PSYCHOSES IN CHILDHOOD.

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In the early literature of mental defect there are allusions to behaviour, shown by defective children, which would now tend to be regarded as psychotic. This is probably one factor which has led psychiatrists into thinking of psychosis in childhood as an exceedingly rare occurrence. It now seems at least possible, if not probable, that many cases of early psychosis have been missed because the end-result has been equated with mental defect. In a sense it could be so classed since psychotic children are very often rendered ineducable by reason of their disorder, which sometimes seems to date "from birth" (Kanner, 1943), and in others certainly arises at an early age. However, the term "arrested development of mind" is less applicable, since the mind of the psychotic child appears to develop in a distorted and unbalanced way, showing some faculties to be absent and others apparently developed in a precocious manner (Bender, 1947).

I know of no completely satisfactory definition of childhood psychosis. It is far from satisfactory to borrow the terms used for adult disorders, only to say that many of them do not apply. Since the impact of the disorder is on an immature and therefore not yet integrated personality, the result is both an arrest in immaturity, and an extensive disruption of the formative patterns of personality. Certain capacities, notably that of object-relationship, are most severely affected. Sometimes muscular co-ordination seems to be exceptionally well developed, perhaps because it functions without the brake normally supplied by the need to conform to an environment. Speech is usually severely affected, rote memory often surprisingly well sustained.

Perhaps psychosis in childhood can best be defined as a disorder, sometimes apparent from birth or from a very early age, and sometimes occurring as a deviation interrupting an apparently normal development, which affects the total organization of the child and his further development, so that he becomes unable to relate himself normally to either people or things.

These cases are still described in the literature as very rare. Both Bender and also Kanner, working in the U.S.A., stress that this condition is commoner than was supposed, and that has been my own experience, especially since drawing my cases largely from paediatric sources. These children appear to their parents ill, disordered, and different from any normally developing child, and so they tend to be taken to hospital.

The merely backward child seems to be a slower and clumsier edition of his better-endowed siblings. The psychotic child has a peculiar quality which is recognized almost from the onset of his disorder, but which is harder to pinpoint in the infantile cases since so little is demanded of the infant and very young child. Of Kanner's reported cases (Kanner, 1944) which he regarded as

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congenital, nearly all were referred for an obvious developmental failure, such as not acquiring speech at the normal age, or because backwardness was feared for some reason.

Where this happens, and the peculiar features so distinctive of psychosis are not recognized, the label of backwardness tends to stick. It is suggested that if a really accurate picture of the early development could be reconstructed for all the patients in any one hospital for defectives, a large number whose condition in childhood was primarily one of psychosis would be picked out. Earl, in 1934, pointed out that idiots were prone to psychotic episodes, but although they may reach the same end-point, the primarily psychotic child is not seen as abnormal until the onset of his illness.

It is therefore possible to hypothecate a series in which a child may be affected by the psychotic process so soon after conception that his illness is already in process at the time of his birth. His whole pattern of development will be subject to the distortions imposed by this illness. He will clinically be represented in the series as a case of Kanner's early infantile autism. Somewhere in this series will come those children whose early development is recognized as fully normal until they reach, say, the age when they are expected to begin to talk. Speech may even have begun hopefully, but the child does not progress towards using his speech to express his wants and his feelings. His words are often a list of names or phrases which he repeats. Even this may die away and he becomes mute. In such cases it is, of course, extremely important to exclude deafness, and the difficulties of being sure about this under school age are very cogent.

Beyond that again come children who, in response to some stress or perhaps without any apparent emotional problem, learn and develop normally for some years, and then have a psychotic illness in which they cease to speak, or in other ways demonstrate what Kanner has called "extreme autistic aloneness." These are children who suffer an intercurrent psychotic illness, a process which in a number of cases proves to be irreversible. Finally there are the children who are in some way predisposed to this disorder, and who become psychotic temporarily and who recover from it.

