S. Wolff

The first account of the syndrome **Asperger described?**

Translation of a paper entitled "Die schizoiden Psychopathien im Kindesalter"

by Dr. G.E. Ssucharewa; scientific assistant. which appeared in 1926 in the Monatsschrift für Psychiatrie und Neurologie 60:235-261

Introductory comments

On reading the paper which follows, it will at once be clear that the six boys described by Dr Ssucharewa some 70 years ago resemble very closely the children reported on by Asperger in 1944 (1) and those more recently described by other workers (2-4).

I will not attempt to summarise the children's characteristics here. Dr Ssucharewa does this admirably. I shall merely try to set the paper in context. What seems remarkable is that the discussions that precede and follow the case reports, while couched in the language of their day and in a diagnostic terminology no longer in fashion, nevertheless contain ideas which are strikingly up-to-date.

Before listing these, however, mention must be made of some of the points in the paper which reflect the differences in knowledge and viewpoint then and now. The most obvious of these is that childhood autism was not yet on the map, so that we do not here grapple with the conundrum of whether schizoid personality disorder in children represents a part of the autistic or of the schizophrenic spectrum or both. Then, the final section of the paper, where symptoms of schizoid personality are likened to expressions of normal adolescence, suggests that the manifestations of adolescence have changed remarkably in 70 years. Finally, we now know that inadequate child rearing, in particular institutional care, does not bring about a schizoid symptomatology.

But what about the similarities between the ideas in this paper and our current preoccupations? Dr Ssucharewa discusses the helpfulness or otherwise of using broadly or narrowly defined diagnostic categories. and opts for narrow definitions both for schizophrenia and for schizoid personality disorder. The references she

cites make clear that schizophrenia was generally regarded as a brain disease, and that both the psychosis as well as schizoid personality disorder were thought to be based on developmental abnormalities of nervous pathways, probably involving the cerebellum, the basal ganglia and the frontal lobes. It was accepted even then that schizoid personality disorder occurred in the relatives of schizophrenic patients and premorbidly in these patients themselves. Schizoid personality disorder was believed to be the expression of a genetic predisposition to schizophrenia, but for the psychosis itself to occur, a further genetic factor was thought to be necessary in addition. Genetic factors were seen as the causes of the neurological dysfunctions which formed the substrate for the symptomatology.

An unanswerable question remains: how was it that Hans Asperger, familiar as he was with Kretschmer's work, did not apparently know of this paper?

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The Translation

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Schizoid personality disorders of childhood

A considerable literature now exists on the topic of "schizoid" and "cycloid" personality types. Kretchmer's book **Physique and Character** (14) was the start of numerous and varied investigations. An overall review of this literature shows that we are still at a stage of conflicting viewpoints. The idea of the schizoid type has proved the most controversial and the introduction of this concept into psychiatric practice has met with serious criticism from many psychiatrists. Bumke (3) regarded it as an artificial construct; Wilmanns (24) thought Kretschmer's types were unclear with poorly defined boundaries, and, according to Ewald (6, 7), the concept of a schizoid type is so overinclusive that it could apply to every kind of personality disorder.

These harsh critiques of Kretschmer's typology are perhaps due to the vagueness with which he described the schizoid type in his **Physique and Character** (14). He sketches the characteristic of the schizoid psyche with masterly artistry; yet the concept itself remains obscure and poorly defined. No clear picture emerges from his brilliant literary descriptions of affected individuals, and the boundaries between sick and healthy people and between aspects of character and of psychosis are blurred. Because its relationship to normal schizothymy and to other forms of personality disorders were so ill defined, the concept of a schizoid type became overinclusive.

As often happens when clinical concepts are insufficiently delineated, the term "schizoid" began to be applied far too widely, and a series of new terms were devised whose meanings are quite unclear: "Schizophile", "schizomanic", "schizoaffinic", etc. As was to be expected, the use of the concept in this much wider sense led to a loss of its original meaning. Kretschmer himself, in one of his last contributions (15), pointed to the risk of conceptual confusion when the label "schizoid" is applied too broadly. He suggests great care in the use of the term which should be applied only to a small group of the personality disorders.

The second point on which critics of Kretschmer took issue is the relationship between schizoid personality and schizophrenia. The differences between these conditions are not made very clear in Kretchmer's work (14). He took the view that the transition between schizoid personality and schizophrenia is a fluid one, and he regarded the schizophrenic process as a mere accentuation of certain constitutional characteristics.

Ewald (6, 7) deals with this topic at length. He considers the parallel Kretschmer draws between schizoid personality and dementia praecox to be arbitrary, and he asks what it is that schizophrenic patients and people with schizoid personality disorder might have in common, since the most characteristic symptom of schizophrenia is a progressive fragmentation of personality. Bumke (3) too maintains that it is impossible for "an or-

ganic illness, like dementia praecox, to become so attenuated that it merges into a normal type of temperament."

On the other hand, it cannot be denied that a whole series of investigations, genetic as well as clinical, have confirmed the existence of some kind of relationship between schizoid personality disorder and schizophrenia. Many authors draw attention to a special type of personality disorder with schizoid features in the families of schizophrenic patients (Medow, Hoffman (9, 10); Rüdin (21); Kahn (12); Schneider (22), etc.). And clinical research into the prepsychotic personality of people with schizophrenia, has shown this to be similar to the picture of schizoid personality disorder (Kraepelin, Bleuler (2); Gannuschkin (8); Kunkel (16); Giese etc.).

These clinical and genetic findings have been interpreted in different ways: some authors regard schizoid personality disorders as an expression of a constitutional predisposition; others take the view that these personality disorders represent a latent or abortive form of schizophrenia (Bumke's "dormant schizophrenias" (3)) and that the prepsychotic characteristics are merely early symptoms of the illness.

Yet even supporters of this second view do not deny the existence of a special type of personality disorder with some schizophrenic features. Kraepelin regarded these as manifestations of an uneven development of synergic mental faculties.

Kretschmer himself revised his ideas about the relationship between schizoid personality and schizophrenia in his later work. In "Constitutional Problems in Psychiatry" (15) he writes that a person with schizoid personality does not develop schizophrenia simply as a result of an accumulation of schizoid features; in the genetic transmission of schizophrenia the schizoid component is augmented by some other genetic factor: a complementary, additional factor is a necessary cause. Here Kretschmer's views come to resemble those of Kahn (12), who distinguishes two separate components in the genetic transmission of schizophrenia: 1) a predisposition to schizoidia (the schizoid constitution) and 2) a predisposition to the schizophrenic illness process.

Thus Kretschmer revised and significantly altered his concept of schizoid personality disorder, in terms of its scope, its content and its clinical significance (particularly as regards the relationship between schizoid personality and schizophrenia).

