THINKING AND MOTILITY DISORDER IN A SCHIZOPHRENIC CHILD*

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Disorders of thinking and motility have been studied intensively in adult schizophrenic patients. Little seems to be known about corresponding psychopathological findings in schizophrenic children. In the following case, a permanent record has been obtained with the aid of an automatic speech-recording device and with movies, which made a detailed psychopathological study possible.

Case Report

This eight-year-old Jewish girl, an only child in a family of low economic status, was seen for the first time at the age of four years, one month. She was then admitted to the New York State Psychiatric Institute because of inability to play with other children, assaultiveness, tantrums and "spells" of one year's duration. On admission, the mother described these "spells" in the following terms: "The day before or a few hours before it happens she usually has a coated tongue and her eyes are dull; she is quiet, refuses her food . . . She wants to do 'good things.' She thinks that if she is good it wouldn't happen. She has a pain (points to right upper abdominal quadrant). When it happens she holds her belly suddenly. She has a severe pain; she does not cry; she says 'Oh!' Her eyes look tortured. She tries to talk, she tries to pronounce the words and can't. It lasts about two minutes; she does not lose consciousness; there is no movement of any part of the body." She was said to have had these "spells" once every three hours for a day or a day and a night, during which she would be very drowsy; then she would become talkative, though her speech was not clear. It took her about two days to get back to normal. The "spells" as described, occurred at first every four or five weeks; at the time of admission, they were occurring approximately every 10 days, though they were milder. "Spells," as described by the mother and reported by her to have occurred at the onset of the illness, were not observed at the hospital.

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Family History. The paternal grandparents were said to have been withdrawn, indifferent individuals, more interested in Communism than in their home life.

The maternal grandfather, a Kappelmeister in Russia, later a music teacher in the United States, was unhappy, felt misunderstood, was subject to sudden outbursts of tears, and was irritated by his wife and by his children, except for the patient's mother who looked upon him as a god and experienced pleasurable sensations at the mere touch of his hand.

The father, a drug salesman, is 35 years old. At seven years of age he lost one eye in an accident, following which he became seclusive, and has shunned people through his life. He is an odd-looking individual with facial assymetry, a frontal scar, and one glass eye. He has peculiar ideas about sex, is unusually well-read on sex literature, and before his marriage had a liaison with a woman who was sexually attractive to him but whom he warned in advance he would not marry. When he became acquainted with the child's mother, he suggested to her "a sharing;" that is, that he enter a platonic marriage with the fiancee, while continuing sexual relations with the mistress, an arrangement which the mother rejected.

The mother, 35 years old, intelligent, aggressive, helps her husband in business. She was graduated with high honors from grammar school and high school; she went to high school and college at night, doing bookkeeping during the day. When she was 17, she seems to have suffered from a severe anxiety neurosis, characterized by insomnia, buzzing in the ear, and "eternal pounding" of the heart. She felt she was going insane (as feared and expressed by her own mother), lost all her friends, and was very unhappy. This condition lasted for about two years. She has also described hallucinations which she experienced for several years following her father's death (she was then nine years old). She could not go into the bathroom without seeing her dead father lying in the tub. At 28, when her child was 15 months old, she had a similar "episode," though not so severe. As regards the patient, the mother has been overanxious, overprotective and openly sadistic.

In the family history, there are also a "hypochondriac" paternal aunt—who makes the rounds of hospitals and has had several operations—and her son who, as a severe behavior problem, had been expelled from school.

Personal History. The child, Joan L., was born in Chicago on January 22, 1933, after three years of marriage with no other pregnancies reported. The child was unwanted and unplanned for. The pregnancy resulted after a break in the contraceptive technique. The husband was then without work, and there were financial difficulties. The mother worked through the seventh month of pregnancy, as she was the only wage earner. The sexual adjustment is said to have been a happy one at this time. The pregnancy was full-term; and prenatal care was obtained during the last month. The foetus is said to have been very active *in utero*. Labor lasted two days and two nights—the mother asserts that no ether was given to her, because she was a "charity patient." Forceps were used. The baby gave only a weak cry and was "all battered." Her weight at birth was seven pounds. About the "shocking" and "frightening" experience, the mother says, "I was so afraid to have a baby it broke my spirit a great deal," although she also insists that the child became "precious" as a result of this shock. She appears to have become obsessed with the "idea of perfect health," reading many books on the subject. She says, "I was so busy taking care of her perfectly, that I didn't have time to take care of her as a human being." The baby was breast fed for three months, following which bottle feeding was initiated. The psychomotor development was normal: She sat up at five months, walked at nine months, was fearless. During the first year, she was thin, active, hungry, and slept a great deal. The first tooth appeared at nine months. At about this time, the mother left for New York where the father was seeking a job, but returned to Chicago in one month. The child said her first word at 12 months, the mother commenting that the baby was slow in talking because the mother lived a lonely life and didn't talk to her. She did not see other children. At 15 months, Joan had measles with no sequelae. Following this, the mother decided to go back to work and went to New York, leaving the baby in Chicago. It is also at this time that the mother had her second so-called nervous breakdown. She spent

