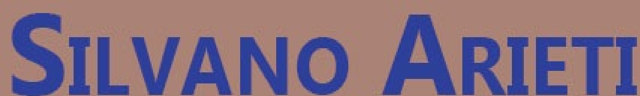
American Handbook of Psychiatry

SCHIZOPHRENIA

Psychodynamic Mechanisms and Psychostructural Forms



SCHIZOPHRENIA:

THE PSYCHODYNAMIC MECHANISMS AND THE PSYCHOSTRUCTURAL FORMS

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SCHIZOPHRENIA: THE PSYCHODYNAMIC MECHANISMS AND THE PSYCHOSTRUCTURAL FORMS

Silvano Arieti

For the psychodynamically oriented psychiatrist the onset of the manifest symptomatology of schizophrenia is a beginning as well as an end—the end of a special nonpsychotic personal history which in its adverse characteristics started much earlier in life, in some cases at the time of birth.

A psychodynamic approach retraces in reverse this long history and correlates it with the present psychosis in order to understand its development, meanings, effects, and potentialities.

Inherent in the manifest symptomatology of schizophrenia (described in Chapter 23) are also unusual psychological structures and forms which must be studied beyond their immediate clinical appearance.

The first part of this chapter will deal with the psychodynamics, the second with the formal psychological structure of the disorder. The knowledge of these two aspects of schizophrenia is of the greatest help to the psychotherapist (see Chapter 27).

Psychodynamics of Schizophrenia

We have already mentioned that the road leading to adult schizophrenia has its beginning in the remote past of the patient, in some cases at the time of his birth or shortly afterwards. Some authors (for instance, Fodor) push the beginning further back, to the intrauterine life. Others feel that the parental attitudes which are so important in determining the conflicts of the patient have their roots in sociological, historical, political, and geographical conditions. It is generally agreed that the psychodynamic studies should include only the psychological life experiences of the patient and the interaction with his close interpersonal environment, leaving the connections with the larger environment to epidemiological, sociological, or community psychiatry studies. Such division is purely conventional and arbitrary, because, as I expressed elsewhere, the sociological factors affect the patient psychodynamically by direct, or, most of the time, indirect routes. Other experiences, such as physical illnesses, unless studied in reference to their psychological impact, cannot be included among the psychodynamic factors.

Although these psychodynamic aspects have so far revealed nothing that can be considered absolutely specific of the life of schizophrenics, certain constellations of circumstances, and their consequences, cluster more frequently in the life of these patients than in that of the average individual.

A psychodynamic understanding of any human being and, in our

particular case, of a person who will eventually suffer from schizophrenia, requires that we take into consideration (1) the world which the child meets; (2) the child's way of experiencing that world, especially in its interpersonal aspects; (3) the way the child internalizes that world; (4) the ways by which the sequence of later experiences weaken, reinforce, distort, neutralize, expand, or restrict the effects of the early experiences.

The world the child meets consists overwhelmingly of his family, and it is this family's world which we shall study in the following section. In this author's frame of reference, the life pattern of the schizophrenic is divided into four periods, of which only the last one can be considered psychotic.[1] We shall examine them separately.

The Family of the Schizophrenic

The reader must be aware that all the studies of the family of schizophrenics were made after the patient became obviously sick and in most cases had grown to be an adult. The assumption is made that the study of how the family is at the time of the illness and the eliciting of past history give an adequate picture of the family environment during the time preceding the psychosis. Moreover, often the appraisal of the family was in many studies strongly influenced by the personal account of it given by the patient himself. Nevertheless, there is no doubt that one of the first vivid impressions that we

get in dealing with patients and their relatives is that the family of the patient is not a happy one, or at least was not so in the formative years of the patient. The unhappiness, although aggravated at times by realistic situations such as poverty and physical illness, was as a rule determined by psychological factors, predominantly by the unhappy marriage of the parents. The marriage was unhappy not only because of the character incompatibility and personality difficulties of the parents but also because such difficulties, instead of being compensated for or countered by less destructive defenses, were enormously aggravated by the process of living together. This atmosphere of unhappiness and tension, although all-pervading and pronounced, in many cases is not apparent to the casual observer, as an attempt is made by all concerned to conceal it not only from the external world but also from themselves. At times, it is almost totally repressed and replaced by psychological insensitivity.

Mostly because of the pioneer work of Ackerman, the family has been studied as a unity, or a constellation, having an impact on the future patient, which is greater than the sum of the effects of the individual members. For instance, it is not just the attitude of the mother toward the child that has to be taken

into consideration, but also how the attitude of the mother affects the whole family, and how the result of this attitude toward the whole family

indirectly affects the child.

Many authors have described special family constellations in schizophrenics. In the first edition of *Interpretation of Schizophrenia*, I described one which I have encountered frequently. A domineering, nagging, and hostile mother, who gives the child no chance to assert himself, is married to a dependent, weak man, too weak to help the child. The father does not dare to protect the child because of fear of losing his wife's sexual favors, or simply because he is not able to oppose her strong personality. By default more than by his direct doing he becomes as crippling to the child as mother is.

Occurring less frequently in the United States, but still frequently enough, is the opposite combination: a tyrannical or extremely narcissistic father is married to a weak mother who tries to solve her problems by unconditionally accepting her husband's rules. These rules do not allow her to give enough love to the child and to be considerate enough of his affective requirements. In these families, the weak parent, whether mother or father, becomes antagonistic and hostile toward at least one child, because she or he (the parent) displaces her or his anger from the spouse, who is too strong to be a suitable target, to the child. In 1957, Lidz et al. described the same type of family constellation, to which they gave the name of "marital skew."

Lidz and his associates found that the role of each spouse in the family cannot be well established and that no attempt is made by them to complement or to help each other. There is no possibility of getting together, of reciprocal understanding and cooperation, no mutual trust, no confidence, but rivalry, undercutting of worth, threat of separation, and enrollment of the children's support against the other. Each partner is disillusioned in the other: the husband sees the wife as a defiant and disregarding person who also fails as a mother. The wife is disappointed because she does not find in her husband the father figure she expected. In this background, the family is often split into two factions by the overt *marital schism* of the parents. Generally, the children belong to one side of the schism or to the other and have to contend with problems of guilt because of their divided loyalty.

I have found other frequent constellations in the family of schizophrenics. One of them consists of a family in which each member is intensely involved with the others. Each member experiences not just a feeling of competition with the others, but an extreme sense of participation, reactivity, and sensitivity to the actions of the others, often interpreted in a negative way. In these cases, the members of the family want to help each other, but because of their neurotic entanglement, anxiety, distrust, and misinterpretation, they end up by hurting one another.

I have observed also a different type of family, which is almost the

opposite, or perhaps a reaction formation of the one described. The family can be compared to an archipelago. Each member lives in emotional isolation and communicates very little with the others in spite of physical proximity.

In evaluating the families of schizophrenics in a general way, Lidz and Fleck wrote of the possibilities of something being fundamentally wrong with the capacity of the "parents to establish families capable of providing the integrative development of their offspring." They spoke more specifically of three categories of deficiency: (1) parental nurturance; (2) the failure of the family as a social institution; (3) defect in transmitting the communicative and other basic instrumental techniques of the culture. Lidz and collaborators feel also that the irrationality of the parents is transmitted directly to the patient.

An important problem that has interested some authors is the persistence of abnormal interaction patterns. An outsider could at first be inclined to believe that if a pattern of living leading to undesirable results has been formed in a family, the pattern would be corrected and equilibrium restored. The opposite, however, occurs in the family of schizophrenics. The same unhealthy "homeostasis" at times lasts decades.

Don Jackson made the pertinent observation that families of schizophrenics are not disturbed in the sense of being disorganized. On the

contrary, the family of the schizophrenic is highly more organized than the normal family, in the sense that "such family utilizes relatively few of the behavioral possibilities available to it." According to Jackson, the bizarre, maladaptive behavior of the family is indication of the restriction of the behavioral repertory, which does not allow variations, or other roles to be followed. Some authors see the family of the schizophrenic as conferring on the patient the role of scapegoat or as a responsible ally of one parent. This role would maintain the pathogenetic interaction patterns of the whole family. Searles and Wolman believe that the child maintains the morbid role because he loves mother and wants to give to her. He believes that without him she would be in a disastrous situation.

Even before the family of the patient was studied as a unity, the various members, and especially the parents, were studied individually, although, as already mentioned, often by relying greatly on how the patient experienced them. Some authors have followed Fromm-Reichmann in referring to the mother as "schizophrenogenic." They have described her as overprotective, hostile, overtly or subtly rejecting, overanxious, cold, distant, etc. Because of these characteristics, she was unable to give herself to the child and was unfit for motherhood. Rosen referred to her perverse sense of motherhood. In the writings of a large number of authors, she was described as a malevolent creature, and portrayed in an intensely negative, judgmental way (Sullivan, Rosen, Hill, Limentani, Bateson et al., Lu, Lidz and Fleck).

The father of the schizophrenic has also been studied by Lidz and his associates. Whereas previous authors had emphasized the weakness, aloofness, and ineffectiveness of the father in the paternal role, Lidz and associates described him as insecure in his masculinity, in need of great admiration for the sake of bolstering his shaky self-esteem, occasionally paranoid or given to paranoid-like irrational behavior.

I shall present my own conclusions, based on over thirty years of personal clinical experience and on the study of the literature.

1. Practically all the authors, including this writer, agree that serious tension, anxiety, hostility, or detachment and turbulent conflicts existed in the family of the patient, especially during his formative years. However, these findings could never be submitted to accurate statistical analysis. Some authors have found family disturbances less frequently among schizophrenics than in control studies.

2. It is common knowledge that family disturbances, similar to those reported by most of the quoted authors, exist also in families in which there has not been a single case of schizophrenia in the two or three generations which could be investigated.

3. It is not possible to prove that adult schizophrenics, studied in family research, were potentially normal children whose lives were warped only by environmental circumstances.

4. The only point of agreement of all the authors is that in every case

of schizophrenia studied psychodynamically, serious family disturbance was found. Unless we think that biases have grossly distorted the judgment of the investigators, we must believe that serious disturbance existed.

5. This conclusion indicates that although serious family disturbance is not sufficient to explain schizophrenia etiologically, it is presumably a necessary condition. To have differentiated a necessary, though not sufficient causative factor, is important enough to make this factor the object of full consideration.

6. The concept of the so-called schizophrenogenic mother needs revision. We have seen that the mother of the schizophrenic has been described as a malevolent creature, deprived of maternal feeling or having a perverse sense of motherhood. She has been called a monstrous human being. At times, it is indeed difficult not to make these negative appraisals because some of these mothers, who to us seem typical, fit that image. Quite often, however, an unwarranted generalization is made. The mother of the patient is not a monster or an evil-doer, but a person who has been overcome by the difficulties of living. These difficulties have become enormous because of her unhappy marriage, but most of all because of her neurosis and the neurotic defenses that she built up in interacting with her children. Moreover, we must take into account the fact that the studies of these mothers were made at a time which preceded by a decade or two the "women's liberation" era. It was a period during which the woman had to contend fully but most of the time

> tacitly with her newly emerged need to assert equality. She could not accept submission any longer, and yet she strove to fulfill her traditional role. These are not just social changes; they are factors that enter into the intimacy of family life and complicate the parental roles of both mothers and fathers.

Since the early sixties, I have made some private studies and compiled statistics that differ from what other authors have reported, and from what I myself have described in the first edition of *Interpretation of Schizophrenia*. Although personal biases cannot be excluded and the over-all figures are too small to be definitive, I have reached the tentative conclusion that only 25 percent of the mothers of schizophrenics fit the image of the schizophrenogenic mother. Why then have so many different authors generalized to all cases what is found in a minority of cases?

Of course, there is the possibility that I have not recognized what was not apparent. However, it is hard for me to believe that I have grown insensitive in my psychiatric work or less aware of the intangible and subtle family dynamics. Repeated observations have led me to different tentative conclusions. As we shall see in greater detail in Chapter 27 of this volume, schizophrenics who are at a relatively advanced stage of psychodynamically oriented psychotherapy, often describe their parents, especially the mother, in negative terms. Therapists, including the present writer, have believed what the patients told us. Inasmuch as a considerable percentage of mothers

have proved to be that way, we have considered this percentage as typical and we have made an unwarranted generalization, which includes all the mothers of schizophrenics. The psychotherapists of schizophrenics have made a mistake reminiscent of the one made by Freud when he came to believe that neurotic patients had been assaulted sexually by their parents. Later, Freud realized that what he had believed as true was, in by far the majority of cases, only the product of the fantasy of the patient. The comparison is not exactly similar, because in possibly 25 percent of the cases, the mothers of schizophrenic patients have really been nonmaternal, and we do not know what percentage of mothers of nonschizophrenics has been nonmaternal.

If this conclusion is correct, we must inquire why many patients have transformed the image of the mother or of both parents into one which is much worse than the real one. The answer to this problem will be provided by the intrapsychic study of the patient, especially in his early childhood.