Schizoid personality disorder in this more restricted sense is accepted by many clinicians, including those who had reservations about Kretschmer's initial views. Even Ewald (7), who had been so critical of Kretchmer's typology, does not deny the existence of a group of personality disorders with a strong psychological resemblance to schizophrenia. He explains the similarity of symptoms of these two quite different clinical disorders as due to a shared cerebral localization. And Berze (1) (in one of his most recent contributions), while critical of Kretschmer's

ideas, accepts that there is a group of personality disordered patients who are particularly predisposed to develop schizophrenia, and whom he diagnosed as having a "sensitive-overreactive" personality disorder. He suggests that these patients have a constitutional overreactivity of certain nervous pathways which explains their vulnerability and the genetic link to schizophrenia. Similar ideas were also developed in von Kleist's department (Loewy (18) Schneider (22)). These workers explain the schizoid constitution in terms of an inborn abnormality of certain brain regions (cerebellum, basal ganglia, frontal lobes), those in fact which Kleist regarded as the anatomical substrate of the schizophrenic process.

Conflicting views about schizoid personality disorders are best resolved clinically (by means of a thorough study of patient, observed longitudinally). Here the study of children has the advantage that the essential features of the clinical picture remain much clearer, unobscured by extraneous factors (such as the social milieu, including culture and occupation; the use of alcohol and other narcotics etc.).

Because cases of childhood personality disorders are relatively rarely described in the literature, we believe it will be of interest to record those cases of schizoid personality disorder which were referred for treatment to the Psychoneurological Department for Children during the past 3 years. We were aware of the difficulties of differential diagnosis, especially in relation to the boundaries between schizoid personality disorder and the pre- and post-psychotic personality features of schizophrenic patients. For this reason we chose only case, with well documented histories, who had been observed over long periods of time. We shall not here deal with those of outpatients who had less obvious manifestations of schizoid personality disorder and whose diagnosis was problematical.

This paper describes a total of six children with schizoid personality disorder. All were boys, aged between 2 and 14 years, and their average stay in our in-patient department was 2 years.

Case 1

M. Sch., aged 13 years, Jewish, from an intelligent family. Family History: Father, 63, suffers from angina pectoris, warm, irritable, with occasional outbursts of anger; pathologically suspicious. Paternal grandfather, died of cancer. Father's oldest sister, nervous, suspicious, temperamental her daughter suffers from obsessional states. Paternal uncle, a dreamer with poor adaptive capacities. Mother, suffers from gout, irritable, anxiously passive in youth, afraid of empty rooms; now considers herself to be much calmer than before. Maternal grandfather, uncouth, irritable, an excessive drinker. Maternal grandmother, died of tuberculosis.

M. Sch. is the youngest of his family, born 2 weeks prematurely, when his father was 50 and his mother 40 years

old. Physical development normal. Childhood illnesses: only measles and appendicitis.

He grew up in a materially comfortable and caring family. He aroused parental anxiety from early childhood because he was different from other children. Even in his crib he was unusually sensitive, particularly to noise, starting at every sound. At the age of 2 he was found to have perfect hearing. He could read at 4 years. Shy, easily frightened and suspicious, he shunned the company of other children. With frequent hypochondriacal complaints, he enjoyed talking about illness and displayed an unusual interest in death. Whenever he sees a coffin or hears mention of someone who died, he becomes very agitated and says: "I shall not live for very long". Compliant, quiet and passive, he initiates no independent activities.

He wanders about aimlessly, bemused at times, and puts numerous absurd questions to the people around him. He repeats these over and over until he gets a comprehensive reply. His appetite is poor, his sleep restless with nightly screams. He is frightened of the dark and of "monsters". At 6, he was once accidentally left alone in a room, and since then he has been afraid of being alone and of locked doors. At that time, frequent masturbation was observed.

At 7 he began to learn the alphabet as well as music: the violin. He was taught by a tutor at home, was distractible, had poor persistence, and difficulties with maths. On the other hand, he made rapid progress in music but without much enjoyment. In 1920, he was accepted by the Conservatoire (Department for String Instruments), where he has been regarded as a good student, although his progress is retarded by an incapacity for systematic study.

In 1923, he was admitted to our Hospital-School in the Psychoneurological Department for Children. The parents' complaints related to his obsessional state and his impaired work capacity. The mother reported that all his symptoms began in early childhood, with no recognisable deterioration in the course of his later life. On the contrary, the impression was that there had been improvement with age.

On examination, his height and weight were above average for his age; his body well proportioned and of an asthenic-dolichomorphic build, with a deep, narrow chest; his face was long with small features; his musculature and subcutaneous fat reasonably developed; his complexion was smooth but with several deep red patches; body skin tougher and elastic, neither dry nor sweaty; hands cyanotic, moist and cold; hair dark, thick and growing low on his forehead; pubic hair well developed. Polyadenitis, normal thyroid. Genitalia precociously developed. Inner organs: rhonchi in right upper lung; mildly irritable heart rate but heart sounds normal. Poor appetite and occasional diarrhoea.

Nervous system

Cranial nerves normal; pupils equal and normally reactive to light; tendon reflexes normal; skin and gag reflexes sluggish; sensory system normal but with marked dermographism. Movements clumsy and awkward; gross muscle power normal. Developmentally retarded by four years on Oseretzky's test. Gait clumsy and awkward; facial expressiveness limited; speech lacking in modulation. Blood: Haemoglobin 80%; erythrocytes 4700000; leukocytes 7200 with normal shape but with a low lymphocyte count. Vegetative nervous system labile. W. R. negative; Abderhalden's (dialysis) test of testicular and thyroid function normal.

Psychological examination

Friendly and polite, but shy and diffident in manner. Restless with a number of extraneous, occasionally tic-like movements. He grasps questions at once and answers willingly. Speech rapid but unclear. He is only superficially responsive, hiding his thoughts beneath a flow of words and phrases. Asked how he is, he replied: "I don't know, perhaps I'm well, perhaps less well. In any case, people feel differently". Asked whether he liked the book he has been reading, he said: "It seems to me that I liked the book, but I am really not sure, the principle of reading is such that one is bound to be taken in." In formulating any thought he takes a circuitous route, rationalizes and leans towards the abstract. But there is no discernible disorder or confusion of thinking.

As regards associations, inner and coordinated associations predominate. Logical thought processes are entirely normal, as is closure. In identifying similarities and differences, he grasps the essentials, and he excels at definitions, even those of abstract concepts (e.g. beauty: "the appearance of an object in a form that is pleasing to the eye"; the difference between obstinacy and persistence: "the obstinate person acts without reason; the persistent person as a matter of principle").