three months in New York, while the father returned to Chicago with the child and grandmother. At two years, the baby was trained for control of bowel and bladder. The mother was impatient with her and felt that training was longer than usual. Beginning at two years, the little girl was able to repeat nursery rhymes which were read to her, even though she did not understand the meaning of the words. At three years, her language development presented some peculiarity in the sense that she used very few words for communication with parents or children, but that she actually knew many words, with a preference for difficult ones. There was considerable pressure on the part of the mother in her drive toward perfection.

When the mother began to take Joan to play with other children at the age of three, she had to be watched because she hit them; she did not know how to play with them. When children came to the house, she behaved as if she and the mother "were spectators and the children the show." It is at this time (three years) that she began to have tantrums. The mother recalls the first one of these. It was "as if she was possessed by a fury." The onset was coincident with the mother's chance meeting with a former lover. For two days, the child had one tantrum after the other; she could not be stopped; she rolled on the floor and tore the bed covers to shreds. Then she became sleepy, did not feel well, and vomited. The episodes just described, called "spells" by the mother, recurred usually at meal time, every four or five weeks. At about this period (three to three and one-half years), she began to wet and soil again. From three and one-half to four years, she became gradually worse and the mother tried to avoid any cause for excitement. Because of the vomiting, the child was taken to several pediatricians who diagnosed "psychic vomiting with calcium deficiency." One pediatrician advised a nursery school. She did not make an adjustment there, had almost constant tantrums for five days, and was sent home. At four years, one month, she was brought to the New York State Psychiatric Institute, on March 16, 1937.

Course of Illness. Joan was at the Psychiatric Institute for about two months, then had whooping cough and was sent home. At the Institute, she was described as very aggressive and destruc-

tive. She talked a great deal in a rapid, singsong, lisping, babyish fashion which was difficult to understand. She ate greedily, smearing her hands with the food which she then rubbed on her face, grabbed at other children's food, became angry when they pushed her away. She wet and soiled, was in constant activity, rocking back and forth, rubbing her legs up and down, sucking the hem of her dress, had frequent tantrums, and was destructive in play sessions. The physical examination, including the neurological examination, and the laboratory data showed no deviations from the normal. There was a palpable spinal bifida occulta of the first sacral segment, confirmed by X-ray. Permission for pneumoencephalogram was not obtained. A psychometric examination gave her an I. Q. of 98 on the 1916 Revision of the Stanford-Binet Scale and 100 in the Minnesota Preschool Non-Verbal Test. During this first stay at the Psychiatric Institute, Joan continued to be very active and aggressive and showed a conspicuous indifference to physical pain. She wet and soiled; she ate newspapers, sheets and blankets, a behavior which was accompanied by severe gastrointestinal disturbances. Compulsive behavior was marked. She was ambivalent toward her mother and toward nurses. When her parents called on visits, she would greet them casually, then would begin to relate events in a thorough and relatively chronological order. When with her parents, her speech was less intelligible than otherwise.

She was readmitted to the children's service of the Psychiatric Institute after five months. The mother reported that the child was at first well behaved, then began to develop new forms of bizarre behavior. She began spitting profusely; she would cross her eyes and say she had "three mummies." She would walk blindly, hurting people and herself. She referred to her father as "the man who sleeps here and has bacon and eggs in the morning that man." When she was scolded for this, she would refer to him as Nathan, his given name, and ask, "When did we get Nathan? Did we get him in Chicago that time?"