First Period: Early Childhood

A characteristic unique to the human race—prolonged childhood with consequent extended dependency on adults—is the most important factor in the psychodynamics of schizophrenia. What occurs at any subsequent age is also relevant and may bring about the decisive turns of events which trigger

off the psychosis. The childhood situation, however, provides the preparatory factors which have a fundamental role, inasmuch as they narrow the range of choices of life directions, thwart the possibility of compensation, determine basic orientations, and facilitate abnormal sequence of events.

The first period of the psychodynamic pattern leading to schizophrenia extends from birth to approximately the time when the child enters grade school. We shall summarize here some salient aspects of normal development during this period in order to understand the deviations occurring in individuals likely to develop schizophrenia later in life.

The newborn human being needs other members of his own species in order to survive and to grow physically and psychologically. This growth will proceed in accordance with its potentialities if the child, with the help of others, obtains a state of *satisfaction* and a state of *security.* A state of satisfaction of the physical needs, such as food, sleep, rest, warmth, and contact with the body of the mother, is enough for the growth of lower species, and for the growth of the human being in the first months of life. But, in order to continue to grow normally after the first nine-twelve months, the human being needs, in addition to a state of satisfaction, a state of security. Before the others acquire “a significant” or symbolic importance, the life of the child is almost entirely governed by simple psychological mechanisms, like reflexes, conditioned and unconditioned, autonomous functions, non-

symbolic learning, imitation, and empathic processes.

Things are soon taken for granted by the child; they are expected to occur, as they have occurred before. After a certain stimulus, hunger, for instance, a subsequent act—the appearance of the mother's breast—is expected. Later, the child comes to feel that all things in life are due to others or depend on others. It is up to mother to give him the breast, to keep him on her lap, to fondle him. The child learns to see everything in a teleologic way—everything depends on the will or actions of others. But, together with the feeling that everything depends on others, there is also the feeling that people will do these wonderful things. In other words, the child expects these wonderful things to happen; he trusts adults. At first, of course, these feelings of the child are vague, indefinite. Since the child is deprived of the use of abstract words to describe these phenomena, his expression of these feelings remains at a primitive level. We may describe them as diffuse feelings, postural attitudes, physiological preparation for what is expected, nonverbal symbolism, and so forth.

Later, the child also expects approval from others. That is, the child expects the significant adults to expect something of him; the child *trusts* that the adults will *trust* him. In other words, there is a reciprocal trust that things are going to be well, that the child will be capable of growing up to be a healthy and mature man. The child perceives this faith of the mother and

accepts it, just as he used to accept the primitive responses to the usual stimuli. He finally assimilates the trust of the significant adults, and he *trusts* himself. Thus, things will no longer depend exclusively on others, but also on himself.

This feeling of trust in oneself and this favorable expectancy, which at first is limited to the immediate future, becomes extended to the immediate contingencies of life and then expands into a feeling of favorable anticipation as far as a more or less distant future is concerned. A basic optimism, founded on basic trust, is thus originated. Security consists of these feelings. If we consider this feeling of security or basic trust in its more social or interpersonal aspect, we may state that its interpersonal counterpart is what can be called a state of *communion.*

This atmosphere, first of satisfaction, then of security and communion (at least with the mother), facilitates the introjection in the child of the symbolic world of the others. It is this introjection that actually permits the emergence and the growth of the self, especially the introjection of the attitudes, feelings, verbal symbolisms, etc., emanating from the mother.

Using Buber's useful terminology and concepts, we may say that an "I-Thou" relationship exists. Psychologically, this means that without others and trust in them there would be no I, no development of the self.[2]

The development of the self, emerging by the incorporation of the Thou while a state of satisfaction and security exists, permits the child to attain a stable self-image. The self-image consists of (1) body-image, (2) self-identity, and (3) self-esteem. As to the body-image, the child will have a realistic appraisal of himself and will be able to identify with his own sex. As to self-identity, the child will become aware of his role in the family and in society. As to self-esteem, he will trust himself and will have a sense of confidence and optimism.

It is toward the end of the first year of life, generally from the ninth month, that the child starts to build an inner life, or psychic reality, which is a counterpart to the external reality in which he is involved. Internalization occurs first through cognitive mechanisms belonging predominantly to what Freud called the primary process, and later more and more to what Freud called the secondary process.

The child continues to participate in the world through non-symbolic ways, like simple or direct learning derived from perceptions, conditioned reflexes, etc. Now, however, he develops symbolic mechanisms, the most primitive of which constitute primary-process cognition. They are images, endocepts, and paleologic thinking.[3] Except in pathological conditions, these primitive mechanisms are replaced and overpowered by more mature secondary processes. Although examples of primitive mechanisms occur also

in normal adult life, it is difficult to find pure forms of these even in children, if they are normal. By “pure” we mean forms that are not affected by concomitant secondary-process mechanisms.

The image is a memory trace which assumes the form of a representation. It is almost an internal reproduction of a perception which does not require the corresponding external stimulus in order to be evoked. The image is indeed one of the earliest and most important foundations of symbolism, if by symbolism we mean something that stands for something else which is not present. Whereas previous forms of cognition and learning permitted an understanding that was based on what was directly experienced and perceived, from now on cognition will rely also on what is absent and inferred. For instance, the child closes his eyes and visualizes his mother. She may not be present, but her image is with him; it stands for her. The image is obviously based on the memory traces of previous perceptions of the mother. The mother then acquires a psychic reality which is not tied to her physical presence.

Image formation introduces the child into that inner world which I have called “phantasmic.” The image becomes a substitute for the external object; it is a primitive inner object.

The endocept is a mental construct representative of a level

intermediary between the phantasmic and the verbal. It derives from memory traces, images, and motor engrams. Its organization results in a construct that does not tend to reproduce reality, and that remains at a nonrepresentational, preverbal, and pre-action level. It is just a disposition to feel, to act, to think, and is accompanied by a vague awareness and at times undefinable, diffuse emotions.

Paleologic thinking occurs for a short period of time early in childhood, from the age of one to three. It is a way of thinking that seems illogical by adult standards or normal logic, and it is based on a confusion between similarities and identities. A salient part or characteristic which two persons or objects have in common is enough to make them appear identical, or belonging to the same category or class (formation of primary classes). All men are “daddies” because they look like daddy.

Normal maturation controls the inhibition of these primitive forms and enhances the replacement by mature or secondary forms of cognition. That young children have greater difficulty in dealing with objects similar to those already known to them than with objects completely unknown has been recently confirmed by Kagan, which formulated the discrepancy principle. As a result of the infant’s encounters with the environment, he acquires mental representations of events, called schemata. Events that are moderately different from an infant’s schema (or discrepant events) elicit longer spans of

attention than either totally familiar events or totally novel events. For instance, in one experiment the child was shown a two-inch orange cube on six separate occasions. The infant was shown either a smaller orange cube (a discrepant event) or a yellow rippled cylinder (a novel event). Kagan reports that infants between seven and twelve months became excited by the discrepant small cube, whereas they remained calm by the appearance of the novel rippled cylinder. Discrepant objects or events are similar. A tendency exists in children to overcome the problem of how to deal with similar events by reacting to them as if they were identical. Normal maturation controls the inhibition of all these primitive forms of cognition as well as their replacement by mature or secondary forms.

In the families of schizophrenics, maturation and psychological development do not have the normal course that we have described. We find, instead of a state of satisfaction and security, an atmosphere of anxiety. Anxiety occurs in the absence of a state of satisfaction or security, or both. The anxiety due to lack of satisfaction would not alone lead to schizophrenia, because it is based on mechanisms more primitive than those involved in the pathogenesis of this disorder. Some schizophrenics were not deprived of satisfaction during the first year of life, but of security later, for many parents are capable of functioning as such when the child is a baby who has not yet developed a will of his own and is completely dependent. In many other cases, however, the patient was deprived of both his early need for satisfaction and

his later need for security. A state of communion was never reached. Immature cognitive mechanisms persist and mature forms are delayed. As we have already mentioned, similarity is confused with identity. Often, the salient parts of stimuli are perceived and the background is ignored. The difficulty spreads backward from cognition to perception, and part-perception tends to replace whole perception. Generalizations follow primary class formation. For instance, certain characteristics of the mother are generalized to all women. Verbal thinking is underdeveloped. Most cognitive processes are mediated by images, predominantly visual. The child who has been raised in an adverse environment tends to participate as little as possible in the unpleasant external reality. He tends to be by himself, and this aloofness favors an overdevelopment of fantasy life or life images. If a few images have pleasant connotations, they urge the child to search for the corresponding external objects which are gratifying. Thus, pleasant images tend to be substituted by overt behavior and mostly unpleasant images and paleosymbols remain as durable inner objects. The result is that inner life in these children is mainly disagreeable at this level of development. Images become associated with others and spread an unpleasant affective tonality to all inner objects. Parents are experienced as clusters of disagreeable images, later paleologically transformed into terrifying fantasy figures.

To summarize what has been said so far, there is an unbalance in these children between external and internal forces. The child escapes from the

external life, but the inner life in which he takes refuge is not pleasant either.

The cognitive immaturity of the child brings about other difficulties. These difficulties exist also in normal children, but to a minimal degree only. Psychological life in which images prevail predisposes to adualism: that is, to an inability to distinguish inner reality from external reality. Inasmuch as life of images is in these children predominantly unpleasant, the result is a negative appraisal of the world. Another difficulty consists in the uncertain appreciation of causality. The child cannot very well ask himself why certain things occur. At first, he expects things to happen in a sort of naive acausality; but past experiences have predisposed him to a state of ominous expectancy, in contrast to the feeling of basic trust of the normal child. Later, he will be more and more under the impression that whatever occurs is brought about by the will of those unpleasant clusters of images that represent the parents, especially the mother.

Some of these experiences tend later to be transformed into endocepts (or imageless thoughts). All these primary-process mechanisms are slowly substituted by others that are verbal and conceptual.

It is obvious from the foregoing that we are not studying only intrapsychic processes in the child, or only interpersonal processes between the child and the family, but both types and their interconnections.

In the families of schizophrenics, there is at first no emotional detachment. All are involved with each other without helping each other, but the little child cannot entirely accept the others, or the Thou, because the Thou is too threatening, is a carrier of too much anxiety. *This is the beginning of the schizophrenic cleavage, this never-complete acceptance of the Thou, or the social self, of that part of the self that originates from others.* This Thou tends to remain unintegrated or to become dissociated like a foreign body, which later in life can be more readily externalized in forms of projection and hallucination.

These difficulties in accepting the Thou are manifested by the reluctance of these children to acquire the language and ways of the surrounding adults and by the emergence of such autistic ways and expressions as neologisms. Autistic tendencies exist even in normal children to a minimum degree, but they are more pronounced in pathological conditions—that is, when the child is afraid of the first interpersonal relations. In some cases, autistic manifestations become so pronounced as to offer the picture of childhood schizophrenia or of "early infantile autism," as originally described by Kanner. In most cases, however, even of pre-schizophrenics, these autistic tendencies are repressed and the individual acquires the symbols of the others, but a propensity to lose them and to return to one's private autistic ways will persist.

Why is it so difficult for the child to accept the Thou, or its most significant component and representative, the mother? We must return to the basic question: Why does the future patient transform the image of his mother or of both parents into one which is much worse than the real one? In my opinion, what happens in the majority of cases is the following: The mother has definite negative characteristics—excessive anxiety, hostility, or detachment—and the future patient becomes particularly sensitized to these characteristics. He becomes aware only of them, because they are the parts of mother which hurt and to which he responds deeply. He ignores the others. His use of primary-process cognition makes possible and perpetuates this partial awareness, this original part-object relationship, if one wants to use Melanie Klein's terminology. The patient who responds mainly to the negative parts of mother will try to make a whole out of these negative parts, and the resulting whole will be a monstrous transformation of mother. In later stages, this negative image may attract other negative aspects of the other members of the family or of the family constellation, so that her image will be intensified in her negative aspect. This vision of mother is somewhat understood by the mother who responds to the child with more anxiety and hostility. A vicious circle is thus organized, which produces progressive and intense distortions and maladaptations. Mother becomes the malevolent Thou, the malevolent mother of a part of the psychiatric literature, and her image becomes the malevolent image of mother. What I have said in relation

to the mother could, in a smaller number of patients, be more appropriately said in reference to the father. Moreover, this feeling of expected malevolence is extended to any adult who may become experienced as a malevolent other. Communion is now perhaps lost forever, any interpersonal relation is experienced with a sense of being ill-at-ease, or even of suspiciousness, possible danger.

Two tendencies may develop: one, to repress from consciousness the reality of the mother-child relationship, but this is not a task which can be easily achieved; the other, to displace or project to some parts of the external world this state of affairs. But, this tendency is also not possible unless a psychosis occurs, and for the time being it remains only a potentiality.

The self-image of the future patient deserves to be studied already during this first period or early childhood. Sullivan conceived the self and self-esteem as constituted of reflected appraisals. Although Sullivan stressed the point that the patient “selectively inattends” certain parts of these appraisals and is mostly aware of that part called “the bad me,” this concept, as it is generally used, represents an approximation of the truth.