Results of psychological testing: 2 years ahead of his age on the Binet scale; according to Rossolino's method, his mean profile is 8.6.

He describes himself as unlike other boys: "they are very good at games and won't let me play; the character of the children is such that they chose the stronger ones". He is good at self-analysis and self-criticism and considers himself to be nervous: "I was never without anxiety. When I was younger, I was afraid of wolves and monsters. Now I am afraid in case I get locked into a room, especially a small one. I often lie in bed and think that perhaps something has happened at home, such as a fire. I am particularly frightened in the bedroom." He knows he has obsessional symptoms and automatisms: "It often seems to me that a word is going round and round in my head

and that I just cannot get rid of it. Or it occurs to me that if I do not do something or other, something will happen to me. It is difficult for me to start anything: I have to make lengthy preparations, and afterwards it is hard for me to stop".

He entered the in-patient unit willingly, adapted easily to the routines of the school, accepts all suggestions for work, but performs everything clumsily, is sluggish and awkward. From the start he evoked teasing from other children and spent more time with the younger ones. He developed a "don't care" attitude: talked incessantly, rhyming, grimacing and clowning. There were periods of even greater agitation, in which he jumped about, pulled faces, etc. Plays the fool constantly, intrusive, pesters other children, bores adults with endless questions. Throughout the winter he greeted everyone with the question: "Where is your skirt?", or "why aren't you wearing a skirt?" His jokes were mainly rhymed; perseverations occurred, with frequent repetitions of the same word. To all appearances his affective life was barren: he had no interests, wandered about aimlessly and sluggishly in leisure periods. But his occasional sensitive comments, in great contrast to his usual foolishness, his responsiveness to every object of beauty, "the world of dreams" which so often featured in his poems, - all this led us to believe that a rich inner life was hidden beneath his external indolence.

Musically gifted, he is totally transformed while playing, giving the impression then of a confident and sensitive musician. He is also an able artist, and the drawing teacher, himself an artist, assessed him as artistically highly gifted. His poems, while unoriginal in content, are mellifluous.

For a time he masturbated intensively and he had a predilection for minor sexual misbehaviours and doubtful jokes.

His classwork continued to be backward and his output was meagre. He was handicapped by his slowness, his automatisms and his inability to let go of any topic and 2. by his incapacity for the sustained effort and concentration necessary for systematic work.

During his 2 years in the therapeutic school, he became physically stronger and began to enjoy physical exercise, gymnastics and eurhythmics. But psychologically few changes were observed: he is less flamboyant and calmer, but he remains aimless at times and plays the fool as before. His school work, however, has improved: he completed several assignments independently and is making good progress in art and music.

In summary

An impaired, dysharmonic personality, a mixture of psychological sensitivity and childish silliness. High artistic gifts in the presence of overall impairment. Symp-

tomatology: tendency to automatism and obsessional states as well as weakness of goal directed volition. Tendency to autistic reactions. Normal intelligence, orderly thinking, but reasoning impaired by rambling and sticking. Asthenic body type. Labile vegetative nervous system. Motorically impaired with clumsiness and awkwardness of movements. Limited facial expressiveness. Course: stationary, without gross variations and with limited Improvement. Diagnosis: Personality disorder: schizoid (eccentric).

Case 2

M.R., aged 101/2 years, Jewish, from an intelligent family. Family History: Father, physician and gifted scientist, physically healthy, absent-minded, somewhat eccentric, irritable, "there was always something incomprehensible about him" (according to his wife). Paternal grandfather died of heart disease. Paternal uncle had an explosive personality, somewhat odd thought processes, and often behaved impulsively. Mother, 34, healthy. Maternal grandfather developed a mental illness (schizophrenia?) aged 35 years. One of his relatives had died by suicide. Maternal grandmother had heart disease and died of a stroke. One of her relatives had a mental illness (schizophrenia?) and two others died by suicide. A maternal uncle had for 35 years suffered from a psychiatric illness, diagnosed as cyclothymia; between attacks he was a somewhat unassuming, hard working man with a colourless personality, who became extremely agitated whenever he had to make a decision.

M. R. was the oldest of his family; pregnancy and birth were normal; as was his physical development. Past illnesses: diphtheria, measles, pneumonia. Socio-economic circumstances satisfactory. Healthy and sensible in early childhood. Learnt to read at 5 and read avidly whatever came to hand. At 8 years he was sent to the Waldschule (Forrest School) where he showed himself to be severely maladjusted: he never complied with school rules, disturbed the work of his whole class, and engaged in senseless, impulsive behaviour. Once, when annoyed by another boy, he pushed him into the lake. The school could not cope with him, and in 1922 transferred him to the therapeutic school of our clinic. At that time the mother described him as lazy, apathetic, easily led and incapable of systematic work.

On examination

Height and weight above average for his age; nutrition satisfactory. Body build somewhat asthenic. Dysplastic: long, narrow, clumsy looking arms; flat, deep chest; curved posture; long face with broad nose and large mouth. Musculature poorly developed; skin delicate and smooth.

Hands and feet cyanotic, moist, cold and often sweaty. Hair dark, coarse and thick. No pubic hair. Enlarged cervical and submaxillary lymph glands, thyroid normal. Genitalia normal. Internal organs normal. Nervous system: cranial nerves normal; pupils regular, light reflex somewhat sluggish; tendon reflexes increased, skin reflexes brisk, gag reflex normal. No pathological reflexes. Aschner's symptom positive. Sensory system normal, hearing somewhat impaired, vision normal. Active movements awkward, clumsy, exaggerated; poor at fine motor activities; poor handwriting and drawing. Retarded by 21/2 years on the Oseretzky test. Many accessory movements (synkinesias). Clumsy, flaccid gait: sometimes takes big, sometimes small steps as he walks. Posture droopy with lax joints. Bland, almost mask-like faces, not reflecting his emotional state. Some paradoxical mimicry: laughs with sad facial expression. Voice nasal. Laboratory tests: W. R. negative; Abderhalden's (dialysis) test of testicular and thyroid function normal. Vegetative nervous system: mild vagotonia. Normal blood count.

