulated that suicide, as well as homicide, is an attempt to defend oneself from the psychosis. Berk (1950) found that suicidal schizophrenics are immature, less emotionally controlled, self-absorbed, and have greater difficulties in heterosexual relations than nonsuicidal schizophrenics.

Criminality is much less prevalent among schizophrenics than among psychopaths, alcoholics, and drug addicts (Guze, Goodwin, and Crane, 1969). These authors found the combined prevalence of criminality among schizophrenic and depressed patients not very different from that expected in the general population.

Homicide is not as common among schizophrenic patients as some people believe. Guttmacher (1960) stressed the fact that

homicide is a very rare phenomenon among schizophrenics. He stated, "When one considers the great prevalence of this disorder, the tens of thousands of cases that exist, and the few homicides committed by schizophrenics and other types of psychotic individuals, there is no cause for alarm." On the other hand, there seems to be no doubt that schizophrenia is more common among murderers than among the general population. A study by Cole, Fisher, and Cole (1968) found that 18 percent of women who had committed murder were psychotic (usually paranoid schizophrenic), but they were not considered legally insane. Guttmacher wrote, "Whenever a former inmate of a psychiatric hospital commits a homicide, there is likely to be raised a hue and cry, demanding that such things stop." Guttmacher added that until we have "an absolute and permanent cure for all psychotic patients, such an occasional tragedy must necessarily be perpetrated by discharged patients. The only sure way to prevent them would be to keep all psychiatric hospital patients in permanent custody, an act the impracticality of which would only be surpassed by its inhumanity. There must be this irreducible minimum of such cases. If none ever occurred, we could conclude that discharge policies were too strict."

Nivoli (1973) has recently completed a study of the

"schizophrenic murderer" which could be considered fundamental to the subject. According to him the murders committed by schizophrenics imply greater violence and body mutilation than those committed by nonschizophrenics. The crimes generally involve more than one victim. The average age of the patient is 29 and he comes from a family living in social anomie; if he is married, his first victim is generally his wife. In many cases, he has asked for help or implicitly requested that he be put in a position in which he could be prevented from committing the crime. However, he was ignored or not believed. The offense is not so much the result of a well organized delusional system, but of decontrolled hostility, or of a sense of fear. In some cases, he had asked to be helped to move away, either to escape a delusionally conceived danger or the urge to commit the crime. He does not seem to have guilt feeling or sorrow for the victim. Often he denies that his victim is dead and may continue to write letters to him.

Theoretically a schizophrenic patient, especially if mildly sick, could commit a crime that is not in any way motivated, caused, or facilitated by the illness. In other words, it is conceivable that the nonsick, still integral part of the patient dictated and actualized the murder. Schipkowensky (1938, 1967), a Bulgarian psychiatrist who

has made a careful study of homicides committed by schizophrenics, calls this group “intelligible homicides.” He writes that the influence of the schizophrenic process cannot be found in these cases. He reported three such cases—two patients killed for money and one in self-defense. The author adds that patients may commit also “murders of liberation” in order to eliminate a hated member of the family. These murders committed by schizophrenics seem identical to those committed by psychopaths, and epileptic and healthy persons, and are not necessarily related to the schizophrenic condition. Actually there is no way to ascertain that the illness did not motivate or facilitate the murder. The other possibility—that is, that the illness had a great deal to do with the murder—seems much more probable, especially from the study of the cases that have come under accurate psychiatric examination.

Schizophrenic murders can be divided into many categories. As in the case of suicides, these categories are artificial. A case that would fit into only one of the categories would be unusual. The homicide may be:

1. A disinhibition of strong hostile trends preexisting in the prepsychotic life of the patient.

2. An effort to prevent the psychosis, or an exacerbation of the psychosis, or to defend against overwhelming attacks of anxiety.

3. A symbolic suicide.

4. An order from hallucinations or delusions, or an act necessitated only by the distorted thinking processes of the patient. This fourth category can be divided into subgroups, as we shall see.

When the psychiatrist studies psychodynamic ally cases belonging to the first category, he realizes that in addition to the "disinhibition" made possible by the illness, there was a preexisting strong aggressive or hostile trend. Guttmacher (1960), for instance, described the case of a patient who was raised in the most unusual way by a strict, peculiar, stultifying, punishing father who did not allow freedom and individuality. The patient had three sisters, who also appeared to Guttmacher as eccentric. As a matter of fact, when the patient eventually slew both parents, the sisters seemed untouched and apathetic. One of them, when she discovered the bodies of the murdered parents, went to notify the authorities; then she returned to the barn and milked the cow. The patient told Guttmacher, "I couldn't take it any more. It seemed like he was always trying to punish me. I

thought of using this knife that I did use." The patient said that no voice or compulsion had ordered him to kill his father. He had not drunk alcohol that day. When he was asked why he also killed his mother, he gave the following explanation: "I did not want my mother to know her son had done it. She was sick; she had a bad heart. . . ." The patient had shown in the last few months several peculiarities, and the father had contemplated having him examined by a psychiatrist. Apparently the onset of the illness released his control and permitted him to act in accordance with his hostility toward his father.

The second category, to which belong schizophrenics who commit crimes in order to overcome an oncoming or already existing psychosis or an overwhelming anxiety, has been described by Wertham (1937) and Reichard and Tillman (1950a).