The young child does not respond equally to all appraisals and roles attributed to him. Those elements that hurt him more stand out and are integrated disproportionally. Thus, the self of the future patient, although

related to the external appraisals, is not a reproduction but a grotesque representation of them. Moreover, the self is constituted of all the defenses that are built to cope with these appraisals and their distortions. The more disturbed the environment, the more prominent the role and lingering of primary cognition. Others factors undoubtedly play a role in making the self-image so different from reflected appraisals. These factors are connected with environmental conditions and with biological individual characteristics which are difficult to ascertain. This grotesque self-image, the image of the "bad me," is very painful, and would become even more painful if the future patient continued to be aware of it and continued to connect it with an increasing number of ramifications and implications. Fortunately, to a large extent this image is repressed from awareness. The individual would not be able to bear it.

One of the relatively common characteristics of the self-image of children who later in life become schizophrenic is their uncertain gender and/or sex identification. Feeling rejected by both parents, they may have difficulty in identifying with either sex and gender. Later, they may not be able to find a complete heterosexual or homosexual identification, and may maintain even through their whole life some unconscious sexual uncertainty.

Another frequent characteristic in the childhood of pre-schizophrenics, found from the second to the fifth year of life, is a certain inconsistency in

what is repressed from consciousness. The image of the malevolent mother and of the “bad me” threaten to come back to awareness, as the normal mechanism of removing unpleasant constructs from consciousness is less efficient in these children. Often, the repressed images tend to become conscious again, or to be transformed into symbolic forms later on in life, or to be projected to other people. In a minority of cases, the malevolent image of the mother is totally repressed and replaced by the image of the good, omnipotent mother, corresponding to the image the child had built during babyhood, when his needs for satisfaction were well taken care of. This image of the mother, however, predisposes to regression and total dependency. If the child should become a baby again, mother will love and protect him. In spite of the anomalies, dreariness, and intense difficulties of this period, relatively few children succumb to child psychosis. The psyche of the individual has many resources, and even in the situation of the children so far described, permits them to enter without obvious or gross pathology the second part of childhood, which covers generally the grammar-school period.

Second Period: Late Childhood

Mechanisms of repression, suppression, or denial are already in full swing. The malevolent mother and malevolent other are now only “distressing others” who make life difficult but possible. The image of the “bad me” has been transformed into the image of the “weak me.” The child

will see himself as weak, in a world of strong and distressing adults. Although in the children that we are describing primary-process mechanisms continue to function for a period of time longer than in normal circumstances, the primary process is eventually overcome and to a large extent replaced by secondary-process mechanisms. The latter are easily accepted as they seem to offer solutions to many of the patient’s problems. The child learns the language of the community, as well as the prevailing ways of thinking, ideas, and mores. The prevailing of secondary-process mechanisms, which are similar to those of the surrounding adults, does not imply, however, that normal relatedness is established between the future patient and the members of his family. There is an abnormal dialogue between the patient and his parents and siblings. No language of basic trust, no taken-for-granted acceptance, no easiness of communication exist, but lack of clarity of meaning, excessive contradictions, unexpressed or distorted emotions, suspiciousness, or, at best, very pronounced cautiousness. Many authors have done much research to elucidate the disturbed communications in the family.

For instance, Bateson and associates have advanced the so-called double bind theory, by which to a large extent they explained schizophrenia etiologically. According to Bateson and associates, the future patient receives, predominantly from his mother, a message with two or more logical meanings so related to each other as to induce painful conflict. In the words of Don Jackson, “It’s a sort of game, or gambit, set up by mother so that the child

is damned if he does and damned if he doesn't"; he does not know to which of the messages to respond. Bateson gives the following example as an illustration: The child cries and the mother goes to him; her impulse is to get rid of the child, perhaps to kill him, but her feelings about this impulse compel her to feign acceptance or love; the child perceives the original impulse and the simulated love (the double bind) and becomes confused and anxious.

Such situations undoubtedly occur more often in the childhood of schizophrenics than in the childhood of other people and may be considered to be among the factors responsible for the general state of anxiety that eventually leads to the disorder. However, it would be unjustified to attribute to the double-bind mechanism too much importance. Double-bind situations are a characteristic of life, not just of schizophrenia. They represent not necessarily pathology, but the complexity of human existence. If we were called upon to deal not with double binds but only with single messages, in a sort of reflex or conditioned reflex manner, life undoubtedly would be much simpler and offer much less anxiety, but it would not deserve to be called human; it would be a unidimensional life. Culture itself exposes the individual to many double-bind situations, that is, to conflictual situations. The healthy child learns to deal with them more or less adequately. But for the child who is to become schizophrenic, the double bind is one of the many carriers of parental difficulty in communication, and also of hostility and anxiety. The child is ill equipped to handle the many aspects of the communication at the

same time. In conclusion, it is not the double-bind mechanism per se which is pathogenetic, but either the use of it in a pathogenetic situation, or the fact that the child is unable to tolerate any ambivalence, any plurality of dimensions.

During the second period of childhood, the child has to repress to a large extent the unpleasantness of the first period. Although he will have difficulties in identifying with the significant adults in his life, he will be able now to build up some kind of less undesirable self-image, including identification with one sex rather than the other. Sexual confusion or homosexual tendencies are repressed and the child's identification with his own sex is achieved. This patched-up self-image and these identifications are not deeply rooted in the core of his being. They are more superficial reflections of how he feels people deal with him than a well-integrated vision of the self. Obviously, this child does not live in a state of communion with others, but in one of uneasiness. He still has to learn ways of relating to people. The basic patterns of relating will constitute his personality. They are defensive types of personality. The two most common types of prepsychotic personality in the future schizophrenic are the *schizoid* and the *stormy.* Although they may be found during the whole life of the patient and some of the most pronounced characteristics will appear at a later age, we shall describe them here. In fact, it is in late childhood that they acquire sufficient characteristics to be recognized.

The schizoid personality is found not only in people who are liable to become schizophrenic but also in neurotics, in people with character disorders, and in a mild form even in people who are considered normal. In the potential schizophrenic, however, it is particularly pronounced and has additional characteristics.

The person who has a schizoid personality appears aloof, detached, less emotional than the average person, and less involved. This emotional detachment originated as a defense against those intense interpersonal relations which occurred in early childhood and which proved destructive. Neurotic children may find defenses in other ways against similar family situations—that is, they may become compliant and submit to the parents unconditionally or become aggressive and fight the parents, and/or develop several neurotic symptoms, such as phobias, compulsions, etc. The person who is becoming schizoid selects instead a pattern similar to the one Horney described as “moving away from people.” Emotional detachment will permit the child to be less concerned or to suffer less on account of the bad images he has formed of his parents, and on account of his self-image and the general difficulties in life.

In addition to this emotional detachment, or rather as a consequence of it, the schizoid person limits his life experiences—his social contacts, his activities, his usual functions. The “object-relationships” are decreased in

number.

It is important to remember that the schizoid personality is only a character armor, a defense the patient has evolved in order to fight the anxiety in living. Actually, the schizoid person is very sensitive; it is because of his oversensitivity that he has to defend himself with this character armor. By decreasing his contacts with society, he shows paradoxically how involved he is with society, and how afraid he is of people.

Although this defense may protect the patient so that he can remain schizoid for the rest of his life, it may also become more destructive than constructive unless treatment or other circumstances change his basic attitudes. When the patient had to contend only, or predominantly, with his family, this character armor may have been an adequate defense, but at about the time of puberty the patient discovers that not only his family but the world at large makes demands on him. He feels "pushed around" when environmental forces compel him to do things in spite of his detachment. On the one hand, reduction of his experiences in living has made him unprepared, hesitant, awkward, fearful; on the other, the early unhealthy experiences, which he may have forgotten, continue to alter or to give a particular flavor to his present experiences. Symbolically, and unconsciously, every interpersonal situation is experienced as a reproduction of the old parent-child relationship. As a matter of fact, a compulsive attitude often

compels the patient to make this reproduction more like the original situation than it actually is.

At times, the patient himself is not satisfied with his withdrawal and harbors strong desires to make excursions into life, but every time he tries, he is burdened with anxiety, is awkward and ineffective, and meets defeat. Defeat in its turn reinforces his inferiority feelings, and a vicious circle is thus perpetuated. According to Guntrip, the schizoid wants to escape from life and return to the womb, for safety, not for pleasure. The schizoid pattern of living is a compromise, since the return to the womb is impossible. It is a half-way house position, according to Guntrip, neither in life nor out.

I would say that the schizoid pattern is *a way of dealing with the distressing other.* The distressing other may be realistically distressing, just as the malevolent other may have been really malevolent. However, in most cases, the patient behaves almost automatically toward every "other" as if he were a distressing other. The patient is predisposed to see any other according to the introject or image which he has formed of the distressing other. His awkward, suspicious, or remote ways may actually elicit in other people unpleasant behavior toward him. In his turn, he may interpret this unpleasant behavior as a proof of the validity of the image of the distressing other. Thus, his schizoidism is reinforced.

In addition to the schizoid personality, which is well known in the psychiatric literature, the present author has described another type of personality frequently found in persons who are apt to become schizophrenic. This is the *stormy* personality. It must be added that since the early 1960s, schizophrenics with a prepsychotic stormy personality have increased in number, especially in large urban centers, whereas there has been a gradual but steady decrease of schizophrenics with a prepsychotic schizoid personality. Sociocultural factors, which I have analyzed elsewhere, are partially responsible for the change in frequency of the two types by acting on the family structure. Whereas the schizoid presents a classic type of alienation (remoteness from one's feelings and from others), the stormy may present either psychological instability or a new type of alienation. In this new form of alienation, the person is not capable or prone to listening to his inner self, but is busy in contacting others, adjusting to others, and responding to external stimulation.

People with a stormy personality did not find a defense in emotional detachment or withdrawal. They tried many possible ways; at times, submersion in external perpetual stimulation; at other times, extreme submissiveness; at other times, aggressiveness; at other times, even schizoid detachment. This variety of dealing with people was often determined by the inconsistency of the parents. The distressing you they contend with is not only distressing but also unpredictable and inconsistent. The distressing you

does not become only an unpredictable distressing other, but, unless detachment is present, remains a *you;* that is, the members of the family (and at times even other adults) are still experienced as close, perhaps manifesting that pseudo-mutuality that Wynne et al. have described. People with a stormy personality have developed an even less workable enduring pattern of living than have the schizoids. Their self-images and self-identifications are even more indistinct than those of the schizoid. They keep trying to reach people, but each attempt leads to hurt. In a certain way, they are like schizoid persons who have been deprived of the character armor of indifference and therefore experience a tremendous amount of conscious anxiety. They are very vulnerable; every minor event can unchain a crisis. Life is generally a series of crises, frequently precipitated by little happenings, which are magnified by the patients who unconsciously see in them symbolic reproductions of original anxiety-producing situations. At other times, the patients seem actively to precipitate crises. They search actively for a meaningful way of living, but the inappropriateness of their actions (bizarre marriages, love affairs, absurd jobs, etc.) leads them to repeated crises. They actually live a stormy life; often, they resort to excessive use of drugs and alcohol in order to abate the storms.

Returning specifically to the second period of childhood of our future patients, we can state that the defenses are generally built as reaction to chronic, undramatic danger, not to immediate fear, and as tepid responses to

poorly expressed states of anxiety.

With relatively few exceptions, the psychological picture seems much improved toward the last period of childhood. The family has learned to live less inadequately with the patient, who is now less immature, less dependent, and less demanding. Although the child's earlier basic impressions and feelings about the world will linger, he is to a considerable extent able to alter them through the use of secondary-process mechanisms. These modifications are generally useful, even when at first they would seem to have an adverse effect. For instance, if the mother seemed to the child a terrible parent during the first period of childhood, the emotional detachment may have repressed the feeling associated with the maternal image. Moreover, the child might have also assumed, at an unverbalized level, that mothers are all this way; that's how the world is. In other words, in this case, he still makes a primary-process generalization. Later, he discovers that culture and society, as a whole, represent or take for granted an image of mother which is much better than that of his own mother. At first impression, one would think that the child will suffer when he discovers this discrepancy. Certainly, it would be better if such discrepancy did not exist, and to a certain extent he does suffer. However, he acquires some hope in life. He becomes more and more aware that the family does not constitute the whole world. He thinks that he will discover the world at large in the future. More and more, he appreciates the importance of the future in one's life and he builds hopes for his own.

Fortunately, in the majority of cases, there is no subsequent evolution toward schizophrenia. The individual succeeds in building up adequate defenses, in adjusting more or less to life, and the psychosis never occurs. When these defenses do not prove adequate, the patient enters the third period.

Third Period: Adolescence, Youth, Adulthood

Since the early experiences have made the future patient awkward socially, clumsy in his activities, and somewhat inadequate in coping with life in general, his defeats become more evident in adolescence and youth, since he has to deal with a greater range of situations.