Psychological examination

On admission, his awkward clumsiness was obvious, and from the start he became an object of general ridicule for other children. Silly conduct, with grimacing and swearing; calls himself a giddy goat and the other children cows and donkeys, and conducts himself accordingly, shaking his head as if butting with horns. Impulsively kicks and hits other children. Occasionally engages in very odd behaviour: climbed onto the window sill of an upstairs lavatory and urinated onto a table set for an outdoor meal below. Asked about his motives, he replied: "I don't know, the urge was suddenly so strong that I never gave it a thought". Argues a lot; talks a great deal in a stereotyped way, always about the same topic: the war of 1812. A compulsive element is evident in his discourse: if interrupted, he becomes agitated, waits for a convenient moment and then starts his tale all over again, from the beginning and in minute detail. His mood is predominantly apathetic: he has no interest in anything, is passive in play, submissive to other children, plays without enthusiasm or affective charge. He dislikes classwork and is neither interested in the work nor in his own achievements. He fails to complete tasks, executing them in a sluggish, fitful and untidy manner.

He is unresponsive during the examination, sullen and apathetic. In a monotonous voice he says about himself: "I was always clumsy; I never took part in outdoor games, I only played the sort of games one can play without other children". As calmly, and without any change of intonation, he went on to report that he had been excluded from school. "I was more silly than the rest, played the fool, laughed a lot, called the teacher 'a cow". He reported no phobias and, as regards obsessional

symptoms, he mentioned that a word often goes round and round in his head, giving him no peace. Asked about his main interest, he at once replied: "I like books most of all". He grasps questions at once and formulates his thoughts correctly and logically. He has a capacity for abstract thinking but also shows a tendency to ruminate. His associations are normal. His intelligence on the Binet test is 4 years in advance of his age, and overall above average on Rossolino's test.

His progress, according to the unit's day reports, showed little change during the first 2 or 3 months. He adapted very slowly to his environment and to communal life with other children. At the end of the first year, he became quieter and began to accept the house rules of the unit. He is now well behaved in class, interested in his work and makes good progress, with far fewer sudden outbursts during free periods. As before, he remains unsociable, isolating himself from other children. But he has become much more lively, takes part in drama; complies with the unit's routines and despite occasional irritability, clearly tries to control himself. He has become less clumsy and participates in gymnastics and craftwork.

In summary

From early childhood, a sluggish, clumsy "hulk" of a child. Isolated from other children. Silly conduct, sluggish temperament, odd impulsive behaviour. Superior intelligence with tendency to abstract thinking. Successful school work, intensive interest in books. Somatic characteristics: asthenic body build with dysplastic features. Nervous system: gross motor deficiencies, clumsy gait, droopy posture, hypotonic joints, flabby, mask-like facies nasal speech.

Progress: marked improvement over the past 2 years. *Diagnosis*: Personality disorder: schizoid (eccentric).

Case 3

A.D. aged 12, from intelligent family, father a Jew; mother Russian.

Family history: Father: musician, reserved, indecisive, extremely shy, only sociable within a small intimate circle, colourless personality, with heightened suggestibility and poor adaptive capacities. Frequent stuttering. Paternal grandfather: died of cancer. Paternal grandmother: reserved, dominating, quarrelsome, suspicious and miserly. Paternal uncle: enthusiast and boastful adventurer. Mother: healthy. Maternal grandfather: died of general paresis. Maternal uncle: reserved, depressive, eccentric, pathologically miserly. Another maternal uncle: gifted musician and mathematician, erratic behaviour: sometimes elated, sometimes listless.

A.D. is an only child. Physical development normal. Grew up as a healthy, intelligent boy. Began to read at 5. Memory good. Even at 5 years his parents found him a "strange" child. They noted his poor concentration, his jumping from one topic to the next, his occasionally incomprehensible behaviour (such as suddenly throwing things out of the window). Periodically he developed strong interests and then pursued these exclusively. At 6, he suddenly began to engage in lengthy arithmetical calculations but gave this up after 3 months; at 7, he began to compose the words of short songs. He entered school for the first time at ten years, played the role of joker and became the butt of his peers, although his school progress was better than that of any of them. At twelve, his conversation was marked by repetitive, obsessional themes: he is argumentative, importunes everyone and gives them nicknames. His mother, who gave the history, stressed that there had been no deterioration in his behaviour from early childhood until now. If anything, he had improved: he was beginning to show more interest in aspects of everyday life.

On examination

Height, weight, chest and head circumferences, two years in advance of his age. Asthenic body build, eunuchoid in type, with above normal ratios of arm and leg to trunk lengths. Long, slim neck; thin extremities, drooping shoulders, flat chest; poor development of muscle and subcutaneous fat; smooth, elastic skin; hair thick and wavy with occasional grey patches; pubic hair absent. Genital development age appropriate; inner organs normal. Nervous system: cranial nerves normal; knee and ankle reflexes somewhat increased; skin reflexes brisk; no pathological reflexes; throat and pupillary reflexes brisk; idiomuscular reactivity somewhat increased; white dermographism. Much restless and excessive movement. Retarded by 2.8 years on Oseretzky's scale. Clumsy, awkward gait; blank faces.

Laboratory investigations: W.R. negative. Labile vegetative nervous system with paradoxical reaction to pilocarpine. Blood count normal.

Psychological examination

At interview he reveals a great store of knowledge and good mathematical abilities. His intelligence is above average for his age, equivalent to 15 years on the Binet scale. Memory good but uneven: good for numbers and words, but he confuses people. Quick associations, no blocking; many external associations; occasional automatisms, and sticking to the same theme. No thought disorder. Logical processes normal. Is good at similarities and differences and draws correct conclusions. There is a tendency to ob-

sessional rumination: he endlessly pursues questions like "Why are there so few children in the school? Why are there fewer girls?" etc, until the other person, now exhausted, replies.

Extremely talkative but at the same time reserved and secretive, he dislikes discussing his experiences. If a conversation involves him personally, he becomes silent or changes the subject. In school he acts the clown, behaves in a silly manner and thinks up various nick-names for the other children. He never takes part in communal games. His suggestibility is increased and he mimics everyone. His mood is always somewhat elated. His affective life is flattened: his reactions to everything seem superficial, nothing touches him deeply, neither pain nor pleasure, everything rapidly passes him by. He has no crude or selfish feelings and is neither greedy nor malicious. He is fond of his parents. He is a great dreamer, lives in a fantasy world, often oblivious of reality. Obsessional states and compulsive counting have been observed. For example, it might occur to him to count the spectators at the theatre. He thinks up a special method for this: counts them after the doors are shut, and then rushes out in the interval to add the late comers, counting them up on his fingers. He also had phobias (was afraid of flying). In class he has difficulties with attention and concentration, And he lacks the capacity for goal directed effort. He either complies automatically or else disrupts class discipline by asking irrelevant questions.

He has musical abilities and a good ear. On the other hand, he is poor at gymnastics, eurhythmy and manual tasks. There has been no marked change over the past 2 years. In 1924, he entered a music college and is making good progress there.