In each of these situations it would seem likely that we are dealing with some unknown factor, together with an inherited vulnerability, plus environmental difficulties leading to emotional distress. Melanie Klein (Klein, 1948) would, I think, regard the failure in object relationship, and in consequent capacity to form symbols, as primary, and she associates it with the failure of the small child's undefended ego to master the severest anxieties. In her view psychosis in early childhood is not so much a regression as a failure to progress beyond a phase of great danger. As a result of that failure, further development ceases. Since, however, this is a phase occuring as part of every child's development, it is still necessary to explain the situation within the child which allows fixation to occur at this early point.

Organic Psychoses.

Very much the same pattern of behaviour is shown, at first, in the organic syndromes, and in this group cases appear to start a degenerative process in early childhood, with or without fits, which progresses towards a final dementia. This process may be rapid and relatively easy to diagnose, as in Schilder's disease, or may, where the whole process is long drawn out, provoke much clinical doubt. In the early stages of these illnesses the children often show the same features as in the psychoses without signs of organic involvement. First their speech is lost, then their outgoing interests and social capacity, with subsequent regression, and the failure to maintain social adaptations already learned. Motor capacity is preserved longer, but eventually runs to seed in a series of endlessly repeated stereotyped activities. The similarity in behaviour pattern is confusing in a cross-section of the illness, but can be seen clearly when a long view is taken and the deterioration carefully watched.

If it is true that in all these syndromes we are seeing the effect of a failure to maintain integration, then physical interference with function will obviously be one of the main gateways, but the path will lead downhill. In the purely psychotic reactions of early childhood it is of great interest that they are usually not progressive beyond a certain point. Either the condition is selflimited, or some equilibrium is reached, for the child remains healthy, and often very active in his limited and peculiar fashion. In the organic syndromes the condition progresses. In the literature, however, it will be noted that here and there, for instance in Tramer's description of a child whose mother kept a day-to-day diary (Tramer, 1934), and in Bovet and Jequier's cases (Bovet and Jequier, 1949), a unilateral extensor response was sometimes elicited, without other signs of pyramidal dysfunction. It is difficult not to confuse the issue by calling one disorder "organic" because it can be seen to progress, because the nature of the pathological process is known, if not the cause, and because post-mortem studies are available; and to call the other group psychoses without the prefix organic, merely because the disease is self-limited, because no organic process has been found to account alike for every case, and because post-mortem studies are usually not available.

To quote Schilder himself (1935), "Inferiority of the brain, acquired or constitutional, will lead to an increase in the emotional and intellectual peculiarities in a child's behaviour . . . primitive drives and emotions, as well as primitive motor tendencies, will therefore come out. . . . these pictures are reaction types of an undeveloped and pathologically inferior brain organization."

The terminology of the psychotic disorders is almost as confused as the pathology, but with less excuse. Where basic pathology remains unknown, classification tends to be based on clinical descriptions, attached to a name, and imperfectly adopted by subsequent users of this term, and the literature is full of such contradictions. For instance Heller (1908) described his original cases of dementia infantilis as being clear of epilepsy. He would class a deteriorating psychosis with fits in early childhood as a phrenasthenia aparetico-aphasica tardiva, but Kennedy and Hill describe a case of Heller's dementia with epilepsy. The differentiating criteria adopted in describing childhood psychosis do no more than emphasize how difficult it is to think clearly while so much of the disease process is unknown.

We shall, however, be quite safe in describing children who appear to be psychotic from birth, children who become psychotic in infancy, or in early childhood, and children who develop psychosis in later childhood but before the age of puberty. As a general rule the age of 12 is taken as the upper limit of childhood, and any psychosis occurring for the first time later than this age is very possibly associated with the emotional and physiological disturbances so common around the time of puberty, and it seems better not to include them in the psychoses of childhood.

Is Childhood Psychosis always a Schizophrenic Reaction ?

If we take the definition of psychosis as a total derangement of the organism, then it is very likely that any disturbance as severe as this will, in the not yet integrated personality, precipitate splitting mechanisms, so that the disorganized picture becomes schizophrenic-like.