Wertham writes that the crime is "an expression of the fight on the part of the patient for safe-guarding of the personality. One gains the impression that the violent act in these cases prevents the developments that would be far more serious for the patient's health. The overt act seems to be a rallying point for the constructive forces of the personality." What the patient undergoes in these situations is

called by Wertham *catathymic crisis.* Reichard and Tillman (1950) seem to have been influenced by Wertham. Reichard and Tillman write: "Murders and suicides which lack an adequate motive may represent an attempted defense against the outbreak of a schizophrenic psychosis in which the ego seeks to protect itself from disintegration by discharging the unassuageable anger through an act of violence." Other authors believe that the murderous acts are attempts to channel anxiety into intense motor activity. They culminate in aggression toward a significant figure in the life history of the patient. Guttmacher (1960) does not subscribe to these interpretations inspired by Wertham's work. He writes that the concept of the murderous act as a defense against the psychosis is interesting, but its validity is difficult to establish. Defense mechanisms are generally habitual methods of response, whereas the schizophrenic act of violence is used generally once. He is inclined to believe that many of the schizophrenic homicides are "short-lived psychic decompensations in vulnerable persons" because of great external or intrapsychic stress. He discusses these cases in a chapter devoted to the "temporarily psychotic murder," because many of these patients seem to have been psychotic only for a short period of time.

When they come to trial at times there is little or no evidence of psychosis. For legal reasons it is very important to determine whether they were psychotic or not when they committed the crime. The evidence of the temporary psychosis is lacking unless the patient wrote psychotic letters or was witnessed in psychotic manifestations during the episode. Guttmacher connects these patients with those described by Menninger and Mayman (1956). These two authors have described patients whose actions suggest the influence of a psychosis and yet did not present evidence of psychosis at the time of the examination or later. Their crimes seem to be the result of unmotivated, silly, impulsive, perhaps automatic behavior.

The third category consists of schizophrenic patients who committed a homicide that was a symbolic suicide. Again we owe to Guttmacher the best report of such cases. He mentions, among others, a schizophrenic mother who had been quite promiscuous sexually and who killed her 13-year-old daughter when she found out that she too had become promiscuous. In these cases the patient identifies with his victim; or, in other words, he projects to the victim that part of himself that he wants to reject and destroy.

The fourth category, which is the most numerous, includes all the murders that are committed as a result of complicated delusional thinking or under the order of hallucinations. Needless to say, in addition to the manifest motivation that is related to delusions, ideas of reference, and hallucinations, there is often an underlying psychodynamic that only in some cases can be understood.

Schipkowensky (1967) reported that the prevailing manifest motivations for schizophrenic crime are defense and sacrifice. Both motivations are inspired by a common goal: "rescue," of the patient or of the family, nation, state, party, and so on, as well as of some ideologies. Delusions of jealousy are also common motivational factors. A patient reported by Schipkowensky killed his physician, a young woman, who was allegedly stealing his sexual potency and transmitting it to the patient's brother. Another patient reported by Schipkowensky killed his cook, who was believed to be attempting to poison the patient and his neighbors. Schipkowensky reported three mothers who killed their babies (one, 1 month old) in order "to save themselves." He reported also ten cases of patients who killed their parents. The larger of his groups included fifteen patients who killed their wives under the influence of delusions of jealousy.

Schipkowensky collected also a group of four schizophrenics who attempted to kill their physicians, but only one of them (already mentioned) succeeded. In the other three cases the physicians were seriously wounded.

Stierlin (1956) has probably made the most extensive inquiry of cases of aggression committed by mental patients residing in seventy-three psychiatric hospitals. Fifty-four (or 6.9 percent) of 773 acts of aggression were directed against physicians, and in five cases death resulted. In 719 cases (or 93.1 percent) the aggression was directed against nurses, attendants, and others, and resulted in eleven deaths. Of the patients involved in these crimes, 60 percent were schizophrenics.

Schipkowensky devoted a great deal of attention to the sacrificial or, in general, symbolic meaning of some schizophrenic crimes, reminiscent of ancient rites. He described in detail the interesting case of patient N., whose crime was inspired by a dream. The patient dreamt of a monster who would destroy the whole world. On awakening, "N. assumed the role of St. George." He obeyed a voice that told him, "Get up and shoot." He killed a 19-year-old girl, a cousin of

his wife.

Contrasted to the harmful or bizarre acts which have been reported in this chapter are the amazingly appropriate actions, manifestations of sudden reintegration of the ego, which occasionally occur in some regressed schizophrenics. I shall mention as an example a woman in her 30's who came for treatment after an acute schizophrenic episode which was followed, as well as preceded, by chronic milder symptomatology, with ideas of reference, delusional thinking, and many distortions. In her life situation as well as during the sessions, she could not go beyond a very narrow range of interest and preoccupation. She spoke almost constantly about the little injustices that her mother-in-law and sister-in-law perpetrated against her and the alleged ineffectiveness of her husband in protecting her. Although there was an element of truth in her allegations, this truth was lost in a web of distortions and petty preoccupations. She had three little children, and it happened that one day one of them was playing with matches and started a big fire which, in a few minutes, involved and destroyed the whole house, an isolated home in the suburban area. The patient, who was in the garden when the fire started, entered the home, saved her three children, important

documents and money, then called the firemen and the police. When they arrived, the whole house had burned, but she had been able to rescue the whole family, as very few normal people would have been able to do in similar circumstances. Many persons in similar cases are overwhelmed by panic and do not live up to what the situation demands. Many therapists have heard similar examples from their patients.