When Joan was seen at the time of readmission (four years, nine months) by the writer, she was in bed talking to herself, leaning over the edge of the bed, looking at her innumerable spittles on the floor. She seemed to recognize the physician, but when the latter

asked who she was, she said, "You're a pest that's a pest that is a thing." On the ward, she was assaultive toward other children. Outside of this aggression, she was practically in a world of her own and did not mingle with the children. She was ambivalent toward physician and nurses saying, "I want to bite you, I love you." There was a great deal of concern about being a good girl or a bad girl. Her speech at this time was almost unintelligible and showed further deterioration. Neologisms were numerous; and her language, to a large extent, was made up of a jumble of meaningless syllables interspersed with plainly audible and well-articulated words. There were marked variations in pitch and volume, giving an oddly modulated effect, with the long phonetic "sentence" ending with a high pitch. Lisping, letter substitution and omission were also present. This speech was extremely difficult to reproduce phonetically, but an approximate example is given: "No what see to you this now . . . a man comes to neh in a minute . . . tell me why a fellow don't come . . . do you know nase I'm sitting here . . . nice loo do I say those things I say new things a new thing away . . . right a good nay . . . do you know what appetoh I don't know . . . whaw appetoh . . ." After having made a scribble on a paper, she called the physician's attention to it, saying, "Nase look this nase I made now . . . that is a phonah." (What is a phonah?) "A phonah is a bey." (What is a bey?) "That is a bey kooyah." There was no playfulness associated with the use of neologisms as would be the case with the normal child in his verbal play with neologisms. While she was at the hospital, a physician observed an attack which he described as follows: "She suddenly yelled, screamed, voided, and defecated, smeared wildly, and seemed to be out of contact." His impression was, "She seemed to be in a state of catatonic excitement." He ordered a pack which quieted the patient shortly. Several days later, Joan was observed to have two episodes of "drowsiness." She was seen by the same physician in the second of these. She was sitting by the table with her head in her arms and was roused only with difficulty. She answered questions slowly, but slightly more intelligibly than usual. She showed waxy flexibility. There were no pupillary changes, neck rigidity, or other neurological signs.

Psychometric examinations done during the second admission gave an I. Q. of 70 on the 1916 Revision of the Stanford-Binet Scale, and 81 on the Merrill-Palmer Preschool Test. The basis of most of Joan's failures was her difficulty with verbal responses. In a Rorschach test, "all interpretations seemed to be vague whole answers or cut-off wholes at the best." Insulin shock therapy was suggested by the writer at the time of readmission; but the mother refused to sign the release for it or for a pneumoencephalogram. The girl made a slight progress in her contact during the second admission; but the mother did not allow her to remain, because of alleged mistreatments reported by the child.

Since Joan's discharge from the New York State Psychiatric Institute, the writer has seen her at irregular intervals. A year and one-half after discharge, at the age of six years, two months, the I. Q. was 68 with a mental age of four years, two months; and the psychologist noted: "Scatter is extremely wide and success-failure pattern is quite extraordinary." The mother reported that the child had been entered at school "to make the child normal," but was expelled after biting and attacking children. At home she had a "bad attack of those spells again preceded by violent exhibitions of uncontrolled anger and contrariness, breaking windows and furniture. She had nightmares, woke up screaming, kept running to her parents' bedroom, scared to sleep alone." Joan did not mix with other children, but attacked them. Her behavior was quite erratic. She would run across the streets in heavy traffic, missing being killed several times. She could not be left alone. Seen by the physician about this time (six years, two months) she was quiet and inactive. When some crayons with which to draw were given to her, she chewed on the crayons, removing the paper from them without paying any attention to the physician. She had a constant irrelevant smile. She whispered to herself, with her back turned to the physician, and showed no interest in answering questions. Echolalia was marked. Speech articulation was more mature than when last seen. The girl continued using neologisms, explaining one by another when she was asked for an explanation. When asked what she did in school, she answered, "Just hang your coat and sit in a chair." She appeared preoccupied and at times suddenly stared in space as if she were hallucinated. There was a

marked tendency toward perseveration. She exhibited a touching compulsion. She became negativistic when the physician tried to get her to come downstairs, became rigid, and had to be carried part of the way. An electroencephalogram done at this time was said to be pathological, with no reference to specific pathology.