The schizoid or stormy personalities become more marked. Many of the schizoid youngsters appear markedly detached, as if something unnatural and strange divided them from the world. In spite of this apathy and aloofness, little signs can be detected in them which indicate how their original sensitivity is ready to erupt. They lack a sense of humor, cannot stand jokes or teasing, and are poor losers in games. In some cases, they find acceptable ways, like entering a monastery, in order to withdraw from life. In some cases, the schizoid person becomes a member of a marginal or fringe group: a beatnik, a bohemian, a hippie, or a marginally asocial person. A common defense among schizoid people is that of decreasing their needs to an almost

unbelievable extent. Many of them live alone in furnished rooms, cut relations with their families, have no social contacts of any kind, except those which are absolutely necessary.

Young people with a stormy personality do not establish an adequate sense of self-identity. The series of crises they go through decreases their self-esteem and their hope.

Although the third period of the course toward schizophrenia may extend to or become manifest as late as the fourth or fifth decade of life, it generally starts around the time of puberty. These wide variations are related to the particular climate of the historical era and of the culture, and to individual occurrences in the patient's life.

The third period starts when the defenses begin to be less effective. We have to examine in detail how the process of ineffectiveness and inability to cope with events starts.

In order to understand this period, we have to unlearn or modify early psychiatric concepts. Repression from awareness does not pertain only to early childhood memories. Sexual maturity does not constitute the only problem of the adolescent; and, as a matter of fact, in many cases it is not the most important per se; it becomes important because of its implications. What may prove most pathogenetic is not instinctual impulses or instinctual

deprivations, but *ideas*—the cognitive part of man, which has been so neglected in psychoanalysis, as well as in general psychiatry. The secondary-process mechanisms, which during the so-called latency period (our second stage) had protected him from the unpleasant generalizations and the paleologic terror of the first stage, now increase the discomfort of the preschizophrenic adolescent.

The patient finally comes to believe that not only his family, but the world at large is unwilling to accept his inadequacy. He has tried to adjust to a difficult world by resorting to heroic defenses, but he has not succeeded. The family drama or the social drama, involving the patient and his milieu, becomes more intense. Let us remember, however, that as long as this drama remains social or intrafamilial, we are still not dealing with schizophrenia. The work of all those authors who, following the lucid and penetrating example of Lidz, have illustrated the importance of the family in the pathogenesis of schizophrenia, has to be complemented by the study of the intrapsychic. The same could be repeated for the work of those authors who have studied the disorder as a social process. As a matter of fact, we may even state that as long as the drama remains an interpersonal one and is not internalized in abnormal ways, we do not have schizophrenia. In order to lead to schizophrenia, the drama must injure the self very much and become a drama of the self, by virtue of high symbolic processes.

As Vygotsky has illustrated, conceptual thinking starts early in life, but it is in adolescence that it acquires prominence. Conceptual life is a necessary and very important part of mature life. Some people, however, make an exaggerated use of concepts, tend to put things into categories, and forget individual characteristics. Some adolescents, who later become schizophrenics, tend to select the formation of concepts and categories that have a gloomy emotional load, and these categories are given an absolute, exceptionless finality.

Individual memories that have escaped repression continue to bother the patient, no longer as individual facts, but as concepts. Their emotional tonality is extended to whole categories and clusters of concepts which become complexes. Old concepts change connotation. Let us take again, as an example, the concept of mother. We have seen how in the pre-pubertal period the earlier concept of mother, derived from individual experiences, undergoes improvement, because of the acquisition of the image of mother provided by the culture. The child was thus actually able to overcome the formation of a primary-process generalization and was no longer including all mothers in one category. But now, because of his unsuccessful dealings with the world, he has come to the conclusion that all adults, and consequently mothers, are not loving creatures. They are also fakers, like his own mother.

From a psychiatric point of view, perhaps the most important aspect of

this expansion of conceptual life is the fact that the image of the self from then on will consist mostly of concepts. The image of the self varies through the ages. At first, it consists of a bulk of feelings, sensations, kinesthetic perceptions, and bodily movements; later, of the image of one's own body. After several other transformations in adolescence, it consists of remnants of previous images, but predominantly of concepts.

The concept-feelings of personal significance, of self-identity, of one's role in life, of self-esteem, now constitute a great part of the self. The self will consist of concepts which have adverse emotional components. This devastating self-image compels one to change concepts about other matters, and these changes, in their turn, will do further damage to the concept of the self. Let us examine again the example of the concept of mother. We have seen how at the beginning of the third period the patient generalizes and sees all mothers as bad and insincere. Later, he develops another concept of mothers which, even if it remains unverbalized, has a more ominous effect than the previous one. He comes to believe that no matter what woman would be his mother, even the best, she would be a bad mother for him, because he himself is so undeserving and so bad that he elicits badness in others who try to be close to him.

Sexual life does not appear as desirable to many troubled adolescents and young adults but as something that has to be controlled and yet is very

difficult to control. In the preschizophrenic, however, the problem does not lie simply in lack of gratification or difficulty of control, but predominantly in the image of the self that he will acquire as a consequence of sexual life. Either because he sees himself in the image of a sexually inadequate person or a homosexual, or an undesirable sexual partner, or lacking sexual control, or having no definite sexual identity, much more than other disturbed adolescents the patient will develop a concept of himself which may become very pathogenetic.

We have seen that in the second period the future acquires importance, and this could be repeated for adolescence and young adulthood, too. In order to feed his present self-esteem and maintain an adequate self-image, the young individual has, so to say, to borrow from his expectations and hopes for the future. “One day it will happen,” he secretly says to himself. It is when he believes that the future has no hope, the promise of life will not be fulfilled, and the future may be even more desolate than the present, that the psychological decline, characteristic of this third stage, reaches its culmination. He feels threatened from all sides, as if he were in a jungle. It is not a jungle where lions, tigers, snakes, and spiders are to be found, but a jungle of concepts, where the threat is not to survival, but to the self-image. The dangers are concept-feelings, such as those of being unwanted, unloved, unlovable, inadequate, unacceptable, inferior, awkward, clumsy, not belonging, peculiar, different, rejected, humiliated, guilty, unable to find his

own way among the different paths of life, disgraced, discriminated, kept at a distance, suspected, etc. Is this a man-made jungle created by civilization in place of the jungle to which primitive tribes are exposed? The answer is in the understanding of a circular process. To a large extent, the collectivity of man, in its historical heritage and present conditions, has made this jungle; but, to a large extent the patient, too, has created it. Sensitized as he is, because of his past experiences and crippling defenses, he distorts the environment. At this point, his distortion is not yet a paranoid projection or a delusion in a technical sense. It is predominantly experienced as anguish, increased vulnerability, fear, anxiety, mental pain. Now, the patient not only feels that the segment of the world which is important to him finds him unacceptable, he also believes that as long as he lives, he will be unacceptable to others. He is excluded from the busy, relentless ways of the world. He does not fit; he is alone. He experiences ultimate loneliness; and inasmuch as he becomes unacceptable to himself, too, he becomes somewhat alienated from himself. It is at this point that the *prepsychotic panic* occurs.

This panic is at first experienced as a sort of strange emotional *resonance* between something which is very clear (as the devastating self-image brought about by the expansion of the secondary process and of the conceptual world), and something which is unclear, yet gloomy, horrifying. These obscure forces, generally silent but now re-emerging with destructive clamor, are the repressed early experiences of the first period and their

transformations in accordance with the laws of the primary process. In other words, the ineluctable conceptual conclusions reached through secondary-process mechanisms and their emotional accompaniment reactivate primary-process mechanisms and contents, not only because of their strength but also because of their fundamental similarity. These resurging mechanisms reinforce those of the secondary process, as they are in agreement with them, and the result is of dire proportions and consequences.

It is this concordance or unification of the primary and secondary processes that first reawakens the primary process, and secondly completes and magnifies in terrifying ways the horrendous vision of the self. In the totality of his human existence, and through the depth of all his feelings, the individual now sees himself as totally defeated, without any worth and possibility of redemption. Although in the past he has undergone similar experiences, they were faint, whereas now these experiences are vivid. They are vivid, even though they are not verbalized and occur in a nonrepresentational, almost abstract, form. They include experiences that cannot be analyzed or pinned down into pieces of information, yet are accompanied by increasingly lugubrious feelings. The patient does not dare to express these feelings in words. He would not be able to do so.[4] Nevertheless, in some circumstances, he tries to appeal for help. This occurs at times in youngsters who are away in camps or colleges. These appeals are often misunderstood. Occasionally, an almost “magic encounter” occurs with a

person who is able to reach a patient, change his secondary-process vision of the world, and arrest the psychosis.

Fourth Period: The Psychosis

In most cases only one solution, one defense, is still available to the psyche: to dissolve the secondary process, the process that has brought about conceptual disaster and has acquired ominous resonance with the archaic primary process. It is at this point that the fourth, psychotic period begins. The psychotic period covers the whole psychosis from its onset to termination. In Chapter 23 of this volume, Bemporad and Pinsker reported how I divide the psychosis, which proceeds to a full course, into four stages: initial, advanced, preterminal, and terminal. Elsewhere, I present a detailed description and interpretation of the four stages. In this chapter, I shall limit the discussion to the initial stage, which is the most important one from a psychodynamic point of view. Furthermore, cases that advance beyond the first stage are now fortunately sharply declining in number.

When the secondary process starts to disintegrate, it loses control of the primary process, which now starts to prevail. The patient acquires not-learned, not-imitated habits, which will constitute his schizophrenic ways of dealing with the world and himself. They are archaic and to a large extent unpredictable ways. They have the flavor of myth and primitivity. They finally

do change the unbearable concepts into hallucinated lions and tigers, and mother and father into persecutors or kings and fairies. In other words, the individual now evaluates some aspects of the external world and reassesses some of his past experiences in accordance with the modes of the primary process.

Here, we shall discuss from a general point of view the psychodynamic significance of the psychotic episode. For didactic purposes, we shall describe only the acute variety of the paranoid type, which is the most common and the easiest to interpret. I must refer the reader to other publications for the study of other types. We must keep in mind that in many cases the psychosis assumes a non-acute course. Also, at times the prepsychotic panic and the psychosis blend or progress gradually by almost imperceptible steps. At times, the gradual changes are so minimal that neither the patient nor his relatives are aware of them. An acquaintance, however, who has not seen the patient for a long time generally recognizes the change at once.

During the prepsychotic panic, the patient has, so to say, protected the world from blame, and to a large extent considered himself responsible for his own defeat. Now, again, he externalizes this feeling. He senses a vague feeling of hostility. The world is terrible. A sensation of threat surrounds him. He cannot escape from it.

The psychosis starts not only when these feeling-concepts are projected to the external world, but also when they become specific and concrete. The indefinite feelings become finite, the imperceptible becomes perceptible, the vague menace is transformed into a specific threat. It is no longer the whole horrible world that is against the patient, “they” are against him. No longer has he a feeling of being under scrutiny, under the eyes of the world, no longer a mild sense of suspiciousness toward his unfriendly neighbors. The sense of suspiciousness becomes the conviction that “they” are following him. The conceptual and abstract are reduced to the concrete, the specific. The “they” is a concretization of external threats; later, “they” are more definitely recognized as FBI agents, neighbors, or other particular persecutors. Whereas during the third period the patient often felt that millions of authorities were justified in having the lowest opinion of him, now he feels that a few malevolent, powerful people are unfair toward him and cause him troubles. There is thus a return to a situation similar to the one he experienced in his childhood, when he felt that a few powerful people were responsible for his difficulties, but now there is a displacement in his attributing the responsibility. In the majority of cases with definite psychotic features, not the parents but other people are considered the wrongdoers. This displacement permits, even during the psychosis, a partial repression of the bad image of the parent. In many cases, the displacement is later extended to a whole category of persons who are identified with the original wrongdoers.

But, whether a whole category of people, or a few persons, or only an individual, are seen as the persecutor or persecutors, such people are experienced as persons, as “malevolent Thou” or malevolent you. The malevolent you, who had been transformed, introjected, tamed, and transformed into a distressing other, is now extrojected, projected, appears strong, and often in the most unusual fantasied forms. At times, the patient refers not to a person as the persecutor, but to a machine, rays, electricity, with the tacit or manifest understanding that these means are used by some malevolent human beings.

The patient often experiences some phenomena that convince him that something is done or ordained against him. He is the victim of a plot. He is accused of being a spy, a murderer, a traitor, a homosexual. He hears hallucinatory voices which repeat these accusations. He is unhappy, fearful, often indignant.