How is this contrasting behavior to be explained? I believe that when a piece of reality is perceived by the patient very clearly and with strength, it may succeed in bypassing the schizophrenic ideation. Finally reality, no longer connected with the patient's habitual cognitive processes, impinges strongly upon him. The perception of the danger and the very adequate response constitute a short-circuited mechanism which contrasts with the usual thought processes. Unfortunately these special actions are the exceptions. Ordinarily the personal mode of thought obliterates the distinction between the real and unreal, and abnormal action results.

IV
Volition

Volition, or the capacity to choose and to carry out the choice, is a topic that has not received much consideration in American psychiatric and psychological literature. Recently, however, three books have been written on the subject (Farber, 1966; May, 1969; Arieti, 1972a). On the other hand, volition, as an object of study, has a long tradition in French and German psychiatric literature (see, for instance, Ribot, 1899; Bostroem, 1928; Ach, 1935; Blondel, 1939; Boutonier, 1951).

Volition, like the phenomenon consciousness, does not lend itself easily to scientific study. Moreover, a great part of the scientific world, so involved in the concept of determinism, denies the existence of free choice altogether. The psychoanalytic schools (especially the classic Freudian, but also most of the neo-Freudians) have contributed to this neglect by denying the importance of the will and accepting the existence of motivation as the universal psychological determinant of action. According to this point of view, every act is motivated (or caused) by a wish or drive. Thus, it is not the will that determines which action is chosen, but rather the motivation (conscious or unconscious) or the strongest of the possible contrasting motivations. If motivation removes the possibility of free choice, then the only act of

free will would be one that is not motivated. But an act that is not motivated at all is not performed voluntarily by any human being— it is automatic. In *The Will To Be Human* (Arieti, 1972a) I clarify how will may enter into the phenomenon of motivation. A will-motivated action may be consistent or not with a wish-motivated action. Certainly conscious or unconscious motivation *per se,* is very important, but so is the mechanism that either actualizes or inhibits the motivated action.

As I discussed elsewhere (Arieti, 1967), mature volition requires several steps: (1) the evaluation of several alternatives; (2) the choice of one alternative; (3) the planning of the chosen alternative; (4) the will (or determination) to carry out the chosen and planned alternative; (5) the inhibition of the envisioned but notwilled forms of behavior; (6) the execution of the chosen behavior.

The first three steps are more cognitive processes than conative ones. They are not exclusively cognitive, however, because they have an emotional counterpart and are always influenced or promoted by conscious or unconscious motivation, or by multiple and conflictful motivations. To discuss the first three steps is beyond the purpose of

this chapter. We would have to repeat a great deal of what we discussed in Part Two.

It is with the fourth step that conation is added to cognition. As Terzuolo and Adey (1960) wrote, our physiological knowledge of willed movement is very meager. These authors added that none of the known neurophysiological data can account for the initiation and arrest of movement, nor for the purposive changes made in the course of a movement on the basis of previous experience. There is considerable proof that starting or stopping of motor activities takes place through the pyramidal fibers in the primary motor area. However, information has already been integrated in other neural centers before executive orders are transmitted to the motor area.[1]

The last three steps in the mechanism of volition require special consideration in this chapter. We shall discuss them especially with regard to catatonic patients. Although catatonic patients have become much less numerous in the last two decades, I think that this topic continues to be of greatest interest, and its study by every psychiatrist is imperative for three reasons: (1) it throws important light on the whole schizophrenic process and on the phenomenon of will as a

human function; (2) it cannot be excluded that, although rare today, catatonic patients may become common again in a not too distant future; (3) although rare, catatonic syndromes occur, and the psychiatrist must recognize them and understand them in the light of the knowledge that is available. A comparative developmental approach will be pursued here.

As we have already mentioned in previous chapters, the symptomatology of catatonia consists not of motor disorders but of will disorders. The patient cannot move, not because he is paralyzed, but because he cannot *will* to move. If an action would merely be a motion, the patient would be able to move freely, but human action is connected with meaning and choice.

Just as symbolism includes an elaborate transformation of what the posterior human brain (temporal, occipital, and parietal lobes) receives from the external world, willing and acting include the elaborate transformation of motor impulses, which take place in the anterior brain (frontal lobes).

Although steps four, five, and six occur in a fraction of a second in

most initial actions, they require complicated mechanisms and various possibilities. The first clear-cut manifestation of willed action is the inhibition of the reflex response. The toilet-trained baby is a clear example of this inhibition. Because of rectal distention, he has the impulse to defecate, but he learns to inhibit the response and to control his sphincters by using cortical mechanisms. The child has the neurological capacity to resist defecation, but he must not want to defecate. If the child chooses not to defecate, although it would be pleasant to do so, it is because he wants to please his mother. Thus, even in the first volitional acts, which imply choices, a new dimension enters: the interpersonal (the you). From a philosophical point of view it seems almost a contradiction in terms: the first acts of volition are acts of obedience, or of submission to the will of others. Choice, this new portentous tool that emerges in phylogenesis with the human race, in the early ontogenetic stages requires support from others before it can be exercised independently. At the same time there is an equally important change in the mechanism of motivation: no longer is motivation involved only with pleasing the self, but also with pleasing others, or at best with pleasing the self through pleasing others.