The mother reported that throughout the period following the discharge, she had taken Joan's problem in hand. She now understood the child's "emotional complex" and used a method which brought good results: namely, beating the child, which caused her to cry. "By making her cry, she releases her tension and doesn't have to have spells." The little girl was admitted to the Psychiatric Institute on October 18, 1939 for electro- and pneumoencephalographic studies; but the mother once more refused permission for the pneumoencephalogram. The report on the electroencephalogram showed diffuse cortical dysrhythmia. The child was admitted to school at seven and one-half years of age. She continued aggressive toward children and seclusive. She occasionally wet and soiled. However, Joan did stay in school when she found a sympathetic teacher. The teacher now reports that when she asks the child questions in class, she becomes excited and makes "queer" answers. Therefore, she leaves her alone. She has made little progress. The principal persists in her earlier opinion that Joan is "an idiot or crazy." At home, she is occasionally excitable and usually withdrawn. She does not mingle with children, and does not seem to know what to do with toys. The mother states, "She still talks through me to the world. It is now with her behavior a cycle just the same as when she had the spells." She has had no "spells" as previously described by the mother in the past year. A psychometric test done when the child was seven years, 10 months gave her a mental age of four years, seven months and an I. Q. of 63. At present, her behavior is quieter; she is passive, preoccupied, uninterested. At times, she appears hallucinated. She occasionally becomes excited. She shows no playfulness, but smiles almost constantly. A pneumoencephalogram done in the children's service of the New York Hospital on March 7, 1941 was negative.

Discussion of Symptomatology

Thinking. The child exhibits bizarre thinking and autistic thinking as seen in the following examples: (Referring to father) "That man who sleeps at my house and eats bacon and eggs in the morning that man—When did we get Nathan? Did we get him in Chicago that time?" (Referring to father and mother at home) "Mama nase live at home I tell you this now; those two new peoples like to be home with me every day." (Who are these people?) "They are mama they are those two people." (But who are they?) "My mama live at home." (That's only one, who's the other?) "That one that's Nathan--" (Referring to the physician and herself, the former engaged in writing a note and the latter in scribbling, she says) "Two people write down here, this one up to here (pointing to physician's head) that one up to here" (pointing to her own head). (Seeing a nurse with whom she was familiar give a key to the physician she says) "One person give a key to one person." There are many similar examples in the record. The intellectual deterioration is reflected in the lowering of mental level. Animism is noted, as is evidenced in a statement that "the shoe wants to be a good thing." There are numerous neologisms. The language disturbances are characterized by disintegration, as shown by the breaking down of the sentence into words and even syllables, resulting in word salad and even inarticulate speech. Speech is not used as means of contact and communication, and it presents characteristic deviations from the normal, that is to say, variations in volume, pitch and rhythm. Whispering of unintelligible speech is also noted. The immaturity of speech development, which is a part of the regression pattern, still shows, to a degree, lisping and letter substitution.

There are disturbances of perception as evidenced by the strong suggestion of auditory and visual hallucinations.

The orientation in time, space, and person is disturbed. Joan asks in a familiar set-up, "Where am I?" She calls people around her, even those as familiar as the physician, by a variety of names without consideration as to sex or person. There is a compulsive concern with time, and the girl has been known to have an anxiety reaction when the quest for this particular information was not satisfied.

"Phonographismus" is evidenced to a marked degree. The child may not appear to be interested in conversations taking place before her, but a day or two later, she may reproduce these conversations in a phonetically almost literal fashion.

Affectivity. There are marked disturbances of affective contact as seen in the withdrawal, and the alternation of alert or excited behavior with stuporous behavior. The alternation is not so marked at the present time as it was four years ago, but it exists nevertheless. Joan's mood is usually absorbed and preoccupied, with outbursts of excitement which are not always explainable. One such outburst was witnessed recently when the child, of whom moving pictures were being taken, would not comply with the suggestion to go back into focus. She suddenly began to bite her own arm, getting more and more excited, jumping and panting as she bit more deeply.

Dissociation of affect is noted. There are also periods of severe anxiety which were more frequent and severe when the girl was four years old, and which have gradually decreased in intensity and frequency. At such times, she becomes wildly excited, screams, and emits a peculiar neighing sound. She has given some hint as to the nature of her anxiety when she described briefly dreams in which she is "afraid for mama."