At first impression, one would think that the development of these symptoms is not a defensive maneuver at all. The patient is indeed suffering. It is not difficult to recognize, however, that the externalization (or projection) and the reduction (or concretization) of some of the psychodynamic conflicts into these psychotic symptoms, prove to be advantageous to him. As unpleasant as it is to be accused by others, it is not as unpleasant as to accuse oneself. It is true that because of the cognitive

transformation the accusation assumes a specific form. For instance, the projected feeling of being a failure does not become a belief of being accused of being a failure, but of being a spy or a murderer. These accusations seem worse than the original self-accusations, but are more easily projected to others. The patient who believes he is accused, feels falsely accused. Thus, although the projected accusation is painful, it is not injurious to the self-esteem. On the contrary, in comparison with his prepsychotic state, the patient experiences a rise in self-esteem, often accompanied by a feeling of martyrdom. The really accused person now is not the patient, but the persecutor who is accused of persecuting the patient. What was an intrapsychic evaluation of the self now becomes an evaluation or an attitude of others who reside in the external world. No longer does the patient consider himself "bad"; the others unfairly think he is bad. The danger which used to be an internal one is now transformed by the psychosis into an external one. *In this transformation lies the psychodynamic significance of the paranoid psychosis.*

An incomplete form of the transformation mechanism is found in some neurotic, borderline, prepsychotic, and even psychotic patients. In these cases, the patient continues to accuse, hate, and disparage himself at the same time that he thinks that other people have the same feelings toward him. Thus, there is a partial projection to other people of the feelings which the patient nourishes toward himself, but there is no repudiation of this self-

accusatory or self-effacing component of his psyche.

Some external events often precipitate a psychotic attack and seem at first to contradict the opinion expressed that what hurts the patient mostly is a sense of inner, not external, danger. Although many cases of psychosis are not preceded by any particular significant external event, others occur after such circumstances as marriage, childbirth, loss of a position, accident at work, automobile accident, traveling, being away from home, flunking examinations, romantic disappointments, striking up a new friendship, quarreling with one’s boss or co-workers, etc.

An observation made quickly and repeatedly—and generally valid as a rule of thumb —is that the more important the precipitating event, the better the prognosis. This situation is easy to understand. The precipitating event is singular and recent, and therefore its effects can be removed or remedied more easily than those durable alterations that are the result of the life history of the patient.

As a matter of fact, we may parenthetically state that it is this relatively good prognosis of cases triggered off by a precipitating event that has made many authors (for instance, Kantor and Herron) postulate two kinds of schizophrenia: reactive schizophrenia and process schizophrenia. Process schizophrenia would be a full-fledged psychosis with an insidious, chronic

course, and based on organic pathology. The reactive form would be a schizophrenic-like reaction to the stress of external events.

The present writer cannot subscribe to this view. First of all, all gradations are seen in clinical practice between the apparent reactive acute type and the apparent chronic process type. The more accurately we study cases of the so-called process type, the more evident will be the presence of serious psychological factors. They did not affect the patient with obvious acute impact, but were slow, hidden, difficult to uncover, interpret, understand, and more destructive in their relentless, insidious course.

If we analyze the precipitating events, we recognize in them the capacity to increase anxiety to a marked degree and to inflict additional and serious blows to the self-image of the patient. Some events, like marriage, new position, may be experienced by the patient as challenges he cannot cope with. Other events, like accidents, disappointments in love, occupational failures, etc., may be interpreted as the final and irrevocable proof of the patient’s inadequacy.

At times, a sudden friendship with a person of the same sex may rekindle or bring to the level of consciousness homosexual desires that the patient had tried to repress. Latent homosexuality, however, does not seem to be such a frequent precipitating event as it was once assumed by the

Freudian school. The importance of homosexuality seems to lie in the fact that it causes anxiety to the patient who knows that this form of sexuality is not accepted in most segments of his environment. Childbirth is a frequent precipitating factor of schizophrenia (in what is commonly called postpartum psychosis). Many authors attribute the onset of postpartum psychosis to the stress of labor or to hormonal or other metabolic changes. Although these physical factors may play some role, the main factors may be psychogenetic in nature. Schizophrenic psychosis is not the only condition that may develop after childbirth; all psychiatric conditions may occur, including manic-depressive psychosis, reactive depressions, and exacerbations of previous neuroses. The symptoms may occur acutely after the birth or even gradually, and at times may be recognizable only a few months after the delivery.

If the condition remains at a neurotic level, we generally have one of these two pictures: Either the mother feels that she is not able to take care of the baby and is very distressed about it, or she is afraid that she may harm the child, and even kill him. These obsessive ideas and phobias are very distressing. In other cases, a pre-existing character disorder becomes much more pronounced.

In cases where schizophrenic panic occurs, the confusion is more acute. The patient presents a sudden inability to face facts. She states that she cannot take care of the baby. She wants to run away, leave her home, her

husband, her baby. At other times, she alternates between these feelings and the feelings that she is guilty, worthless, not even capable of being a mother. She identifies with her own mother, who was a bad mother, and with her child, who is the victim of a bad mother. Any human contact increases her feeling of inadequacy and her anxiety. The family is unable to help at all. The family generally consists of three people in addition to the patient, and these three people are perceived by the patient as strangers. The first stranger is the baby, who is seen not as a source of love but as a source of anxiety, because it will disclose her failure as a mother, her ungiving qualities, her inadequacy. The second stranger is the mother of the patient who, as in the past, is incapable of reassuring the patient. As a matter of fact, she seems to scold the patient for her failure to be a mother and, paradoxically, she herself seems to the patient to be the prototype of bad motherhood. In many but not all cases, there is a third stranger: the husband who is also caught in a situation he does not know how to cope with. Although he tries to control himself, he cannot comfort or express sympathy for the wife who is not able even to be a real woman, a mother for his child. Instead of sympathizing with her, he bemoans his destiny for having married such a woman.

Although the mother and husband try most of the time to conceal these feelings, the real feelings are conveyed to the patient. Her anxiety and confusion increase, the fear reaches the proportion of panic, perceptual reality becomes more and more distorted, and finally a full-fledged psychotic

episode, often hebephrenic or catatonic in type, ensues. In some cases, what follows is an acute or more or less chronic paranoid state. I have also seen lasting postpartum quasi-delusional states where the distortion never reached psychotic dimensions.

Space limitations do not permit me to discuss the psychodynamics of all the types of schizophrenia or all varieties even of the paranoid type. The reader is referred to my more complete works for my personal approach to this topic. Important works of other authors are those by Fromm-Reichmann, Hill, Rosen, Searles, and Will.

Other authors have given a different psychodynamic interpretation to the schizophrenic psychotic episode. For some authors (especially Lidz, Wynne, and Jackson), the psychosis is the outcome of irrationality directly transmitted from the parents or the family to the patient. For instance, a female patient hears a hallucinatory voice calling her a prostitute. But we know from the history of the patient that the mother used to call her a "whore," just because she was wearing lipstick. The present writer cannot subscribe to this point of view, as he strongly feels that we cannot equate psychodynamics with the whole psychopathology. The irrationality of schizophrenia is not transmitted from generation to generation with such simple mechanisms as are language, manners, or mores. Direct transmission is not a mechanism that can explain the characteristics of schizophrenic

thinking, delusional ideas, hallucinations, etc. If the parents of the schizophrenic presented the same irrationality and used the same forms of cognition as the patient, they themselves would be recognized as schizophrenics, but they are not, except in a relatively small percentage of cases. They may be peculiar, odd, eccentric. Certainly, their children may adopt their peculiarities, but they are not to be diagnosed schizophrenic because they learned them. Eccentricity in itself is not schizophrenia. Schizophrenia is not learned, although it may be acquired by virtue of certain relations with parents and family. The family affects the patient psychodynamically, so that eventually under the stress of conflicts the secondary-process mechanisms weaken or disintegrate, primary-process mechanisms acquire predominance, and the psychosis occurs. Psychotic symptoms do reflect or echo the family conflicts, just as a dream may reflect family conflicts. Family conflicts, however, could never explain the characteristics of dreams, such as reduction of ideas to visual images, special ways of thinking, confusion of reality with imagination, etc.

Other authors interpret the illness as a result of unfavorable social factors. Siirala sees a prophetic value in many apparent delusions of schizophrenics. He sees the patient as a victim and as a prophet to whom nobody listens. These prophecies consist of insights into our collective sickness, into the murders that we have committed for many generations and which we have buried, so that they will not be noticed. For Laing,

schizophrenia is not a disease but a broken-down relationship. The environment of the patient is so bad that he has to invent special strategies in order “to live in this unlivable situation.” Not only the family but society at large with its hypocrisies and masks make the situation unlivable. In some ways echoing Szasz, Laing goes to the extent of saying that the diagnosis of schizophrenia is a political one.

There is no doubt that society at large enters into the psychodynamics of mental illness, but these authors have not described accurately how society puts into action unhealthy mechanisms that may favor the psychosis. The statements made by these authors seem to indicate a direct and simple cause-and-effect relation. The disorder would be a normal reaction to an abnormal social situation. In my opinion, the disorder is an *abnormal way of coping with an abnormal situation.* The way the schizophrenic deals with the adverse environmental factors is not a normal one. This topic is too complex to be treated here; on the other hand, we must stress that the numerous social or epidemiological studies of schizophrenia published so far have not been well integrated with their psychological significance. For instance, it is not enough to find out that the incidence of schizophrenia is increased among minorities, or people living in slums or poverty. We must be able to translate these statistical data in terms of human suffering. For instance, we must investigate whether these social factors become pathogenetic or not by decreasing in a certain group of people the possibility of either becoming good parents or of

providing good parenthood.

I wish to stress again that the psychodynamic development of schizophrenia, which I have for didactic purposes divided into four periods, should not be considered an ineluctable course of events once the first period has taken place. Perhaps we can reformulate part of what I have said in the frame of reference of von Bertalanffy’s general system theory. Prior to becoming schizophrenic, the patient can be seen as an open system in a steady state. His final state, or any state, is not unequivocally determined by the initial conditions. Thus, psychiatrists who stress only early childhood and overlook the fact that the individual is always open to new possibilities that may alter the cycle of life, ignore the principle of equifinality. Any individual may increase negative entropy, and develop toward states of increased order and organization, even if he has to cope with a great deal of psychodynamic pathology, inside and outside himself. But when he becomes schizophrenic, that is, when his way of living accords with the prevalence of the primary process, he tends to become a closed system, to follow the second principle of thermodynamics, and to move toward progressive simplification and homogeneity. The aim of therapy is to reopen the system. By re-establishing relatedness with the patient, we shall feed him negative entropy again. By understanding his psychodynamics and by learning special techniques, the patient will become able to choose to be less homogeneous, less passive, and more complex, and to accept more and more his autonomous meeting with

the world. (See Chapter 27 of this volume.)

We must now take into specific consideration the passage from a predominantly psychodynamic frame of reference to one that is predominantly psycho-structural or formal. In other words, we must see how the psychodynamic conflicts become mediated during the fourth period by schizophrenic cognition.

Schizophrenic Cognition

Schizophrenic cognition in some aspects corresponds to the primary process of the Freudian school. Freud originally described the primary process in Chapter 7 of *The Interpretation of Dreams,* and he took into particular consideration the mechanism of displacement and condensation. The primary process is represented as an immature functioning of the psyche, which appears ontogenetically prior to the more mature secondary process. After this important contribution, Freud did not make other significant discoveries about the structure of the primary process. He became particularly interested in the primary process as a carrier of unconscious motivation.

It has been one of my main focuses of interest to study the primary process, predominantly as a kind of cognitive organization. It was always difficult for me to understand how the followers of the orthodox Freudian

school could conceive the id and the primary process, respectively, as an amorphous reservoir of energy and as a way of dealing with energy. Very recently, however, some classical psychoanalysts, for instance Schur and Holt, have started to study the primary process from a cognitive point of view.

In my studies on cognition, I have adopted a comparative developmental approach which is a derivation of the one proposed by Werner. I see primary-process cognition as a less differentiated, premature, microgenetic, or intermediary process in the complicated hierarchy of mechanisms, which eventually leads to the secondary process. Although it is true that primary-process cognition is not as elaborate as that of the secondary process, it is by no means a random conglomeration of psychic functions. The primary process presents immature forms that occur also in the three types of development, phylogeny, ontogeny, and microgeny. The concept of microgeny, as formulated by Werner, is less known and requires some explanations.

As I expressed elsewhere, microgeny is the immediate unfolding of a phenomenon, that is, the sequence of the necessary steps inherent in the occurrence of a psychological process. For instance, to the question, “Who is the author of *Hamlet*?” a person answers “Shakespeare.” He is aware only of the question (stimulus) and of his answer (conscious response), but not of the numerous steps that led him in a remarkably short time to give the correct

answer. Why did he not reply "Sophocles" or "George Bernard Shaw"? How did he reach the correct answer? There are numerous proofs that the answer was not necessarily an established and purely physical or neuronic association between *Hamlet* and Shakespeare, but that an actual unconscious search went on. In fact, if the same question is asked of a mental patient or a person who is very sleepy or drunk or paying little attention, he may reply "Sophocles" or "George Bernard Shaw." These are wrong but not haphazard answers, inasmuch as they refer to playwrights. The mental search required by the answer had at least reached the category of playwrights. The numerous steps that a mental process goes through constitute its microgenetic development.