It is difficult to say why manic-depressive syndromes are so rare in early childhood. Again, turning to the analytic writers, Klein (1948), Scott (1948) and Winnicott (1945) all recognize depressive illnesses in early childhood, Melanie Klein going so far as to hypothecate the existence of the depressive position as a phase through which the child passes in the course of normal development. My clinical approach to children is not through child analysis, and therefore I am not equipped to support or refute her view, but I think we would all agree that very deep and disruptive reactions can be associated with states of mourning in young children. The clinical picture is perhaps most commonly seen in the pre-school child who is evacuated to a residential nursery, or as in the well known "Grief" film of Rene Spitz. The physical accompaniments of apathy and inertia, the inconsolable quality of the crying, the anorexia, the regression in personal habits, and perhaps most frightening of all, the rapid loss of any capacity to renew human contacts, is very strikingly like the depressed and depersonalized adult.

The manic flight is still more rare, and I can only recall seeing two really typically manic children. One of these was recovering from an acute encephalitic illness of unknown origin, and the other was an older boy of borderline intelligence, where the manic flight appeared to be a defence built around his very inadequate capacity.

The child analysts have led the way in propounding a psychopathology of the psychoses based on the analyses of normal and of disturbed children, and I do not doubt that we shall begin to look more intelligently on some of the hospitalization reactions as possibly related to depressive illness.

Nevertheless, at the present time to talk of a psychosis in childhood is, to all intents and purposes, a discussion around schizophrenic-like states in childhood.

The Condition Regarded as Congenital.

Kanner in 1943, and subsequently, has described a condition which he has named "early infantile autism," emphasizing that the children have never been otherwise than highly autistic, lacking in rapport, and in many instances mute. Most of these cases were referred for a supposed intellectual defect, or failure to acquire speech. The possibility of a deafness or an aphasia must be ruled out on clinical grounds. These children are not deaf, and they appear to understand spoken language when their interest can be caught sufficiently to attend to it. There is no doubt that many of them will eventually find their way into schools for the mentally defective. In this group, since the child has never been quite normal, and is often very late in talking even where speech does develop, the diagnosis of mental defect is made and the unusual pattern of early development is lost. According to Kanner, the parents of these children are often highly intellectual; indeed a high proportion of his recorded cases seem to be the children of psychiatrists !

One wonders, however, whether there are not as many of these children, from less socially favoured families, where the child has had to be institutionalized. Until this condition is recognized clinically, and looked for, the incidence will not be known. It is, however, these children that I would suggest are lost sight of in what is essentially a social diagnosis of undifferentiated mental defect. The interesting thing about them is their great similarity as a group. This will not be surprising if eventually they are traced to a unified pathological process, or to a disruptive process occurring at a particular point in development. Winnicott (1945), in an important paper which throws much light on the possible mechanisms of this condition, considers that around the age of five months the critical developmental level referred to by Klein is reached. One might therefore search the early histories for factors occurring around that date. Kanner notes the frequency of early feeding difficulties. In my own series of cases, 16 probably come into this category of congenital or near congenital cases. Analysing this admittedly very small group the following points seem to call for further inquiry :

Six children are in M.D. colonies, and 2 who are still under four look like graduating to one, i.e., half the group are loosely regarded as mentally defective. Of these 8 children, 3 had a history of threatened abortion with bleeding at dates between the third and sixth months of pregnancy, and 4 had a history of illness in infancy between four and a half and six months (post-natal), after which their development appeared to alter in a significant way. In only one of the eight " defective " children was there a perfectly clean sheet as regards the months of pregnancy and events in early infancy. Of this one child, the mother said that she appeared never to respond to her mother, who in turn admitted to having no feeling of affection for the child.

Of the remaining 8 who are distinctively psychotic and not likely to be taken for defective, 7 have unusual parents who are either highly intellectual and somewhat obsessional or admittedly psychopathic. In only I child out of 8 was the nurture and the parental background wholly normal and natural.

These few examples then, as far as they go, seem to support the thesis that in a high proportion of these cases the early history merits a careful analysis. In the group who emerge as *in effect* defective, the pregnancy history is not straightforward, or the very early development seems to have been interrupted by illness just at the date considered so critical by Winnicott.

Of course records could supply many hundreds of histories with similar disturbance where normal development seems to have been safely resumed. Maybe herein lies the unknown factor in these cases, either constituting a particular vulnerability to such disturbance, or an inherent inability to build

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up defences against the disruptive process. These points are put forward as indications for further investigation ; it has been frustrating to try and apply the same sort of simple analysis to case-histories in the literature, only to find that half of them are for instance given without any reference to pre-natal or natal and immediately post-natal occurrences.