In summary

The following features characterized this case: a somewhat elated but foolish mood, a tendency towards stereotypies and irrational rumination, increased suggestibility, automatisms, compulsive counting, phobias, a certain flattening of affect. His intelligence was above average. Physically, he was tall with an asthenic body build, eunuchoid features, and motor impairments.

Course: no change or fluctuations. Diagnosis: (sic) Personality disorder (eccentric).

Case 4

J.D. aged 12, Russian from intelligent family. Family history: Father: suffers from obsessive-compulsive symptoms, difficult personality, obstinate, quarrelsome. Paternal grandmother: nervous with obsessive-compulsive symptoms, under constant medical care. Paternal aunt:

pathologically suspicious, egocentric. Mother: tender minded, lacking in character, with neuralgic complaints. The boy, born at term, was asphyxiated at birth. Physical development normal. Childhood illnesses: varicella, pertussis, tuberculous toxicity. Sluggish in early childhood, preferred adult company and avoided other children because, he explained, they did not interest him and he disliked playing with toys. Always reserved, lived in a world of his own, developed his own world view from an early age. Intellectual development good. He had taught himself to read by five years but found writing more difficult. Loved joking and making fun of other people. Markedly irritable and temperamental; a restless sleeper with frequent night terrors. Started school at 10, made no contact with other children, and especially hated and despised the girls. He was friendly and affectionate towards his parents but bitter and quarrelsome with everyone else: he disliked and was critical of all human beings. Suffered from obsessional and phobic symptoms since 1923 and often voiced fears that something awful could happen. Worries about his mother when she goes out. Admitted to our therapeutic school in 1924.

On examination

Height average for his age; nutrition below average. Poor body build of markedly asthenic type. Long, slender bones. Flat, long chest; drooping shoulders; long face with small features. Hypotonic musculature. Height average for his age; nutrition below average. Sparse subcutaneous fat; smooth, pale skin. Hands and feet moist, somewhat cyanotic. Fine, dark brown hair, no pubic hair. Enlarged lymph glands: polyadenitis. Thyroid normal. Testicles descended. Penis age appropriate. Inner organs: decreased breath sounds right apex. Heart sounds normal; pulse irritable. Digestive system: poor appetite, frequent colitis. Nervous system: cranial nerves normal; increased tendon reflexes in upper and lower limbs; decreased abdominal reflexes; normal cremasteric reflex. Pupils average in size, brisk light reflex. Sensation normal in all modalities. Vision and hearing normal. Red dermographism. Slow, clumsy movements. Slack and crooked posture, clumsy gait. Facial expression lively and congruent with his experiences. High pitched, whiney voice.

Psychological examination

Unresponsive at interview, mistrustful and suspicious. Attentive, serious expression with occasional crooked smile; adult intonation. Well oriented in time and space. Large store of knowledge, but this is superficial and fragmented. Speech fluent with no word finding difficulties. Good logical operations; answers are always to the point. Grasps essentials at once when defining similarities and

differences. Gives good definitions of abstract concepts, enjoys these discussions and talking about "serious things". Experimental psychological examination found him to be of high intelligence. Two years ahead of his age on the Binet scale and with a high profile (8.5) according to the Rossolimo method. Although his thought processes are so well developed, a certain compulsive element is discernible: there are often pauses in his flow of speech, and he clings to certain themes. Associations normal.

He entered the therapeutic unit willingly but adjusts poorly and slowly to his new surroundings. Makes no contact with the other children and does not play with them. Mood apathetic, occasionally depressed, almost embittered. He sees life and other people in a wholly negative light: "I don't like anything. Everyone insults me." For some time he has felt hatred and enmity towards those who humiliate him. He himself, however, enjoys teasing the other children and will quietly push them. The other children dislike him because he is forever talking about fairness, while he himself is totally selfish, defending only his own interests. Before he can start any work, he has to think it all out for some time; is reluctant to take any initiative; tends towards exaggerated self-analysis. Extremely slow over eating and dressing, and always last to finish his work. Despite adequate intelligence, his school achievements are meagre because of his poor mental set and incapacity for effort. Slowness, automatism, obsessional thinking, all interfere with his school work. In subjects requiring physical skills and manual dexterity, he lags behind other children (manual work, drawing). No obvious changes were seen in his functioning throughout his period of observation in the unit.

In summary

Introverted type; autistic, inner directed attitude. Abstract type of thinking. Tendency to rationalization. Poor achievements, despite good intelligence (because of poor mental set). Egocentric, over-estimates himself but self-esteem is easily hurt. Emotional life pervaded by irritability and misery. Tendency to obsessionality. Somatically: delicate, asthenic body build. Evidence of tubercular intoxication. Nervous system: increased tendon reflexes, impaired motor functioning.

Diagnosis: Personality disorder, schizoid (eccentric). Some of his psychasthenic traits could possibly be explained on the basis of his tuberculous toxicity.

Case 5

K. A. 13 years old, Russian, from an intelligent milieu. Family history: *Father died* aged 43 of miliary tuberculosis. He had been a gifted man, wrote poetry, but had a difficult personality, reserved, vindictive, irritable, unreliable, a gambler. *Paternal grandfather*: impulsive, unprincipled, dominating, despotic. *Paternal grandmother*: elated, moody, divorced by her husband after the birth of 13 children. *Paternal uncle*: lazy, fantasist, gambler. *Paternal aunt*: odd, eccentric. *Mother*: 40, healthy. *Maternal uncle*: epileptic.

K. A. was healthy at birth; developed eczema at 11/2 months which persisted till the age of 4 years and left him with a dry skin. Much illness in early childhood: frequent intestinal ailments and rickets.

Normal physical development: Childish illnesses: measles, pleurisy. Nocturnal enuresis until 12 years. Grew up as a delicate, sensitive child, always with adults, uninterested in making friends with other children, played alone and thought up his own games. Irritable, moody, persistent in his demands and often irrationally obstinate. Always very talkative, he began to speak in rhymes at the age of 3.

Learnt to read at 5 years and read everything he could find. Started school at 8 and made good progress. Suffered from night terrors since early childhood. After 1921, in response to marital strife between his parents, he became much more irritable, cheeky and obstinate. He was admitted to the therapeutic school in 1922.

On examination

Height was that of a 15-year old, but weight was age appropriate.

Long legged, narrow shouldered, narrow chested. Delicate, asthenic body build. Large, long face; irregular features; long, delicate neck; narrow, hunched up shoulders, pigeon chested; right scoliosis; loose skin, sparse subcutaneous fat. Skin grey, pale, very dry and thick, rough and chafed; mucosae pale.

Enlarged bronchial lymph glands; normal thyroid; genital development age appropriate; no secondary sex characteristics. Inner organs: expiratory sounds in right upper lobe; anaemic venous sounds; otherwise normal.