These three developments, phylogeny, ontogeny, and microgeny, unfold in time, although with great variation in the quantity of time: from periods as long as geological eras in phylogeny to periods as short as fractions of a second in microgeny. What is of fundamental importance is that the three types of development tend to use the same structural plans. I do not mean that microgeny recapitulates phylogeny, but that *there are certain formal similarities in the three fields of development and that we are able to individualize schemes of highest forms of generality that involve all levels of the psyche in its three types of development.* Here, we may find a beginning of a general system theory of cognition.

When the primary process takes over, the whole psychological picture undergoes a transformation. The relation to the external world changes. Not only does inner reality become much more important than external reality, but it is confused with external reality. The patient becomes adualistic, that is, unable to distinguish the two worlds, that of his own mind and the external. Consensual validation as well as intrapsychic feedback mechanisms become defective. The patient is less and less in contact with the external world and, like people during sensory deprivation experiments, becomes more and more dependent on the primary process. In other words, whereas secondary process mechanisms need contact with reality or feedback mechanisms to maintain such contact with reality, primary-process mechanisms feed more and more on themselves.

In my research, I have studied some mechanisms of the primary process not fully studied by Freud from the point of view of cognition. I have illustrated such phenomena as the mechanisms of active concretization, the principle of von Domarus, the imbalance between the connotative, denotative, and verbal values of language, altered causality, perceptualization of the concepts, and related processes. I have also tried to trace back the biological origin of primary-process cognition.' These studies do not purport to reveal what goes on in the interplay of neurons, but they may be viewed as heuristic psychological formulations that help us to understand how primary-process cognition works, at least in schizophrenia.

The Process of Active Concretization

The process of active concretization may be best illustrated in the paranoid type of schizophrenia. We have seen that prior to the outbreak of the psychosis, the patient experiences feelings of despair and inadequacy and an impression that the whole world is hostile toward him. Some of these feelings are vague, all-pervasive, indefinite, and imperceptible. They represent the culmination of his disastrous life history, particularly in the presence of a new challenge with which he cannot cope. After the onset of the psychosis, these feelings become definite and concrete. Now, the patient believes that “someone” or “they” are against him. Another patient who prior to the onset of the psychosis had the feeling that he had a “rotten personality” channels this concept into a concrete olfactory hallucination; he smells a bad odor emanating from his body. From now on, the patient is concerned with his body, which stinks, and forgets his personality. In this aspect, the schizophrenic is similar to the dreamer, the fine artist, and the poet, who transform abstract concepts into perceptual images. The higher level impinges itself upon a lower form. Contrary to what happens in artistic production, however, in schizophrenic cognition the abstract level disappears within the concrete form and the patient is no longer aware of it.

Goldstein was one of the first to see the schizophrenic process as an expression of the concrete attitude. According to him, the schizophrenic

abandons the realm of the abstract and withdraws into the concrete. There is no doubt that Goldstein has opened a path of fruitful inquiry. Nevertheless, we must recognize that his formulations are incomplete and at times even inaccurate, suffering from the fact that originally Goldstein worked predominantly with patients with organic dysfunctions. Life, experienced only or predominantly at a concrete level, is a reduced life, but not necessarily a psychotic one. A brain-injured patient may not be able to solve problems of higher mathematics, but may remain in the realm of a limited reality. Goldstein himself stated that the concrete attitude may be a realistic one. The subhuman animal, which does not possess the ability to conceive categories or platonic universals, lives in a limited but nevertheless realistic world. Goldstein also realized that the concreteness of the schizophrenic is not the same as that of the organically diseased patient, but he interpreted the difference simply as the result of different levels of concreteness.

This explanation is not satisfactory. We find different degrees of concreteness in various organic defects and also in mental deficiencies, but these conditions are not necessarily accompanied by psychosis. To this writer, schizophrenic cognition seems to result not from a reduction to a concrete level but from a process of *active concretization.* It is not just a question here of different semantics. The process is viewed differently. By active concretization is meant that the psyche is still capable of conceiving the abstract but not of sustaining it, because it is too anxiety-provoking and

disintegrating. It has to transform it immediately into a concrete representation.

The most advanced form of active concretization is the perceptualization of the concept, as found in hallucinations. For instance, the patient who smelled an awful odor emanating from his body changed his feeling toward himself into an olfactory hallucination.

In the intermediary stages between the abstract level and the perceptualization of the concept, the patient undergoes peculiar experiences. At times, but especially at the beginning of the first psychotic attack, these subjective experiences are felt as a struggle, “a fight against a tendency to give in.” The patient tries to resist the temptation of accepting this limited, perceptual world and is afraid that sooner or later he will succumb. Succumbing would somewhat relieve a state of confusion and panic.

At other times, the opposite process occurs: The patient searches actively for corroborative perceptual evidence.

In patients who have auditory hallucinations and, through psychotherapy, have acquired some understanding of their symptoms, three states could be recognized in the hallucinatory experience: First, the patient is in a state of anxiety. (A situation that would not arouse too much anxiety in an ordinary person has acquired a particular meaning for the patient and

provokes great turmoil—for instance, returning to a lonely home from a party, after having vainly hoped for a date.) Second, the patient puts himself in the *listening attitude.* He expects to hear something derogatory. (This would be the evidence he searches for.) For instance, he must try to listen to what the neighbors say. Third, the patient actually hears; he *hallucinates.*

Most patients are aware only of the third stage. As a rule, only during intense psychotherapy do they acquire awareness of the first two stages.

Let us now examine hallucinations in their three important characteristics: (1) perceptualization of the concept; (2) projection to the external world of the inner experience; and (3) the extremely difficult corrigibility of the experience.

The perceptualization of the concept is an extreme degree of concretization. It is not the only type of perceptualization of concept, dreaming being another important one. In dreams, thoughts acquire the form of visual perceptions. In hallucinations, they acquire the forms of many types, but predominantly of the auditory. Thoughts, which ordinarily consist of images (verbal, visual, auditory, etc.) use a lower mechanism—the mechanism of perception.

The second important characteristic of hallucination, projection to the external world of the inner subjective experience, also exists in dreams. The

dreamer believes that the action of the dream actually takes place in the external world. This characteristic of hallucinations may be easily understood if we remember that it is also present in every normal perception. If I see an object in front of me, the perception of that object occurs inside me, around my calcarine fissure, but my organism projects this perception again into the external world. Thus, in hallucination, the most important fact is not that the subjective experience is externalized, because this externalization or projection occurs in every perception, but that an abstract thought has been perceptualized and follows the law of perception instead of those of thinking.

In a previous publication, I called the third characteristic the "incorrigibility of the experience." I think now that the term "difficult corrigibility" is more appropriate, because patients in psychotherapy learn to recognize and correct the hallucinatory experiences, although with great difficulty. (See Chapter 27.) In the majority of not-treated patients, however, hallucinations are not corrected. The patient not only has the dynamic wish to believe the content of the hallucination but also the need to interpret experiences in accordance with the levels of mentality to which he regresses.

The concretization and perceptualization of the concept (for instance, in the case of the patient who smells an awful odor emanating from his body) may seem metaphorical and symbolic. Let us remember, however, that these experiences are metaphorical and symbolic only for us, who retain our usual

way of thinking or at least the possibility of shifting from one to another of different ways of thinking. But these experiences are not metaphorical for the patient. They are intensely lived; they are his reality.

Paleologic Thought

The patient struggling in his attempts to resist the "fascination" of the lower levels is in a very unpleasant state of mental confusion. Often, in this state, he suddenly experiences what has been called "psychotic insight." For instance, given a sequence of events such as noticing, during the course of a few days, that several people glance at him and then hearing his doorbell ring twice in an evening, the patient will suddenly think that these are not coincidences—there is a relation between the events; agents of the FBI are watching him in order to prove that he is a spy.

If the patient were resorting only to the process of concretization of the concept, he would not begin to use this method of interpretation. But here he regresses to a lower level of rationality; he no longer operates with Aristotelian logic but rather uses a logic *sui generis,* which has been called paleologic. Paleologic is, to a great extent, based on a principle enunciated by von Domarus. This author, as a result of his studies on schizophrenia, formulated a principle which, in slightly modified form, is as follows: *Whereas the normal person accepts identity only upon the basis of identical subjects, the*

paleologician accepts identity based upon identical predicates.

For instance, if a schizophrenic happens to think: “The President of the United States is a person who was born in the United States; John Doe is a person who was born in the United States,” in certain circumstances he may conclude, “John Doe is the President of the United States.” This conclusion, which to a normal person appears delusional, is reached because the identity of the predicate of the two premises, “a person who was born in the United States,” makes the schizophrenic accept the identity of the subjects, “the President of the United States” and “John Doe.” Of course, two additional factors permit him to reach such a conclusion: first, the over-all state of anxiety makes the use of the highest levels of mentation less efficient; second, he has an emotional need to believe that John Doe is the President of the United States, a need which will arouse additional anxiety if it is not satisfied. It is not difficult, then, to see how, in a teleologic way, the patient grasps the re-emerging paleologic level in order to reach the conclusion that he desires. A patient thought that she was the Virgin Mary. Her thought process was the following: “The Virgin Mary was a virgin; I am a virgin; therefore, I am the Virgin Mary.” The delusional conclusion was reached because the identity of the predicates of the premises (the state of being virgin) made the patient accept the identity of the two subjects (the Virgin Mary and the patient). She needed to identify herself with the Virgin Mary because of the extreme closeness and spiritual kinship she felt for the Virgin Mary.

A patient, quoted by Bleuler, thought that he was Switzerland. How can we explain such a bizarre thought? Switzerland was one of the few free countries in the world, and the patient had selected the name of this country for the concept of freedom with which he had the impelling need to identify.

It must be emphasized that the schizophrenic does not necessarily adopt paleologic thought for all or even most of his thinking processes. Especially in the early stages of the illness, paleologic thought is found only when it involves the complexes of the patient. Later, however, it tends to extend to other areas. In this early selectivity for the emotionally determined complexes, paleologic thinking differs from organically determined mechanisms which apply indiscriminately to any content. In the light of von Domarus' principle, even bizarre and complex schizophrenic delusions can be interpreted.

Occasionally, the schizophrenic has insight into his mode of thinking and makes his deductions consciously. Usually, however, this process is as automatic as the normal person s application of Aristotelian logic.

The application of von Domarus' principle extends far beyond schizophrenia. The whole phenomenon of Freudian symbolism may be interpreted from a formal point of view as an application of this type of logic. The symbol is not only something that stands for something else but also

something that has at least a common characteristic (predicate) with the thing it symbolizes. Freud demonstrated that a person or object A, having certain characteristics of B (that is, a common predicate with B), may appear in dreams as B or a composite of A and B. The wife of a dreamer may appear in a dream as having the physical appearance of the dreamer's boss. The two persons are identified in the dream because the dreamer is concerned with a characteristic common to them (domineering attitude).

Of course, we do not attribute to the word "predicate" only the meaning usually given to it in logic or grammar. The term, as used here, refers to an attribute of the subject, in the broadest sense. It may also be a tangible part of the subject. Thus, in this type of thinking there is a tendency to identify a part with the whole—e.g., a room with the house to which the room belongs. Expressed differently, $a=a+b+c$ because the two terms of the equation have a in common. The predicate, furthermore, may refer not only to a quality inherent in the objects but also to spatial and temporal contiguity. The predicate that leads to the identification is called the *identifying link.*

Often, what should be only an *associative link* becomes, for the schizophrenic, an *identifying link.* According to my own studies, this mechanism underlies the disturbances of association in schizophrenia. It is beyond the purpose of this chapter to describe and interpret all alterations of association that may occur in schizophrenia. It will be enough to mention that

regressed schizophrenics substitute associative words for those actually appropriate. For instance, if a regressed schizophrenic is asked the name of the President of the United States, he may reply, "White House." The idea of "White House" is a normal association to the idea of President of the United States, but in the regressed schizophrenic, associated ideas are identified and substituted for one another. The understanding of this transformation of associative links into identifying links will lead to the interpretation of word-salad, which otherwise appears an incomprehensible phenomenon.

Paleologic thinking can be interpreted with formulations which seem to differ from von Domarus' principle, but actually refer to the same phenomena. We may, for instance, state that the cognitive faculty of the schizophrenic organizes classes or categories which differ from those of normal thinking. For normal persons *a class is a collection of objects to which a concept applies.* For instance, Washington, Jefferson, Lincoln, Roosevelt, Truman, etc., form a class of objects to which the concept "President of the United States" applies. In paleologic thinking (or thinking which follows the primary process), *a class is a collection of objects that have a predicate or part in common, and which, by virtue of having such predicate or part in common, become identified or equivalent.* Whereas the members of a secondary (or normal) class are recognized as being similar (and it is actually on their similarity that their classification is based), the members of a primary class become equivalent, that is, they are freely interchanged (for instance, the patient becomes the

Virgin Mary). Not only do they all become equivalent, but one of them may become equivalent to the whole class. It is easy to understand why it is so. In primary classification, it is only the common element that counts; all the rest is not important, or not noticed or responded to by the psyche.