Whereas infrahuman animals *react* to events, men *act*—that is,

they have a choice as to what to do, or at least they act in the belief that they have a choice as to what to do. One of the first facts of life that primitive men become aware of is their ability to will. Men understood this fact long before they grasped the concept of physical causality, that is, the concept that a given physical event is the cause of another event. As a matter of fact, as has been mentioned in Chapter 16, in primitive societies every event is considered to be caused by the will of men or anthropomorphized beings (gods, animals, rivers, and so on). We have also seen how the person who caused the event was in primitive or ancient societies considered to be responsible for the event. Responsibility and causality were interconnected. If an event was harmful (and in a primitive society that can hardly protect itself from nature, many events are bound to be harmful), the person deemed responsible for the event was considered guilty. The concept of *guilt* and *cause* are confused in many primitive languages. Even in early Greek, the word *aitia* (from which is derived the English word *etiology)* means both guilt and cause. For the primitive, to do is to be potentially guilty, because, after all, you could not know the event that will follow what you are doing. The event might even have an effect on the whole tribe; its repercussions might be enormous, like an epidemic

or drought. Kelsen (1943) has well illustrated the relation between *to do* and *to be guilty.*

How do primitive men act in order to diminish their feeling of guilt? They refrain from acting freely; they perform only those acts that are accepted by the tribe. For any desired effect, the tribe teaches the individual what act to perform. Ritualism and magic thus originate. The life of primitive man is not as free as many philosophers and romantic writers believe. It is completely regulated by an enormous number of norms and restrictions. The individual has to follow the ritual for practically everything he does. By performing the act according to ritual, primitive man removes the anxiety that arises from the expectation of possible evil effects. The ritual ensures that the effect will be good.

Now, if we translate the foregoing into psychiatric terminology, we may state that an extreme state of anxiety is alleviated by the adoption of an enormous system of compulsions. What would happen if the primitive would not follow the ritual? He would be overwhelmed by tremendous anxiety, not only because he is afraid of being punished by the tribe, but also because he feels guilty or responsible for his free

acts. He may seek punishment or remain anxious. If the anxiety is intolerable and as intense as panic, he may eliminate action entirely. Actually that happens very seldom; the man living in a primitive culture faithfully follows the ritual.

From a certain point of view, the history of humanity, subsequent to the primitive period, can be seen, in spite of many detours and regressions, as a gradual movement toward freedom, that is, toward less reliance on the support of the group and toward individual will. This act of liberation from the influence or suggestion of others has its ontogenetic representation in the negativistic stage of children, who, for a certain period of early childhood, refuse to do what they are told to do. By disobeying, they practice their newly acquired ability to will; but they do so by resorting to a primitive method of willing—namely, by resisting.

A comparative developmental approach thus discloses that the unfolding of volition, which in its mature form consists of six steps, goes through the following developmental stages:

1. Negative volition, consisting of the capacity and conative efforts to resist reflex responses or other automatic

responses.

2. Volition with compliance to mother, or tribe, or ritual, or volition accompanied by anxiety and/or guilt.

3. Volition by resisting compliance, anxiety, and/or guilt.

4. Independent positive volition. This fourth stage will permit the unfolding of the six steps of mature volition.

This is, of course, a simplified scheme. In normal human beings, all possible types are found, but in pathological conditions we find a preponderance of immature types and partial or total loss of others. For instance, in neurotic persons we find excessive compliance to others; in obsessive-compulsives it is compliance to ritual. In catatonic patients we find the most regressive forms.

V
Volition in Catatonics

The dynamic studies reported in Chapter 10 indicate that people apt to become catatonic are those who in their early childhood were prevented from developing confidence in their own actions and reliance on their capacity to will. The parents or parent-substitutes

predisposed these patients either not to will or to follow parental decisions. When the patients later had to make their own choices, they found themselves unable to act; if they acted, they were criticized and made to feel guilty. Thus in catatonia, the typical schizophrenic childhood struggle with the significant adults is connected particularly with the patient's actions and choices. The fear of action becomes panic. The catatonic state is a way to remove action in order to remove the panic connected with the willed action. Sometimes this panic is generalized. When it is extended to every action, the patient may lapse into a state of complete immobility (stupor). Let us reconsider the cases of the patients reported in Chapter 10. When Richard was in a state of extreme anxiety and in the process of developing a catatonic attack, he presented the following strange phenomena. More and more he realized that it was difficult for him to act. He did not know what to do. He did not know where to look, where to turn. Any motion that he was inclined to make appeared to him as an insurmountable problem because he did not know whether he should make it or not. This problem presented itself when any act was to be performed; it was an exasperating, horrible experience. The overwhelming fear of doing the wrong thing, which would either hurt or disappoint him, possessed