Nervous system

Increased tendon reflexes; no pathological reflexes; normal skin and mucosal reflexes. Pupils equal and briskly reactive; cranial nerves normal; mild, pink reddening of skin after stroking. Positive Aschner's symptom. Somewhat hopping gait; awkward movements, sometimes exaggerated sometimes restrained and inhibited. Retarded

by 21/2 years on Oseretzky's test. Lively, somewhat relaxed facies. Deep, hoarse voice. Hearing and vision normal. Sleep normal.

Laboratory investigation

Blood: Haemoglobin 75%, erythrocytes 4570000, leukocytes 7600. No leukocyte abnormality except lymphocytosis. Abderhalden's (dialysis) test of thyroid and testicular function normal. W.R. negative. Sympathetic nervous system overreactive. Normal skull x-ray. Dermatological opinion on his dry skin led to a diagnosis of hereditary ichthiosis.

Psychological examination

Enjoys being examined. Talks and behaves like an adult. Polite and reserved in manner but too effusive. Speech is affected, with unusual literary expressions: frequent aphorisms and play on words. Describes himself as calm and well adjusted: "I am very reserved; I used to be nervous". He reported past phobias he could no longer remember. He talks at length about his early childhood, recalling that he never enjoyed playing with other children and invented his own games. Most of all he liked making up stories: "special creatures lived in the fire place; there were three kinds, each with a special name". For some years he had regarded himself as particularly close to some of these creatures, first to a fly, later a person: "I remember the house and the apartment where they lived very well. Once one of these creatures had a son, and since then I have celebrated his birthday every year." He was very chatty and easy to relate to at the start of the interview, but as soon as more personal experiences were touched upon, he clammed up and became silent. He revealed himself as very well read and his intelligence is well developed. He has a considerable store of knowledge about socio-political issues and, as he says himself, his opinions are sacrosanct ("holy"): "if the facts don't correspond to my opinions, I have to try to find some flaw in the facts".

His thinking is orderly, precise, clear and markedly abstract. He operates much better with abstract concepts and schemata than with concrete images. His answers are all too discursive. He shows a tendency towards philosophising, doubting and being diverted by excessive detail. Asked to define a cup, he said: "A cup is an object made of glass or pottery, is hollow and used for drinking" or "table — a piece of wood used only for domestic purposes and, of necessity, with a flat surface".

Experimental psychological testing revealed his intelligence to be above normal.

At school he keeps himself to himself. His attitude towards other children is condescending or mocking; and totally without authority. They nick-named him: "the talking machine". He takes no part in their games. His mood is calm, without much fluctuation or emotional outbursts; he is often lazy and apathetic. But at times he becomes agitated, clowns and annoys everyone. He himself describes these states as follows: "There are times when I start to talk nonsense; I reproach myself for it afterwards but at the time I can't control myself; something comes over me."

In marked contrast to his calm demeanour and a certain affective turpitude, is his passion for his mother; he treats her with passionate tenderness, overwhelms her with caresses, and has tears in his eyes whenever he meets her or parts from her. On the whole he conforms to the rules of the unit. Has occasional attacks of obstinacy – apparently motiveless resistance to trivial matters. When asked by the child carer to move up a little at the dinner table, he replies: "I have my principles and am pedantic and therefore I will not do it."

He works hard in class. Is pedantic and orderly; but helpless when manual dexterity is called for. In free periods he wanders about aimlessly unless he is reading. Never initiates any activity; importunes, annoys and bores evervone with endlessly recurring questions. For example, he asks everyone repeatedly: "How many votes did the different parties get in the English elections?"... "Which are the best strains of rabbits?" etc. Writes notes with absurd contents to his doctors and child carers, put a card into the bag of one of the doctors which reads: "Honorary member of the society of fried dogs"; in another note he announces that he is giving a "lecture on all the nutrients contained in cotton wool!". Apart from this, his essays on political topics are good, he writes comprehensive articles for the children's newspaper, some of which demonstrate excellent literary gifts (a journalistic style with a touch of humour).

He improved markedly during his stay in the therapeutic school: he became calmer, his school work improved, he was less clumsy and worked in the woodwork department. Occasionally, he even took part in PE and eurhythmics.

In summary

Above average intelligence; with a definite literary gift. At the same time there is an impression of something bizarre and odd about him. This impression is increased by his tendency to absurd speculations and his frequent outbursts of silliness. His mood state is generally calm with much tender feeling towards a few people who are close to him.

Physically

Tall, asthenic-eunuchoid body build; dry skin (ichthyosis), manifestations of tuberculous toxicity. Nervous system: increased tendon reflexes; manneristic, hopping gait; expressionless facies; motor clumsiness.

Course: marked improvement during his in-patient stay.

Diagnosis: personality disorder; schizoid (eccentric).

Case 6

P. P. aged 12 years, Russian, from intelligent family. Family history: Father: pathologically absent minded, high minded, truth-loving, talented, wrote poetry and stories, mathematically gifted. Paternal grandfather: a cultured man, autocratic, poor father. Paternal grandmother: moody, stubborn. Paternal uncle: gifted mathematician. Mother: egotistical, quarrelsome. Gambles and takes no interest in her children. At the age of 30, she developed cleptomania: stole from friends and shop lifted. Musically gifted and played in concerts. Improvises.

The boy was born at term and physical development was normal. Childhood illnesses: scarlet fever, measles. Was a quiet child in his early years: sat alone in corners and avoided other children. He was clumsy: "a little bear", had a stooped posture, was a poor runner, and very rarely mischievous. From an early age he was noticeably distracted, often lost in thought, with a distant look in his eyes. Always tactful, compliant and truthful; generally obedient but with occasional unprovoked attacks of obstinacy, when he would be totally out of control. Satisfactory intellectual abilities. Began school at 8 years. Took no pleasure in learning, had no special interests, and was an average pupil. He stood out because of his great persistence. Once he had started a task, it was hard to distract him. Until the age of 6, his material circumstances were good. But the emotional atmosphere at home was poor: he was neglected by his mother. At 6 years he went to live with his sister with whom he stayed until 1922. His musical talent was evident from an early age: he was exceptionally responsive to sound, and at 3 he spontaneously reproduced a number of tunes on the piano. He had systematic music lessons until 1922, when he was admitted to our Department.

On examination

Height age appropriate. Nutrition average. Body build: unmistakably asthenic: slim, long legged; broad, straight shoulders, protruding shoulder blades; stooped posture. Insignificant, right scoliosis. Flat, long chest. Development of subcutaneous fat and musculature satisfactory.