Other authors have given different interpretations of schizophrenic thinking. Cameron, an author who has made important contributions, considers schizophrenic thinking: (a) *asyndetic,* that is, having few causal links; (b) *metonymic,* or lacking precise terms and using words with approximate or related meaning (like "menu" for "meal"); (c) having interpenetrations, or intrusions with unrelated themes; (d) over-inclusive, including material that has only peripheral connection; (e) requesting changing the conditions with which problems are solved; (f) presenting incongruity between acts and words; (g) ineffective in changing generalizations and hypotheses; (h) disorganized.

Of all the characteristics described by Cameron, *overinclusion* is the one that has received the greatest consideration. Some authors believe that if the patient's thinking is over-inclusive, it comprehends more than it should, and therefore cannot be considered restricted or concrete. According to Payne, the schizophrenic thought disorder could be due to inability to develop and maintain a normal set. Normal mechanisms of inhibition would be broken down. Ideas distantly related are thus included in thoughts. Similarly, the

patient is unable to disregard perceptual stimuli, ignored by most people, and their perception, too, becomes over-inclusive.

In my opinion there is no contradiction between “overinclusion” in the sense used by Cameron and Payne and the concepts of concreteness and paleologic thinking. “Over-inclusive” means inability to exclude the non-essential and to abstract the essential. The nonessential, related to the essential only by a whimsical or peripheral similarity, is retained in the new categories formed by the schizophrenic. In other words, overinclusion implies a defect in the formation of Aristotelian or secondary classes. This inability of the schizophrenic is related to stimulus generalization, as Mednick and Freedman think, or to increased equivalence of stimuli, or to what I have called primary generalization. In other words, schizophrenic generalization tends to be at the level of non-differentiation. It is not the type of generalization that follows the Pavlovian technique of discrimination. Thus, contrary to what Payne and Mednick and Freedman believe, overinclusion is not the converse of concreteness or paleologic way of thinking, but an expression of it. This point of view has also been reaffirmed by Sturm.

Piro believes that there is a semantic dissociation in schizophrenia. This dissociation is linguistic and does not refer to thinking per se. For him, dissociation means loosening the connection between the verbal sign and its meaning, cognitive and emotional. The word is no longer applied to the

original semantic structure. According to Piro, in normal persons every word has a *semantic halo,* or a personal extension of meaning, which allows a certain ambiguity and indetermination in its use. In schizophrenia, the semantic halo is either increased or decreased. I agree with Piro that words have different meanings for the schizophrenic, but I have related this phenomenon to the difficulty in forming Aristotelian categories.

Loren J. Chapman, alone, and with collaborators,' wrote a series of important papers on schizophrenic cognition. McGhie and J. Chapman attribute great importance to disorders of attention in schizophrenic thinking. There is no doubt that attention is very much impaired in many schizophrenics and that this defect may lead to conceptual impairment. However, it is not always present, nor can it explain most delusional thinking. For instance, how can impaired attention lead the patient to believe he is Jesus Christ?

A large number of authors have directly studied schizophrenic thinking from the point of view of family or social interaction and transaction. Wynne has written many of these works in collaboration with several authors, but there is no doubt that he is the architect of this large and interesting area of work. I have already expressed the opinion earlier in this chapter that this work is very important in elucidating some aspects of the psychodynamics of schizophrenia, but not in explaining the specific formal characteristics of the

thought disorder.

Desymbolization and Desocialization

The individual during his childhood introjects symbols and roles from the surrounding adults. During the schizophrenic psychosis, he tends to lose these introjected symbols and roles. Desocialization or withdrawal in the schizophrenic means much more than being at a physical distance from the interpersonal environment and living in an ivory tower (as the schizoid does). For the schizophrenic patient, desocialization implies a change in the process of symbolizing, change that will permit the loss of the introjected symbols which originate from others, and the replacement with more primitive ones.

In order to understand this process, a brief discussion of the process of symbolization in the human mind is necessary.[5]

The symbolic property of the mind permits the human being *to go beyond* what is given by the perceptual apparatus. Sense perceptions give information about what is here and now, that is, present in the spatiotemporal world in which the subject lives and by which he is stimulated, but symbols and the symbolic apparatus will permit him to become aware even of what is not given.

We may recognize a hierarchy of symbols. The simplest is the sign,

which we have in common with infrahuman animals. The smell of a mouse, which is not seen, is, for the cat, the sign that the mouse is around. The physician sees a rash on the skin of the child and he realizes that that rash is the sign of measles. Signs are parts or cues of objects or situations and stand for the whole objects or situations that are *present or about to be present.* We may even say that the *sign* is that predicate of the subject, which makes the observer become aware of the presence or imminent presence of the subject. *Symbols* must be considered as belonging to higher levels than signs because they stand for something which is not present.

As we have seen in a previous section of this chapter, the image is the most primitive form of symbol. The external object is no longer present, but the individual retains an internal image which tends to reproduce the past perception of the object. Thus, the image of the mother may be with the child even when the mother is not present.

The image, however, tends to be private and cannot be externalized. We have seen that the same characteristics are found in the endocept. The next important step in the development of symbolization occurs when an individual succeeds in equating an external event or thing for something that is not present. (A sound or a thing [fetish] or a gesture may be equivalent for the object that is not present.) The thing that is taken as equivalent of the absent object is originally perceived as part or predicate of the missing object

and becomes a paleosymbol. But paleosymbols, too, are individualistic and private. Paleosymbols (and the higher types of symbols) may be auditory, visual, tactile, etc., but, for the sake of simplification, we shall consider only the auditory.

When an auditory paleosymbol, for instance the sound *ma-ma,* uttered casually or accidentally by a primitive man in connection with his mother, is understood by a second man (for instance, a sibling) as referring to the mother, we have the occurrence of a *verbal symbol* (called also *common* or *social symbol).* The verbal symbol evokes in the person who pronounces it the same reaction that it evokes in others, it elicits "consensual validation."

The verbal symbol not only replaces the missing object but also is shared by many people. Thus, it is no longer a paleosymbol, even for the person who used it for the first time, because the person now knows the reaction that the symbol will elicit from others, and knows that this reaction is approximately similar to his own.

The evolution of the word from the paleosymbol to the most abstract levels cannot be described here in detail, but a brief summary will be presented. A word, when it is created by primitive men, has at least two characteristics: first of all, *denotation.* The denotation is the object meant. The denotation of the word *ma-ma* is the mother of the primordial siblings.

Second, it has *verbalization.* The verbalization is the word applied to the object; it is the word as a word, that is, as a verbal entity, independent of its symbolic value. In primitive societies, the emphasis is on these two aspects of terms. The word is so strictly tied to the object it denotes that it is often confused with that object. We have thus “word magic:” the word applied to an object assumes the same quality that the object itself has. A great deal of attention is paid to the word, from the point of view of sound, rhythm, rhyme, assonance, homonymy, etc.

Later on, however, the word acquires *connotation* (or enlarges the primitive connotation); that is, it represents the concept of the object it stands for. It refers not only to a particular embodiment of the object but to the whole category of the object. Thus, in the example given, the sound *ma-ma* came to refer not only to the particular mother of the primordial siblings but to any mother, and came to assume the meaning, “female who begets offspring.”

At high levels of development new symbols and roles are continuously created. The child is immediately exposed not only to many already made words, which have denotations and connotations, but to groups or configurations of words which reproduce or represent concepts and roles.

At the same time that he learns new words, he learns new relationships

and concepts and the roles that he must assume. The image of himself, which consists predominantly of the body image, self-esteem, and self-identification, needs words, concepts, and roles reflected to the self from the human environment.

In schizophrenia, we have an approximate reproduction in reverse order of all the stages of symbolization and socialization. Furthermore, all of these stages may overlap and mix in several proportions, so that what results is a very confusing picture.

The process of desocialization starts first with the progressive loss of those organizations of symbols that are referred to the self. There is thus a tendency to reject, or to divest the self of, those attitudes and tendencies that were reflected from others and became part of the self, and a tendency also to project, or give back the introjected attitudes. For example, the nagging, scolding attitude of the parent is originally introjected by the child who will acquire a critical, condemnatory attitude toward himself. When the patient becomes psychotic, this attitude is projected, or given back to a parent-substitute—an authority or a person paleologically conceived as a persecutor because he seems to have one of the persecuting traits of the parent.

Thus, projection is not only attributing an idea to others but also giving back, restoring to the people who the patient believes have contributed to the

building of an unpleasant part of his self. The patient no longer accepts self-condemnation as a part of the self; condemnation now comes from the persecutor. This mechanism is greatly complicated and obscured by the fact that what is given back is returned not to the original givers but to persons who symbolize them. Thus, paleologic mechanisms will transform the condemnatory quality of a parent into the persecutory actions of an FBI agent.

We may distinguish three successive stages: First, the stage of introjection where the action or attitude of the parent is still external, actual, and is being introjected. Second, the stage of assimilation where the child has distorted and then accepted the attitude of the parent, which has become his own attitude toward himself. He accuses, hates, or controls himself, as he believes the parents did. Third, the stage of projection (the psychotic stage) where the patient projects back to symbolic parents those attitudes toward himself that he now rejects.

This mechanism of projection may be viewed as the expression of a changing interpersonal relation between the I (the patient) and the Thou. At first, the Thou is the parent or parent-substitute; then, the Thou, after undergoing some distortions, becomes that component of the patient himself which may be called superego, if we adopt Freud’s terminology. Eventually, when psychosis occurs, the Thou is the persecutor.

We have seen earlier how basic introjections occurred early in childhood when the unpleasant experiences took place. These unpleasant experiences are repressed, but continue to act on the patient during the second and third periods of development by unconsciously motivating him toward awkward actions and distorted interpersonal relations. They participate in making the derogatory self-image much more pronounced and more difficult to tolerate. During the fourth period, the psychosis tries to eliminate this self-image.

At the same time that delusional formations occur, or later, other processes take place which are more directly related to language. Although the healthy person in a wakened state is concerned mainly with connotation and denotation of a symbol, he can shift his attention from one to another of its three aspects; the regressing schizophrenic, however, is concerned more and more with denotation and verbalization, and experiences a partial or total impairment of his ability to connote. This is what I have called *reduction of the connotation power.* For example, when regressed schizophrenics are asked to interpret proverbs, they do so literally. (A patient, asked to explain the proverb, “When the cat’s away, the mice will play,” replied that the mice felt free to play when the cat was away. He could not give to the word “cat” the special connotation, “a cruel person in authority.”)

At the same time that the connotation power is decreased, denotation

and verbalization become more important.

The verbal characteristics of schizophrenics are well known. The patients pay much attention to the sound, alliteration, and repetition of words. They seem to enjoy writing or pronouncing words that have sound associations—as, for instance, in the following series of words written by patients: “C, see, sea.” “I know it, you know it. Chuck, luck, luck, Buck. True-two. These are it. I know it. I know it, you know it.” “Are you pure? Sure? Yes! Yes! Yes! Frame! Name! Same! Same! Same! Came.”

In the course of the illness, the patient gradually relinquishes common symbols and reverts to paleosymbols—that is, to symbols which he himself creates and which have no consensual validation. The paleosymbols represent a return to the level of the autistic expression of the child. As it happens in children, however, these paleosymbolic expressions are not completely original and private, but use remnants of common symbols. Often, we recognize in neologisms common symbols that have undergone autistic or paleosymbolic distortions.

This process of desocialization and desymbolization is sometimes delayed or arrested by restitutive phenomena.' With the progression of the schizophrenic process, however, the process of desocialization increasingly impoverishes the patient’s repertory of common symbols. With the advancing

impoverishment of common symbols it becomes progressively more difficult for the patient to assume his own role and to visualize the roles of others. This process reveals how much of man is actually made of social life. When what was obtained from others is eliminated, man remains an insignificant residue of what he used to be.

Causality and Action: Motor Dysfunctions

Man uses two forms of causality to explain the universe and himself. The first is mechanical or deterministic causality: “Each cause has an effect.” The necessary antecedent A is the cause of a necessary consequent B. The second is teleologic (or psychological) causality. Things occur because of their purpose. B (reading a book) takes place because of A, the reader’s *purpose* (learning a subject). Psychological causality is a variety of teleologic causality.

In pathological conditions or primitive thinking, mechanical causality plays a very small role. Instead of finding a physical explanation for an event, the paleologic thinker looks for a cause in a personal motivation or an intention. Every act, every event, occurs because it is willed or wanted either by the person himself who seeks an explanation or by another person or by something which becomes personified. In other words, causality by logical deduction, often implying concepts involving the physical world, is replaced with causality by psychological explanation: *the necessary antecedent of any*

event is an act of will. The study of primitive concepts of causality consists of the study of what is attributed to the will. This method of interpreting the world, *projected psychological causality,* is always found in paranoiacs and paranoids who interpret almost every occurrence as expressions of psychological intentions related to their delusional complexes.

More difficult to understand, perhaps, is the concept of *introjected psychological causality,* which is pronounced in catatonics. Although this type is psychological causality related to the thinker himself, and therefore not essentially dissimilar from projected psychological causality, it requires the study of other aspects of the problem. Here one's own will becomes the antecedent of events.