him to an increasing degree. Therefore he preferred not to eat, not to dress, not to wash himself. He preferred to be motionless, almost paralyzed, to lie in bed or on a chair for a long time. However, before he developed the symptoms of immobility, when he realized that it was becoming increasingly difficult for him to do things and had the feeling that he was lost, or was losing himself, he tried desperately to hold on to something. That something was, to use his own word, "magic." For instance, when he was walking and would see a red light, that was interpreted by him as a sign that he should not go ahead; God was guiding him and was telling him to stop. If he saw an arrow, he would go in the direction of the arrow. He felt that he *must* go in that direction. If he discovered no signs, a terrific hesitation tortured him. When he was motionless, he had to "interpret" everything. Every occurrence seemed to have a special reference to him and was an indication of whether he should do the thing he wished to do or not. When he was asked questions, he tried to answer, but an accidental noise or other occurrence was interpreted by him as a possible sign or order for him not to respond. The number of words the question consisted of was interpreted as a possible sign not to answer. Even before he had become so sick, he had tried to find signs for guidance.

One day he saw a girl working in a hospital, an indication to him that he should work in that hospital. As the anxiety increased, his reliance on these signs did not help much, and he gradually sank into a complete catatonic stupor.

In this case I have related these experiences almost verbatim, as given by the patient. Very few patients are able to recollect the experiences of precatatonic panic as well as this patient did. I was very fortunate indeed to be able to recapture them from him. They are dramatic and frightful experiences of tremendous emotional intensity and often completely forgotten by the patient. At times, the patient who senses that he is sinking intc stupor because he is afraid to act tries to prevent this by becoming overactive and submerging himself in a manic-like sequence of aimless acts. This is the so-called catatonic excitement that precedes or follows the catatonic stupor. During this period of excitement the patient acts in the opposite way, that is, as if he were not concerned at all with responsibility or as if he would defy previous concepts of responsibility. He may become homicidal, suicidal, and destructive. Indeed, the catatonic excitement is one of the most dangerous psychiatric occurrences, more dangerous by far then the manic excitement.

Now, let us reexamine the case of Richard in view of our knowledge of the mechanism of volition accompanied by guilt. We have seen that because of the traumatic environment of his early life, whenever Richard was in the act of doing something, he would be possessed by anxiety. Mother was always there, either in her physical reality or as an incorporated image, to tell him that he was doing the wrong thing. When the difficulties in living, which were described in Chapter 10, further increased his anxiety, the problem of acting became even more difficult. Action automatically produced either guilt or at least further anxiety. In other words, the patient was in the same predicament as was primitive man, when he was first confronted with this new and portentous weapon, the choice of action. Like the primitive, he tried to protect himself by resorting to neurotic compromises, compulsions, and obsessions, which correspond to ritual and magic.

If the prepsychotic patient knows what to do, if a sign is given to him, he will not feel guilty or anxious. The future will be controlled, he feels, the effect may be foreseen, the result will be good. Often, however, this compromise or defense is not sufficient, either because the anxiety is too overpowering or because the patient is not able to

find enough signs, that is, is not able to fabricate compulsions quickly enough. He is actually in a much worse situation than the primitive. The tribe protects the primitive by giving him all the signs he needs (magic and ritual), but the patient has to fabricate all of them by himself at an increasing speed, and the more acute the spell of anxiety is, the more difficult it is for him to do so. He has only one other resort, the last, with which to escape anxiety: not to act. He will not act and will fall into catatonic stupor.

This sequence of events also explains why many catatonic attacks occur acutely or semiacutely. If the anxiety does not increase in an acute manner, there is the possibility of building a compulsive defense, which may prevent the psychotic breakdown. But, before interpreting other psychotic symptoms and the relations between catatonia and obsessive-compulsive psychoneurosis, it may be useful to reexamine briefly the case of Sally.

As in the case of Richard, Sally grew up in an atmosphere of over burdensome parental interference. Her fear of doing the wrong thing was always present. She either did what her mother wanted or had to face anxiety. However, after her marriage, when the anxiety increased

to a tremendous degree, the fear became uncontrollable. We have seen how, at other times in her life, she resorted to compulsive defenses. After her marriage, with the precipitation of events, she sank into a catatonic stupor. Like Richard, she was able to describe what happened. She was afraid to make any movement. Any movement she made might be wrong. For that reason, she could not dress herself, get up from bed, eat, and so forth. If she were dressed by others, and if she were spoon fed, the responsibility would rest on others. Even talking was an action, and she wanted to avoid it as much as possible. This catatonic condition lasted for a while, but later, when she was less insecure, she was able to transform the catatonic symptoms into compulsive ones. If she acted in a special way, that is, by examining every movement and seeing that pieces of herself were not falling off, she might be allowed to act. She might do a few things, but at the expense of tremendous ritual. Each small trivial act had to be made licit by the application of the ritual. This was so cumbersome, however, that she often preferred absolute immobility to the action. That is why, during the first few months of treatment, the patient alternated between compulsive activities and catatonic postures.