Polyadenitis. Genitalia age appropriate, no secondary sex characteristics. Internal organs: noisy expiratory sound, right apex. Rapid pulse. Nervous system: cranial nerves normal; brisk pupillary reflexes; tendon reflexes, especially patellar reflex, brisk; skin and mucosal reflexes normal. Red dermographism. Positive Aschner's symptom. All sensory modalities normal, with normal hearing and vision. Movements somewhat slow and hesitant. Rolling gait. Expressionless faces.

Laboratory investigations: blood: haemoglobin 70%; erythrocytes 4350000; leucocytes 7400 with marked lymphocytosis. W.R. negative. Abderhalden's (dialysis) test of thyroid and testicular function normal. Lability of both vegetative nervous systems.

Psychological examination

Adapts very slowly to his new surroundings, avoids company of other children and explains this by saying that: "the children are too noisy and disturb my thinking". Tense during the examination, with a serious, attentive expression; if he feels a stranger looking at him, he becomes even more guarded; unresponsive and uncommunicative; has great difficulty expressing himself appropriately. Satisfactory orientation to his environment. Associations are well ordered and sensible. Logical thinking satisfactory: his generalizations are good, his deductions correct; but there is a certain vagueness. He functions like a 15-year-old on the Binet scale. His psychological profile showed good attention, adequate memory and good higher functions: grasp and capacity for making cognitive connections.

In class, he is hard working and keen, works patiently and with persistence, listens with interest and concentration to what the teacher has to say. His work is erratic: sometimes he sits and works for hours at a time, at others he withdraws into himself and, despite his apparently attentive expression, he fails to respond when the teacher addresses him. Pathologically distractible. His attention does not appear to be diverted by external events but by inner experiences. Outside the classroom he wanders about with a distracted gaze, hunched up and alone, making no attempt to engage with other children.

He is silent and communicates his thoughts to no one. He is gentle and sensitive towards other people. Despite his apparent sluggishness, he is inwardly overemotional. He is tactful. He has deep feelings for the beauties of nature. Is extremely sensitive to the smallest rebuff, bursts into tears at once and seeks solitude. Remembers past stressful experiences for a long time. He is deeply emotional and very attached to his sister. If a letter from her arrives, he will hide in a corner to read it on his own rather than in the presence of witnesses, waiting patiently until he is left alone. Truthful and pedantic, he always takes a principled viewpoint. He never gives in in altercations

with other children; and cannot grasp the idea of accidental happenings or misunderstandings. He complies with the rules of the unit and there is no marked negativism or automatism in his responses. His school work does show a tendency towards automatisms: once he has started a task (e.g. copying out), he cannot stop. He is musically gifted, has a good ear, a rich musical memory, and performs quite well on the piano.

During his 21/2 year stay in the unit, he adapted to communal life with other children, took part in children's groups, and became more lively and animated. He often plays with other children and enjoys PE. He is now much more lively in play, with a fresh and cheerful look. But he remains reserved and silent. He is even tempered and quiet in relation to his peers, but has no intimate friends. His school and musical attainments are very good.

In summary

A reserved, silent "little old man", with an urge to seek solitude and quietness in order to withdraw into his inner world. Outwardly inactive and apathetic, he is at the same time very sensitive towards himself and others, and tends to feel things deeply. Intelligence normal. His intellectual achievements are somewhat impaired by his pathological distractability and his tendency to automatism. Musically gifted. Delicate body build with signs of tuberculous toxicity. Impaired motor development which has improve somewhat recently.

Progress: marked improvement during his stay in the therapeutic school.

Diagnosis: Personality disorder, schizoid (eccentric).

Despite individual differences in the clinical picture of the cases of schizoid personality disorder here reported, we think it is possible to define those characteristics which all the children had in common. They are as follows:

An odd type of thinking

- a) a tendency towards abstraction and schematization (the introduction of concrete concepts does not improve, but rather impedes thought processes);
- b) this characteristic of thinking is often combined with a tendency to rationalization and absurd rumination (see cases 1, 2, 3, 4, 5). This last feature often marks the personality out as odd.

An autistic attitude

All affected children keep themselves apart from their peers, find it hard to adapt to and are never fully themselves among other children. Cases 1, 2 and 3 became objects of general ridicule for the other children after their admission to our school. Cases 4 and 5 carried no weight among their peers and were nick-named "talking machine", although their level of overall functioning was far above that of the other children. Case 6 himself avoids the company of children because he finds it painful.

All these children manifest a tendency towards solitude and avoidance of other people from early childhood onwards; they keep themselves apart, avoid communal games and prefer fantastic stories and fairy tales.

Emotional life

There is a certain flatness and superficiality of emotions (cases 2, 3, 5). The latter is often combined with what Kretschmer has aptly called the **Psychasthetic aspect of mood**. This mixture of insensitive and oversensitive elements was seen in all our cases.

Case 1 had affective sluggishness as well as exaggerated sensitivity; case 2 demonstrated increased irritability resulting in explosive emotional outbursts, combined with affective sluggishness, in line with Bleuler's description of spasms and paralysis of emotions. Case 5 had a generally calm mood state and was at the same time passionately tender towards some of the people close to him. Case 4 was a gloomy, irritable misanthrope but also a tenderly loving son.

Other characteristics were as follows

- a) a tendency towards automatism (cases 1, 2, 3, 4 and 6) manifesting as sticking to tasks which had been started and as psychic inflexibility with difficulty in adaptation to novelty;
- b) impulsive, odd behaviour (cases 1, 2, 3);
- c) clowning, with a tendency to rhyming and stereotypic neologisms (cases 1, 2, 3, 5)
- d) a tendency to *obsessive compulsive behaviou*r (cases 1, 2, 3, 5); and
- e) heightened suggestibility (cases 1, 3 and 6).

We did not observe any definite negativism. Apparently unmotivated obstinacy was seen in two cases (5 and 6).

Definite motor impairments were found in all our cases: clumsiness, awkwardness, abruptness of movements, many superfluous movements and synkinesias (cases 1, 2, 3 and 4). Lack of facial expressiveness and of expressive movements (manneristic (cases 1, 4 and 5)); decreased postural tone (cases 2, 4 and 6); oddities and lack of modulation of speech (cases 1, 2 and 3).

As regards the possible relationship between body build and psychic structure, our observations support Kretschmer's somatopsychic syndrome: all our schizoid patients were of asthenic body build. But we cannot ascribe too much significance to these findings because all our patients were pubertal or prepubertal, and at this stage the asthenic/dysplastic body type prevails. The same applies to the frequent association we found between a schizoid constitution and tuberculous toxicity. This was also found in a high percentage of other children.