Her ambivalence is marked and was especially conspicuous earlier in the history when she would say to the physician, "I kill you I like you." She seems to be afraid of her own aggressiveness and has been heard to say, "Pinch me so I won't pinch you." She was also previously more aggressive and assaultive than she has been in the past year; she still assaults other children, but infrequently. There is an impulsive character to this assaultiveness. The lack of reaction to painful stimuli was noted in the neurological examination, and was also striking on one occasion when Joan caught her arm between the leaves of a folding table, an experience which would be extremely painful to anyone. She made no effort to move her arm and stood with a mask-like expression. There are exhibited a number of compulsions. She goes into an anxiety panic when, as she watches the physician write on a page, she notices that the latter does not write to the end of the page. The same type of reaction prevails if the physician does not answer the

telephone. Once, while presented at a staff conference, she insisted on touching everybody after she had started to touch the person nearest to her.

There is marked perseveration. One morning she kept calling this physician "Mr. Jones" after a psychometric examination with Dr. Jones. Another time, she called three doctors, two men and one woman, "Dr. Despert." This same perseveration is seen in such things as drawing, motor behavior and speech, and it is extensive. She is negativistic, a characteristic which she has often demonstrated. Regression, as shown by the relapse in training, eating of non-edible materials, and the spitting, all of which were marked at the onset, has decreased at the present time. Joan wets and soils only infrequently.

Motility. The excited motor behavior has been described. There are primitive, purposeless movements of hands, arms, legs, as well as head. The motor behavior presents the same character of dissociation which has been seen in the thinking and affective spheres, with considerable variety in patterns and purposelessness of activity. There is also considerable oral activity, with chewing and sucking movements of the lips, also a protrusion of the tongue and the lips which is strongly suggestive of *Schnauzkrampf.*

Differential Diagnosis

On historical data, epilepsy and the post-encephalitic syndrome can be ruled out. The differential diagnosis stands between a schizophrenic syndrome and a degenerative disease in which schizophrenic-like symptoms occur. On repeated neurological examinations, there is no evidence of organic disease in the course of a four-year followup study. The electroencephalograms, while pathological, are not characteristic of any pathological entity; and the pneumoencephalogram is negative.

The symptomatology, as described, would probably not be questioned as being indicative of schizophrenia if the patient were an adult. The outstanding symptoms are: thinking and perceptual disorder, mental deterioration, language and speech disturbances, dissociation of affect, alternation between excitement and semi-stuporous states, negativism, impulsive behavior, and primitive motor behavior. The evolution of the syndrome in the course of

the four-year followup is also characteristic. According to the literature, there is a divergence of opinions, however, even as to whether schizophrenia can occur under varying age levels. It is said, for instance, that delusions or hallucinations cannot occur in children because of immaturity of intellectual organization. However, the intellectual organization of the child at various developmental levels is not well known. The many examples cited, as, for instance, the one referring to the identification of the father, indicate that the thinking disorder in this case is on the basis of an affective dissociation. A normal young child may have difficulty in giving a complete picture of his father; but however simple his account may be, it is colored by his own emotional experience toward it. This child behaves as if she had no affective relation to her environment.

Prognosis

According to most writers, the prognosis in child schizophrenia is poor. In the case of this child, regression and intellectual deterioration have been marked and have taken place over a short period of time, that is to say, from three to six years. From the age of six years, there is a tendency toward stabilization of the symptoms; and later examinations up to the present time show that the regression and intellectual deterioration have not progressed. The behavior also tends toward a relative adaptation, with no increase in the intensity of the behavior anomalies. It seems that social adaptation will remain inadequate and that normal intellectual progress and development will be prevented by the affective dissociation which has taken place, and which at this time is fixed at a level of chronicity. The prognosis therefore is poor, although it is possible that the disease may not progress toward more severe deterioration until additional stress is placed upon the personality.

There have been indications that Joan was more accessible to treatment during the second admission at the New York State Psychiatric Institute (from four years, nine months to four years, 11 months), as the writer then established a rapport with the patient, though fairly superficially. The withdrawal from the hospital made it impossible to continue and, therefore, to ascertain whether a more permanent affective contact could be effected. At

the present time, rapport with this writer is considerably less adequate than it was then. Furthermore, there has been a further blunting of emotional reactions as seen in the greater indifference toward the environment and the lessening of emotional extremes, all of which represent an attempt to deal, at a pathological level, with a conflict which no longer arouses violent affective reactions. According to most writers, results from intensive psychotherapy have been poor.