From both these cases one sees that there is a major difference

between the primitive and the patient. Whereas the primitive has the support of authority (the tribe) and therefore may indulge in the ritual with a certain facility, the patient does not have such support. In the case of the patient, the authority (parents) is generally the one that predisposes the patient to revert to the stage of introjected guilt. This explains why obsessional neuroses are absent in primitive societies (Carothers, 1947, 1951). The culture itself is obsessive-compulsive. "It is only when the individual stands alone and must develop his own ethical code that this neurosis can develop." In the ten years spent in Kenya as a psychiatrist, Carothers never saw a single case of obsessional neurosis. He did see, however, thirty-two cases of catatonia. We do not know the dynamics of those cases. One may venture to guess that the culture did not protect them any longer with the ritual and that they protected themselves with a catatonic armor, just as people in our culture may do.

What has been mentioned explains other characteristics encountered in cases of catatonic schizophrenia. In order to avoid anxiety and guilt, the patient cannot will any act, but he may passively follow orders given by others, because the responsibility will not be his. Thus, if somebody tells a catatonic, "Show your tongue, I want to

prick it with a pin," the catatonic may show his tongue in a very submissive way. This blind acceptance is due to the complete substitution of someone else's will for his own. Waxy flexibility, or the retention of uncomfortable body positions in which the patient is passively put, can also be explained in this way. When the patient is put in a given position, the will or responsibility of someone else is involved. If he wants to change positions, he has to will the change, and that will engender anxiety or guilt.

Quite often the reverse seems to occur. The patient will resist the order or will do the opposite. This is the phenomenon of negativism, which has baffled many investigators. As we have learned from Richard and Sally, the resistance is due to the fact that often the patient feels the responsibility for an act, even when it is ordered by somebody else. It is true that he is ordered to act, but he himself must will to move. Therefore he resists. Bleuler (1912, 1950) thought that one of the reasons for external negativism has to be found in the autistic withdrawal of the patient into his fantasies, which makes every influence acting from without a comparatively intolerable interruption. According to this interpretation, the patient wants to be left alone or wants to be unaware of all stimuli emanating from the

outside world because they are unpleasant. This undoubtedly is the impression the observer receives; but if we try to decatatonize early catatonics with injections of sodium amytal, we may convince ourselves that in many cases this interruption of stimuli from the external world does not take place, even if the patient wishes so. The patient who comes out of the stupor is able to give an accurate account of the events that occurred or of the words which were spoken in his presence when he could not move or talk. This indicates that, in spite of appearances, the attention toward the external world is preserved and that only actions are blocked because only actions are willed. The phenomenon of negativism will be considered again further on in this section.

Formerly, psychiatrists used to say the most disturbing things about diagnoses and prognoses in the presence of catatonic patients, thinking that they could not pay any attention to what was said (Arieti, 1973). It is true, however, that in several instances, the attention of the patient is withdrawn from his surroundings because the patient cannot *will* to pay attention. In numerous other cases the catatonic pays attention to his surroundings, but his interpretation of the external world is unrealistic and paleologic.This is particularly true in

cases that present mixtures of catatonic and hebephrenic features. On the other hand, in the typical catatonic the perception of the external world is well preserved. Psychiatrists who have worked in institutions for many years know of several examples proving this to be so. We know that in the case of fire in hospitals, catatonics suddenly move, start to run, or even help others. It is equally true that some others preserve their catatonic state and perish in the flames. In many psychiatric hospitals, we hear anecdotes about unpredictable and very appropriate behavior and actions of catatonic patients. Many years ago I heard this small but significant episode; its authenticity has been guaranteed to me by a reputable psychiatrist. In a state hospital, resident psychiatrists, instead of attending to their duties, were playing cards in the vicinity of a patient who had been in a complete mute catatonic stupor for many years. From a window the patient saw the director of the hospital coming toward that ward. He was reputed to be a strict man, and the positions of the doctors would have been jeopardized had he caught them playing cards. All of a sudden, the patient shouted, “The director is coming.” The doctors immediately stopped their game. From that moment on the patient resumed his catatonic silence, which he kept for many more years, possibly until

his death. I believe that this episode might have really happened. That the patient was able to see the director and visualize the disastrous consequences for the doctors is not surprising to me. I have been convinced that the perception of the external environment is normal in many catatonics; at times it is even sharpened because, being unable to respond, they concentrate on perceiving, a process of which they remain fully capable. Withdrawal, as a protection against unpleasant influences of the environment, is more typical of the hebephrenic. The catatonic withdrawal is a retreat from action and from will, rather than from the environment, but because the environment forces him to will, the catatonic may withdraw from it also. The above-mentioned episode is remarkable, however, because the patient, under strong and unusual emotional stress, became able to talk.

The inability to act also covers any manifestation of emotion, so that quite often the observer gets the impression that the patient is apathetic. Occasionally, however, a little movement or sign discloses the emotional involvement that is present in some cases at least. I remember the case of a young man who had been hospitalized for many years in Pilgrim State Hospital. He was in a state of complete

immobility, confined to bed, was wetting and soiling, and had to be tube fed. Every time I was feeding him tears would drop from his eyes. This sign of his emotional life was enough to demonstrate that behind this armor of immobility he could still feel and suffer. It is possible, however, that, especially in very pronounced cases, the patient is never aware of the fact that it is the fear of movement that immobilizes him. He may sink into the stupor and remain in it without knowing the psychological processes that have determined it. He may have learned to react to stimuli with inactivity and to repeat the mechanism automatically. As the schizophrenic process proceeds, the patient bypasses the stage at which his will has to be exercised and regresses to a lower, apparently more active stage, where he merely reacts in reflex or short-circuited ways that do not involve his will centers. Echolalia may be explained in terms of such a regression.