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. The human action is not a simple motion, it is also an act of will. One of the first things primitive man became aware of was that he was able to will. He became aware of this long before he was able to evolve the concept of physical (deterministic) causality.

Human action is a very complicated phenomenon. 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). At the same time, of course, other non-cortical mechanisms permit the precise execution of the movement as a neurological function.

What seems to be 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. Because of rectal distention, he has the impulse to defecate, but he learns to inhibit the response. He learns, by using cortical mechanisms, to control his sphincters. The will of the child is necessary: the child must want not to defecate. He develops the capacity and the will to resist. But if the child wants not to defecate, although it would be pleasant do so, it is because he learns to please his mother. Thus, even in the first volitional acts, which imply choices, a new dimension enters: the interpersonal (the Thou). 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 which emerges in phylogenesis with the human race, in the early ontogenetic stages requires support from others before it can be exercised independently.

Individual primitive man, as an independent doer, often feels guilty. To do is to be potentially guilty, because, after all, you cannot know what event will follow what you are doing. It might have an effect on the whole tribe; its

repercussions might be enormous, such as an epidemic or a drought. Kelsen has illustrated well the relations between *to do* and *to be guilty* in the primitive. In order to diminish their feelings of guilt, primitive men refrain from acting freely; they perform only those acts that are accepted by the tribe. The tribe teaches the individual what act to perform for any desired effect. Ritualism and magic thus originate. By performing each 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.

From a certain point of view, the subsequent development of humanity can be seen largely as a gradual freedom from this reliance on the support of the group and as an expansion of the individual will. This act of liberation from the influence or suggestion of others ontogenetically is seen during the negativistic stage of children, when they refuse to do what they are told to do. By disobeying, they practice their newly acquired ability to will; but they do so with the most primitive method (volition of resistance).

The phylogenetic history of human action may be summarized diagrammatically, as shown in Figure 24-1. This is, of course, a simplified scheme, and many intermediate stages have probably been omitted. Furthermore, many stages overlap and coexist. In normal human beings, all possible stages are found, but in pathological conditions we find a preponderance of earlier stages and partial or total loss of others. For

instance, in neurotic persons, neurotic compliance to others; in obsessive-compulsives, volition with compliance to ritual. But the most pathological forms of volition are found in catatonic patients.

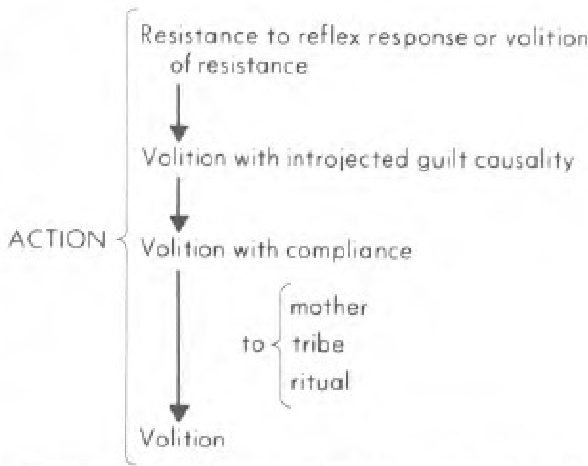

Figure 24-1.
Diagram of phylogenetic history of human action.

Dynamic studies reported elsewhere indicate that people who are apt to become catatonic are those who in their early childhood have been prevented from developing confidence in their own actions and reliance on their capacity to will. The parents or parent substitutes have forced 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. In catatonia, the typical

schizophrenic childhood struggle with significant adults is connected particularly with the actions and choices of the patient.

The eventual catatonic may try to remove the anxiety which accompanies his actions by compliance or obsessive-compulsiveness. In precatatonic patients, in fact, we find strong ambivalent attitudes, pseudo-compliance, and compulsions. But if the symptoms are not sufficient to protect the patient from excessive anxiety, or if they cannot be built up rapidly enough to dam the anxiety, catatonia develops. Catatonia is a removal of 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).

In less advanced cases, one clearly recognizes the impairment of the function to 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 he stops. At other times, there is a series of alternated opposite movements, rather like a cogwheel movement, superficially similar to that observed in postencephalitic patients affected by muscular rigidity. In the middle of a movement, the patient becomes afraid of willing the act, decides not to perform it, 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 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 are able to relate.

This fear of volition accounts for 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— there is a complete substitution of someone else's will for his own. Waxy flexibility or the retention of body positions in which the patient is passively put, no matter how uncomfortable, 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 this engenders 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. This action of willed disobedience is sometimes present in the normal person and in the negativistic child, as if unwillingness to obey or to follow an order automatically engendered an action of resistance. Perhaps, we may understand this phenomenon of negativism if we interpret it as a return to the most primitive act of volition, or volition of resistance.

There seems to be a correlation, although not yet statistically proved, between the decline in the catatonic type of schizophrenia and the decline in manic-depressive psychosis. Perhaps, a cultural environment which emphasizes the concept of guilt predisposes to these two conditions. (See Chapter 21.) But, whereas generally the premanic-depressive feels guilty for not acting, the catatonic feels guilty for acting. Actually, this is not the only difference between the guilt of the manic-depressive and that of the catatonic. The guilt feeling of the catatonic is much more primitive; it is a syncretic feeling of guilt-fear and is associated with the elementary concept of action, rather than with the higher concepts of sin and atonement.

At times, the catatonic loses this inhibiting guilt-fear complex and acts in an opposite way—that is, as if he were not concerned at all with responsibility or as if he were defying previous feelings of fear and responsibility. His behavior manifests a manic-like sequence of aimless acts. He may become violent and homicidal. This is the state of *catatonic excitement.*

Other patients who remain in a catatonic stupor for a long time develop what I have called a feeling of *negative omnipotence* or an alleged expansion of will power. They feel that if they move, the whole world will collapse or all mankind will perish. In a case which I have reported elsewhere, a patient experienced an unusual phenomenon. There was a discrepancy between the

act he wanted to perform and the action that he really carried out. For instance, when he was undressing, he wanted to drop a shoe, and instead he dropped a piece of wool; he wanted to put something in a drawer, and instead he threw a stone away. However, there was a similarity between the act that he had wanted and anticipated and the act he actually performed. The two actions were analogic; they had become psychologically equivalent because they were similar or had something in common. This phenomenon is, in my opinion, of theoretical importance because it extends to the area of volition those characteristics mentioned in schizophrenic paleologic thinking.

Progressive Teleologic Regression

If we view schizophrenia as a pathological release of a set of mechanisms, which in normal conditions is controlled by higher structures, we find this phenomenon similar to many others described in general medicine. For instance, in some pathological conditions of the heart, when the sinoauricular node is injured, the more ancient auriculoventricular bundles take over its functions. Like the auriculoventricular node, the primary process has normal functions in various activities of the mind, for instance in dreams.

If we accept this point of view, we still have to explain how the re-emergence of the primary process is to be reconciled with the psychodynamic formulations of schizophrenia, to which we strictly adhere. On one side, we

deal with psychodynamic factors which eventually lead to the defeat of the self. On the other side, we deal with such phenomena as archaic mechanisms, less differentiated structures, paleologic thinking, concretization of the abstract. It seems almost as if we embraced two logical universes, two irreconcilable views of man and nature.

I have tried to interpret this passage from a psychodynamic to a psycho-structural or formal frame of reference with the concept of *progressive teleologic regression.* In my conceptualization, regression—more than being related to a return to earlier stages of fixation, as Freud saw it—means renewed availability of functions belonging to lower levels of integration. Whereas the *content* of symptoms may reproduce, in either identical or symbolic fashion, earlier ontogenetic experiences and their derivatives, the *forms* that the symptoms assume may use even mechanisms that appeared in earlier phylogenetic levels. In the schizophrenic's psychological structure, an attempt is made *to fit a higher content into a lower form.*

Hughlings Jackson's mechanisms of dissolution may still be considered as a heuristic frame of reference. Jackson demonstrated that when a high level of nervous integration (for instance, the cerebral cortex) is in a pathological condition, the functions of that level may be absent (negative symptoms), and the functions of a lower level, which are usually inhibited, re-emerge (positive symptoms). In other words, the symptoms would not be only the effect of

pathology at higher levels, but also of a return to a lower level of functionality. In Jackson's view, regression (or, as he called it, dissolution) is completely a mechanistic or deterministic process. The higher level is eliminated by an organic disease, and the organism operates at the lower levels, which are still intact. This point of view does not provide for a psychodynamic understanding. We may build a bridge between determinism and psychodynamics if we view the psychiatric patient as channeling his conflicts through a form of teleologic regression.

The term "teleologic" implies that the regression is purposeful, having the purpose of removing excessive anxiety and re-establishing some kind of psychic equilibrium. This is not a completely vitalistic or animistic concept; it is an additional application of concepts developed in general medicine by Claude Bernard and in psychiatry by Freud. A teleological point of view is not a denial that psychological and psychopathological phenomena follow physical determinism (according to which, causes have effects), but an additional affirmation that the living organism, in health or disease, seems to be subject to both mechanical and teleologic causalities. An example from physical medicine may clarify the matter. An infective disease produces an invasion of foreign proteins in an organism, and foreign proteins bring about a temperature rise; that is, fever. All this follows mechanical causality. We know, however, that fever has a purpose: to combat the invasion of the foreign proteins. Here the organism seems to follow purposeful causality.

Obviously, in the course of evolution only those organisms survived which had such inherited biochemical properties that enabled them to respond with fever to bacterial invasion. For us, who are interested in survival, the mechanism is teleological. It is teleological at the level of human values. In the same way, we may admit that when the evolution of the nervous system reached the human level, the psyche, in order to survive, had to develop the capacity of readjusting at least at some psychopathological levels. In Freudian language, we could say that the symptoms could not be just regressive but also restitutional. A psychological defense is a pathological readjustment, purposeful, although determined by previous causes.

Cybernetics also tries to find a reconciliation between a deterministic and a teleological interpretation of biological phenomena.

The phenomenon of teleologic regression can be formulated in the form of a principle: “If in a situation of severe anxiety, such as that provoked by deep injury to the self-image and to the self, the psyche cannot function at a certain level of integration and cannot attain the desired results, a strong tendency exists toward functioning at lower levels of integration in order to effect those results.” In schizophrenia, functioning at a lower level means functioning with the mechanisms of the primary process. It means fitting a higher content into a lower form, changing the abstract into the concrete, a general threat into a specific one, something that originates from the inner

self into something that comes from the external world. For instance, the feeling of self-accusation is changed into an accusation that comes from other persons, the persecutors. The regression can thus be interpreted as purposeful or teleologic. This point of view is not irreconcilable with the point of view that a biological factor, constitutional or biochemical, predisposes some individuals to this type of regression, when the mentioned circumstances occur.

In schizophrenia, the regression is *progressive,* because, although it is purposeful, with few exceptions it fails of its purpose and tends to repeat itself. An individual who is deprived of the highest level of integration can be compared to an animal experimentally deprived of the cerebral cortex. This animal will not be in a physiological condition comparable to that of an organism of a low species which does not possess the cerebral cortex. Rather, it remains in an abnormal condition, because its whole organism is attuned to the cerebral cortex, or integrated with the functions of the cerebral cortex.

In a similar way, the schizophrenic patient will *regress to,* but not *integrate at,* a lower level: He will remain disorganized. The organism then defends itself from this disorganization with further regression to an even lower level. The process repeats itself in a vicious circle that can lead to complete dilapidation. The situation is thus different from that occurring in other psychopathological conditions. For instance, the phobic patient also

undergoes a regression. The phobic patient, however, as a rule remains arrested at a phobic level, without progression toward lower mechanisms.

A limited regression from the highest levels of functionality may be a preserver of normality in sleep, convalescence, neurotic conditions, and some overwhelming circumstances, but it is pathological in schizophrenia because it resorts to mechanisms usually repressed and discordant with the state of normality of the individual. When the regression continues, the patient proceeds to more severe stages: the second or advanced, the third or preterminal, the fourth or terminal.

The description of the process of progressive teleologic regression in schizophrenia should not be interpreted as the description of an ineluctable unfolding of events. The process can be arrested, and, as Chapter 27 of this volume illustrates, even completely reversed, reaching results by far superior to the condition in which the patient was prior to the onset of the psychosis.

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Notes

1 In previous publications I used the terms, “first, second, third, and fourth stages” to designate the different parts of the patient’s life history. Inasmuch as these parts do not represent actual stages of an illness, but portions of time, characterized by certain events and processes, the term “period” seems to me more appropriate. Moreover, in this way we avoid confusion with the different stages of the disorder, once the illness has started its manifest course.

2 Buber’s “I-Thou” expression corresponds approximately to Sullivan’s “me-you” expression.

3 For a more elaborate analysis of images, endocepts, and paleologic thinking, see Volume l, Chapter 40, Section C. Also, see The Intrapsychic Self.

4 His understanding is to some extent endoceptual again, as it was during the first period.

5 For a more adequate discussion of this subject the reader is referred to Cassirer, Langer, and, in relation to schizophrenia, Arieti.