Our description of the symptomatology of schizoid personality disorder is similar to that of Kraepelin's eccentric type and to Kretschmer's schizoid group. The core features of schizoid people, as described by Kretschmer: autism and psychasthetic mood were present in all our cases. But the feature which best characterized our patients, and was invariably of help in the differential diagnosis, was the peculiarity of motor behaviour and the marked motoric impairment. If these observations are confirmed in a larger group of patients, they could shed important light on the biological/pathogenetic substrate of schizoid personality disorder. The motoric dysfunctions, accompanied as they were by a series of other symptoms: a certain lack of mimicry and expressive movements, peculiarities of voice and language, can be regarded as developmental abnormalities of specific brain systems. It would then be possible to find a biological/pathogenetic substrate for the "schizoid" condition on the basis of clinical observations. Our own observations are numerically too meagre for definitive conclusions to be drawn, but they suffice as a basis for these speculations.

The differential diagnosis of schizoid personality disorder should take into account a number of possibilities.

Milder cases must be differentiated from the normal. Isolated schizoid features are not infrequently seen in normal children who often grimace, repeat words stereotypically, and invent new words.

Many authors draw attention to the catatonic characteristics of children: their tendency to perseveration, echolalia, stereotypies in drawing, etc. Wildermuth draws a parallel between schizophrenic splitting of the personality and that state of affective splitting which can be observed in normal children at play. Symptoms of negativism and heightened suggestibility are particularly often seen in childhood.

Schizoid characteristics are especially common and prominent during the so-called critical periods of child-hood: between 3 and 4 years and especially at puberty.

The clinical picture of adolescence is reminiscent of the symptomatology of schizoid personality disorder described above. Puberty is characterised by a withdrawal from reality, an increased fantasy life, an attraction to abstract ideas, to philosophizing and rumination (what Ziehen has called the stage of "philosophical intoxication"). Ziehen, Lange, K. Schneider and other authors draw attention to a number of catatonic symptoms seen in adolescence: a tendency to stereotypy, to a self-conscious and flowery style, and a peculiar sentence structure. Lange stresses the silliness of the girls, their affected

behaviour and shyness; and the uncouth behaviour of boys, their dismissal of the usual conventions, their preoccupation with higher realms of thought, etc.

The physical characteristics of the adolescent period resemble those described for schizoid personality disorder: an asthenic body build, dysplastic features, uneven development of body parts, a predominance of length over breadth, etc. In addition, disturbance of motor functioning is a special characteristic of this stage: movements are awkward and abrupt, children at this time of life tend to drop things, knock things over, stumble, etc.

Homburger (11) discusses the "motoric crisis" of adolescence in detail. All these phenomena, he holds, are very similar to the disorders of schizophrenic patients, and he believes them to be due to an extrapyramidal disturbance: temporary during adolescence, but permanent in schizophrenia.

The above review of changes occurring at puberty indicates how easy it is to mistake them for the symptoms of schizoid personality disorder. But in all our cases schizoid features began in early childhood and could not therefore be explained in terms of the psychophysical characteristics of adolescence.

In the differential diagnosis of schizoid personality disorder, consideration must also be given to the fact that isolated schizoid symptoms can occur as a result of exogenous factors: primarily encephalitis and the personality changes it can induce, as well as other cerebral diseases and intoxications (narcomanias).

In paediatric practice one also often sees children whose personality has undergone a gross change, resembling the schizoid syndrome, but brought about by long-term psychogenic influences (a poor milieu or poor child rearing). This group includes children reared from early childhood in poorly organized children's homes, who have never experienced affectionate care. Emotional blunting and negativistic outbursts are common in such children.

In most of our cases environmental causes could be excluded on the basis of a detailed case history: pathogenic factors such as brain pathology, intoxication, or a poor child rearing environment were absent. Furthermore, the symptoms had been persistently present since early childhood.

In more seriously affected cases with multiple schizoid symptoms, the differentiation from schizophrenia can be problematical. We excluded a schizophrenic disease process because of the absence of any evidence of progression. In all our cases schizoid symptoms began in early childhood. Their development paralleled the growth of personality and provided no evidence for a schizophrenic deterioration. In none of our patients was there any intellectual decline which might have suggested a schizophrenic process. All affected patients were under our observation for a number of years and all were seen to make considerable progress. Case 1 had excellent achievements in

music and art. Case 2 did well at school and his personality became significantly better adjusted. Case 3 made good technical progress in music despite his oddities and reserve.

There have been no previous descriptions of schizoid personality disorder in children. Rinderknecht (20) reports on several cases, from Bleuler's clinic, who had some of the features of people with schizoid personality disorder (all were over the age of 16 years). All these patients had manifested autism, negativistic tendencies and frequent hebephrenic or catatonic outbursts since early childhood. After puberty antisocial tendencies developed. The author called these patients "criminal heboids" and believed they belonged to a special sub-group of the schizophrenias with a progressive course and an end state of dementia.

The antisocial type described by Meggendorfer (19) under the label "parathymia" resembles Rinderknecht's cases. This author too believes these cases to constitute a sub-group of the schizophrenias. Like Rinderknecht, Meggendorfer used the concept of schizophrenia in a very broad sense.

If one adopts this broad definition of schizophrenia, then our cases too might be regarded by some authors as having latent or mild schizophrenia. But is such a broadening of the concept of schizophrenia really helpful in clinical practice? Does it facilitate psychiatric diagnosis? or does it lead instead to even greater conceptual confusion and misinterpretation? Where the boundaries of schizophrenia are to be drawn has once again become a

topical question, because the concept of schizophrenia is now public currency (Ewald (6)).

In analysing our case material we took as our starting point the concept of schizophrenia as a disease process with a definite tendency towards disintegration of the personality. Our patients had none of the features which might suggest that they belonged to this group.

Our childhood case material seems particularly well suited to shed light on the divergent views of schizoid personality disorder. The processes of schizophrenic deterioration are more obvious in children; the schizophrenic disease process is more malignant in childhood, because in addition to the destruction of a mature psyche there is impairment of the developmental process itself. The patients described above are the more instructive because of their very early development of schlzoid symptoms, which remain stationary with no evidence for any personality deterioration but, on the contrary, a steady improvement and growth of personality over time.

Our observations force us to conclude that there is a group of personality disorders whose clinical picture shares certain features with schizophrenia, but which yet differs profoundly from schizophrenia in terms of its pathogenesis. At present we can only speculate about the possible biological/pathogenetic substrate of this disorder. The explanation that best fits the clinical phenomena is that schizoid personality disorder arises on the basis of an inborn deficiency of those systems which are also affected in schizophrenia (but that in the latter condition other, additional, influences are at play).

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