In less advanced cases, one clearly sees the involvement of the will. For instance, as an answer to an order, the patient starts a movement, but then stops, as if a counter-order had prevented him from completing the movement. Having decided to obey, he is then afraid to will the act involved, and so he stops. At times there is a series of alternated opposite movements. For example, if one asks the

patient to reach for an object, he starts the movement and then stops, many times in succession, giving the impression of performing a cogwheel movement, similar to that observed in postencephalitic patients affected by muscular rigidity. Incidentally, this resemblance to postencephalitic patients is superficial; the cogwheel phenomenon in the catatonic has nothing to do with muscular tone but has to do with an alternation of volition. For instance, a patient who reaches for an object may become afraid of willing that act in the middle of the movement; he then decides not to perform the act and arrests his arm. But to decide not to perform the act is also a volition. The patient becomes afraid of it and starts to make the movement again. To do this is also a volition, and he is again afraid. This series of attempted escapes from volition may go on for a long time; it is a horrifying experience, which only a few patients, like Richard, are able to remember and describe. In a personal communication, Prof. Christian Muller (1962), of Lausanne, Switzerland, told me that one of his patients had been condemned by the Nazis to be executed but was saved just before going to the executing squad. Subsequently this patient underwent a catatonic episode. Later the patient was able to tell Prof. Miiller that the experiences he underwent when he was in a

catatonic state were by far more painful and terrifying than that of expecting to be executed by the Nazis. Ferenczi (1950) wrote that catatonia is really a cataclonia, a high-frequency alternation of activating and inhibitory impulses.

A mixture of obedience and disobedience often appears in the actions of catatonics. For instance, if we ask a patient to close his eyes, he may close them, and at the same time will turn his face in the opposite direction. More than once Bleuler has compared this resisting negativistic attitude of the catatonic to a sexual attitude, especially that of the woman who resists sexual overtures. He also feels that often the negativism of the catatonic has a sexual connotation. I am not convinced that this is true. It seems to me that a somewhat similar motivation causes the resistance in the catatonic and in the woman—namely, fear of guilt versus a desire to act. In our culture sexual indulgence, especially at the time of Bleuler, is often connected with guilt. The woman feels she must resist and not act, because if she does act, she will feel guilty. At the same time, she wishes to yield in order to gratify her sexual needs; therefore, there is an alternation of acceptance and resistance. At times, she puts on an act to convince her partner and herself that she cannot be considered responsible,

inasmuch as she made some resistance. Many women enjoy fantasies of being raped. If they are raped, they have sexual gratification without the feeling of responsibility.

In our society unconscious feelings of guilt often induce acceptable ways of avoiding action. The hermit, the anchorite, and the person who goes into a convent choose for themselves a life as deprived of action as possible. Some, though by no means all, of these persons want to avoid the guilt that would accompany their ordinary activities, especially the joyful ones. Often they remove their unconscious guilt not only by escaping from actions, but also by indulging in ritual, that is, in sanctioned or sanctified actions. They do this, for instance, when they join religious orders. These people act as if they were condemning themselves to a metaphorical and partial catatonia or to a social obsessive-compulsive psychoneurosis. Society treats those who have been found guilty similarly. By putting the culprits in jail, it limits their actions. An artificial catatonia is imposed on them. We remember that Richard, when he was over the catatonic attack, still wanted to escape from actions of life by committing himself again to the state hospital. The catatonic's fear of action at times becomes personified, projected externally, and perceptualized in

the form of voices that tell the patient “no” when he is about to perform an act.

At times the patient does not limit himself to avoidance of what he is supposed to do but resists actively; at times he even does the opposite. This active or willed disobedience is sometimes present in the normal person and in the negativistic child, as if the unwillingness to obey or to follow the order would automatically engender an opposite action of resistance. We have seen that in the development of volition, resistance enters at least twice: first, as a resistance to automatic or reflex response; second, as a resistance to the influence of mother, ritual, or group. Among the various disorders of volition found in catatonia there is apparently regression to negative (or resisting) volition.

In Chapter 10 we discussed a third important case—John. We have seen how in this patient any action became a moral issue. However, there was an additional feature in John’s case, which made it unique: analogic action became a substitute for the intended action. For instance, when he was undressing, he wanted to drop a shoe, and instead he dropped a big log. When he wanted to put something in a

drawer, he threw a stone away. Thus, at times the action was similar or analogic to the one intended; at other times dissimilar or opposite.

The disorder seems to have involved one of the first three steps in the development of volition. Perhaps step three is involved: the planning of the chosen alternative. In John's case the engram for the chosen action was at times substituted by one that was similar. In other words, two actions became psychologically equivalent because they were similar or had something in common. The similarity between these regressive conative phenomena and paleologic cognition is impressive. It seems to indicate that the same basic formal psychopathological mechanisms apply to every area of the psyche. Unfortunately, no case similar to John's has been described in the literature, and any interpretation must remain purely hypothetical. Some neurological studies of motor integration by Denny-Brown (1960) may be helpful. The analogic movement may be viewed as a "release" of "dedifferentiation or loss of restriction to specific attributes of adequate stimulus." Very important in the case of John was also the fact that some actions escaped the catatonic barrier: those needed for carrying out the suicidal attempt.