The cases which I have seen are consistently like those described by Kanner. In all there was the alert, intelligent expression described by him, with quick and well co-ordinated movement. All were autistic, and mothers often used the expression "living in a world of his own" or "he seems miles away." All showed a limitation of speech; some with echolalia and a stilted verbalization, or a late developing speech which shortly died away altogether, and 5 have never spoken at all. All showed a tendency to stereotypy in movement and a restriction of interests, preferring above everything to watch moving objects; 7 of them were "spinners" who either spun themselves round and round, or who developed an uncanny dexterity in spinning any round object again and again, content to watch it. While some of these children tended to cling to adults, none showed a normal affectionate response to tenderness. At the same time as unpredictable moods and fusses, all showed considerable indifference to their surroundings. Nine of them showed major sleep disorders during the years when the psychotic state was becoming established.

Psychoses Preceded by a Period of Normal Development.

In the children who developed a psychosis, the factor of vulnerability is peculiarly hard to assess, since their history prior to the illness has often not been noted with any particular accuracy. Once the child has become ill, however, the back history is reviewed, but always in the light of the illness which has subsequently developed. How much reliance can be placed on the history which begins "Now I look back I remember . . . ?" Again Kanner points out that, since a highly obsessional parent is one of the difficulties related to this condition, even those parents who do keep day-to-day records may be thereby demonstrating the harm they do by such meticulous scrutiny. Reverting to the Kleinian theory, if the development of schizophrenia in later childhood is related to a failure by the ego to sustain itself against severe anxiety, one source of anxiety is the intellectual parent who seems both remote and exacting to the child who so urgently needs to be sustained by a tolerant affection, capable of seeing him through his most negativistic and hostile phases.

A further difficulty arises over just this point of "vulnerability." We see fleeting moments of schizophrenic-like behaviour in many children, who fret and become disturbed over some major alteration in their lives. The normal child will often regress alarmingly during a period in hospital, at the birth of a younger sibling or at the loss of some loved figure, but the situation is surmounted, and could hardly be regarded as even a psychotic episode. From such little-noticed beginnings develops, in these especially vulnerable children, the full-blown schizophrenic attack. Naturally this raises the question, "Were they ever fully normal?"—has the untoward occurrence merely highlighted a degree of rigidity and unadaptibility, present from birth, but until now not called to account? The other doubt which other observers as well 1951.]

as myself have felt is whether these children are recovered early schizophrenics who are first noticed in a relapse.

Sometimes, too, the disappointment of parents is all the greater because, before the psychotic illness, the child was a model child, an exceptionally good baby, something highly prized but with an almost unrealistic accommodation to parental hopes. Are we seeing here already the ominous passivity and the readiness to learn by rote, and to mimic, rather than to prosecute an egodirected activity for its own ends? With such doubts in one's mind, going over the cases in the literature raises many questions of this kind.

However, there are undoubtedly children who eventually become psychotic after a clear history of months or years of normal development, without it having appeared at all likely that this would be so at an earlier stage. Again, very few have no precipitating cause to show, although the false reasoning of "post hoc, propter hoc" is difficult to guard against. Of 17 cases personally observed, only 3 began without any obvious cause. In 6 the psychosis developed out of an excessive reaction of protest and the arrival of another baby, and 2 followed the loss of a loved figure—in 1 the father who left home for an operation, in another a crippled elder brother who died. In 3 cases there was an illdefined illness out of which the psychosis developed. In several others, changes such as an operation on the child with hospitalization, or the return of a father from active service, or a journey overseas, appear to have brought on the attack. In only 3 of the 17 cases was the psychotic illness itself the first sign of disturbance.

In all, speech is involved early and rapidly fades to mutism, and all but one child showed evidence of anxiety, unrest, fear of strangers, difficulty over feeding or elimination, but these distressing signs are more frequent, and the motor restlessness somewhat less marked, than in the earlier group. No less than 12 showed difficulty over sleep, often with periods of wakeful activity with laughter and talking to themselves during the night.