Etiology

Etiological factors are not wanting in this case. These are the same factors which were found to be present in a previous study of schizophrenic children admitted to the Psychiatric Institute.* The history shows a marked familial tainting, as seen in the social attitudes of the paternal grandparents and the maladjustment of the maternal grandfather. Both parents have neurotic characteristics, the mother's being more prominent. In the case of the mother, the neurotic symptoms are so severe as to have warped her attitudes strongly in handling the child. The mother's relationship to her own father was pathological; and his death brought on psychotic symptoms; namely, visual hallucinations associated with anxiety over a period of years. Before her marriage, she suffered from a severe anxiety neurosis and again from a somewhat similar episode when Joan was 15 months old. The mother's aggressive and sadistic attitudes have had a significant repercussion on the failure of this child to adjust to the world of reality. It can be said that Joan's mother has created for her child an early pathological environment from which almost all other influences were excluded. Her rejection of the child made it impossible for her to create the atmosphere of affection which is an essential requirement of an infant's life. The marked ambivalence of the mother is reflected in the child's own ambivalence toward the outside world. The external world—which for the average child is to a large extent one of play and gratification—becomes full of frustrations for this girl; and her withdrawal from the external world is a reaction to such frustrations. The rôle played by the father is more obscure, but light may be cast on Joan's attitude by the statements she has made regarding her feeling of strangeness toward him.

*Despert, J. Louise: Schizophrenia in children. PSYCHIAT. QUART., 12:366-71, April, 1938.

The speech-language history of this patient is of considerable interest. She exhibits to a marked degree at the present time, and has exhibited in her earlier history, a characteristic described by the writer as one of dissociation between language-sign and language-function. The mother recalls that Joan did not use words to communicate with people around her but was, at the same time, able to retain and use difficult words and many of them. This points to an early affective dissociation. The significance of this affective dissociation, as reflected in the anomaly of language development, has not been emphasized enough and should be recognized and further investigated, since the use of early language in the child represents his first attempt to employ an adult means of communication with his environment.

Since, in childhood, language expression is in a constant state of evolution, it is evident that the early deviations which at first only reflect the affective dissociation, later become also a contributory factor in increasing the feeling of strangeness, and in decreasing the capacity for affective contact and intellectual development.

Summary and Conclusions

The case of an eight-year-old girl who has been followed by the writer for four years is presented, and the symptoms analyzed from the point of view of schizophrenic criteria. Organic genesis has been ruled out, the final step being a negative pneumoencephalogram obtained on March 7, 1941. In the case of an adult, the symptoms noted in this child would be acknowledged as characteristic of schizophrenia. They are: specific thinking and perceptual disorder, mental deterioration, specific language and speech disturbances, dissociation of affect, alternation between excitement and semi-stuporous states, negativism, impulsive behavior, and primitive motor behavior. The evolution of the syndrome is also characteristic. The onset is placed at three years of age; and since then, there has been a progression of symptoms, followed by a relative social and emotional adaptation to the environment. This relative adaptation is at a functioning level which is not so well integrated as that observed before the onset of illness.

The diagnosis of schizophrenia was made early in this case on the basis of the affective dissociation which was manifested in the

disintegration of the speech-language function. Severe behavior disorders, associated with regressive characteristics, are not uncommon in young children with acute emotional disturbances. However, in the absence of affective dissociation, the diagnosis of schizophrenia cannot be made, however severe the behavior disorder. This was clearly brought out in the case of this child, since coincidentally with her first stay at the New York State Psychiatric Institute, a boy of three and one-half years, Wilbert S., was admitted with a superficially similar pathological picture. He exhibited assaultiveness toward members of his family and neighbors, adult or child; tantrums; selective mutism; soiling and defecating. However, there was lacking any evidence of intellectual deterioration, or of perceptual and thinking defect on the basis of affective dissociation; and the diagnosis of schizophrenia, however bizarre the behavior, could be ruled out.

Affective dissociation in the young child can be diagnosed only with some difficulty, owing to the present lack of knowledge of early intellectual function and the relation of emotional factors to symbolic structure at various developmental levels. Because of this lack of knowledge, intellectual and perceptual defect is usually evaluated through comparison with the schizophrenic adult, whereas it should be evaluated in terms of deviations from the normal child of similar developmental level. Whether the patient be adult or child, the specific deviations from the corresponding normal individual define the pathological syndrome.

Studies of early language and thinking development from the point of view outlined here should throw a light on the question of criteria for schizophrenia in children.

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