As a matter of fact, in practically every catatonic some actions escape the impairment of the will: for instance, those necessary to put one's own body in uncomfortable positions that obviously have acquired for the patient a symbolic meaning (see Figure 1).

Some relations between obsessive-compulsive psychoneuroses and catatonia must be further discussed.

It is not to be assumed that every obsessive-compulsive is potentially a catatonic. Some obsessive-compulsive symptoms are present in practically every human being as defenses against anxiety. There are infinite quantitative gradations from the normal to the catatonic. Many cases are definitely arrested at one of these numerous stages. Sudden and intense exacerbations occur in the person who is to become catatonic. If the process is very acute, a catatonic stupor may ensue without apparently having been preceded by a compulsive stage. There are undoubtedly many similarities between the obsessive-compulsive personality and that of the catatonic. The difficulty in making decisions, the occasional obstinacy in maintaining one's opinion, the going back and forth between two alternate dispositions or points of view, such as aggressiveness and

submissiveness, pleasing oneself or somebody else, dirt and cleanliness, order and disorder, the feeling of command coming from within, as contrasted with commands from outside, and so on, are all obsessive-compulsive symptoms reminiscent of catatonic negativism.

Fear of uncertainty (of the effect) is also a characteristic common to both catatonics and compulsives. Even a remote possibility that the dreaded event may occur arouses anxiety, as if that possibility might immediately materialize. For instance, the patient cannot feel *mathematically sure* that he will not become infected if he does not wash his hands three times before eating. Many obsessive-compulsives actually become mathematicians in their search for that absolute certainty that allegedly is the only thing that can confer security. As was mentioned before, other obsessives become very religious and submerge themselves in ritual. The greater the fervor or the anxiety, the more extensive is the inclusion of ordinary acts in the ritual. Some neurotics find a guide for their behavior in the study of numbers or astrology, as an escape from uncertainty. Many obsessive-compulsive patients would like advice from their therapists on what to do. They want to know what they are *supposed* to do in every circumstance. They want to follow a schedule, a routine. They dread

spontaneity, which means, as the etymology of the word implies, acting according to one's will. Some of them feel guilty if they do what they wish to do; therefore, they never do what they wish, and they comply with authority. Other patients spend their lives going through the formality of situations without becoming at all involved in them. They become extremely conventional, or automatic, in order to escape the anxiety and the guilt of spontaneous actions. The catatonic is much more afraid than the obsessive, because he is deprived of the ritual. The uncertainty of what may happen if he puts into effect the wrong volition reduces him to immobility.

Bleuler (1950) and other authors have found obsessive-compulsive behavior in patients who later became catatonic. It is equally true, however, that in many obsessive-compulsives who later become schizophrenic, the psychosis assumes a predominantly paranoid or hebephrenic symptomatology. The projected type of causality and other paleologic mechanisms play more prominent roles in their symptomatology.

Although we have emphasized the role of the fear of parental disapproval in the psychodynamics of the future catatonic, we must

stress that such fear is not the same as the fear of action of the person who has already become a catatonic. The fear of action of the catatonic is much more intense, having acquired an archaic form; later it is disconnected from the fear of the authority, and it becomes fear of the action itself. Some patients develop for a certain period of time a mixed feeling of fear and power, which we may call a feeling of *negative omnipotence.* They feel that if they move, the whole world will collapse or all mankind will perish. Together with a feeling of cosmic power they have a feeling of cosmic responsibility. Finally, the fear of the action itself becomes unconscious and is followed by an automatic state in which the patient has entirely given up the function to will and performs only automatic or reflex acts. Thus, one can conclude that the dynamic and the formal mechanisms very clearly are connected in catatonia.

Since Kahlbaum differentiated catatonia (1863), there have been numerous attempts to explain catatonia as manifestation of a primary physical disease of the brain. Kahlbaum himself thought that catatonia was due to edema of the brain (1874). Some authors have tried to explain the syndrome as a disease of the cortical motor centers, others as a disease of the basal ganglia. The fact that postencephalitic

patients, in their attitude, posture, and lack of action, resemble catatonics very much has reinforced the belief that catatonia is primarily an organic disease. In 1921 DeJong began a series of investigations aimed at comparing the effects of bulbocapnine on animals with the symptomatology of human catatonia (1922). DeJong and Baruk (1930a, *b*) as well as many other authors, found that when bulbocapnine is administered to animals, a clinical picture follows that is characterized by loss of motor initiative, maintenance of passively impressed postures, maintenance of posture against gravity, resistance to passive movements, and variations of muscular forms.

I am not going to attempt a complete refutation of these organic theories of catatonia here. As far as the early theories are concerned, they have been confuted very well by Bleuler (1950). As to bulbocapnine, Ferraro and Barrera (1932), in a monograph on the subject, describe their experiments with cats and monkeys, showing the superficiality of the resemblance between catatonia and bulbocapnine intoxication. They found that the manifestations of bulbocapnine occur even in animals deprived of the whole cerebral cortex and have no psychic components whatsoever.

Notes

[1] The neurophysiology of the inhibitory mechanisms that permit choice has been reviewed by Diamond, Balvin, and Diamond (1963).

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