The youngest age of onset was one year, where the illness followed abruptly on an operation for intussusception. In the others the ages of onset ranged from one year ten months in a boy who became acutely hysterical, anorexic and anxious when his mother went into hospital to have a second baby, to four and a half, the latter being I of the 3 for whom no cause could be found. In the remainder the age of onset lies between two and three, thus falling into the notoriously difficult period of negativism in early childhood. The condition is only very slowly progressive, the eldest of the group being now fourteen. His condition as far as I can tell is quite stationary, except that, having no contacts, no speech, and no interests, he tends to become more difficult to manage as he gets older and stronger.

In none could I find any evidence of physical deterioration or brain pathology. Insulin was tried on one case, a dementia infantilis, and she unfortunately succumbed to a cerebral haemorrhage in an irreversible insulin coma, but the post-mortem showed no focal changes in the brain apart from those associated with her death. Three are in institutions for mental defectives, and the fourteen-year-old boy awaits admission to one. One boy appears to be responding favourably to psychotherapy.

The Psychotic Attack with ? Recovery.

Bender (1947), in her series of 100 children, states that a considerable number respond favourably to treatment or remit spontaneously. Her experience of cases is exceptionally large, but I can only say that in my own practice the results are anything but hopeful. This is partly due to the severity of the attack impact on the un-integrated organism, so that there is a likelihood of disintegration, or what Winnicott has called "falling to bits " of the personality. These long illnesses constitute such a formidable interruption to normal development that life can never be quite the same to the child who has experienced such an attack.

One boy had his acute attack at the age of four and a half. It was in the middle of the war, with air-raids at their height, but otherwise there was no clear precipitating cause. He remained a much disturbed child for some years, excessively dependent on his mother, anxious, solitary and almost speechless, grimacing, attitudinizing with regressed personal habits and disturbed sleep. He was seen again, and treatment began at the age of eight. He spoke in such a fragmented way that therapy was mainly effected by his drawings, which could sometimes be interpreted to him. He was at least able to make an active transference relationship, and through that to regain some measure of control over his disturbing fantasies. By nine and a half he was able to go to school, although he had no idea of reading or writing and required much special tuition. He made a very poor contact with other children, and often appeared weepy and afraid for no obvious reason. Now at thirteen and a half he is still in school and regarded as a timid and dull boy. He is quite without number sense, but he reads well and draws very well, though not nearly so well as when he was ill (Bender describes a similar heightened artistic ability during the acute illness). The most striking thing about him is his inertia and lack of initiative and his inability to make friends. During a holiday with normal rather aggressive children he became more active, but very paranoid about the wardens of the hostel. I think the likelihood of further schizophrenic attacks is very high indeed.

The other child is a boy now six, who went into a fever hospital at the age of five, and was unduly isolated because of severe poliomyelitis cases on either side of his cubicle. Although he is said to have been a normal child before this happened to him, he had in fact always shown a poor capacity for expressing feeling, and had been late (aet. 3) in learning to talk. His I.Q. on tests is approximately 80. After three weeks in hospital he was discharged, and during this time he had not been visited. His parents were quite unprepared for his condition on return, and it really seems as if this severe reaction had escaped notice in the hospital. He was mute in so far as conversation was concerned. He mumbled all day to himself, and played solitary and unintelligible games. On several occasions he appeared to be hallucinated, and perhaps for this reason he feared being alone, though he made little contact with anyone present. He showed great anxiety over going to the toilet, and his sleep was disturbed by periods of laughing, talking to himself and rocking. He appeared to be quite without response to personal contact, and his expression was dull and puzzled. This state of affairs lasted from February to August with very

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gradual improvement, during which time he received psychotherapy. By September he became able to manage mornings at an ordinary school. He is still attending the clinic. It is open to question whether this is a schizophreniclike reaction induced by solitary confinement, and a breaking off of all the personal anchorages on which he seemed unduly dependent. It is certainly a reactive psychosis, of which the pattern is not like that of a depressive state. In this child, too, therapy was directed to effecting a relationship within which the terrifying fantasies could be discussed, and so to speak disarmed, by being related to a reassuring adult figure. It was much more difficult in him to discover what was happening in his mental processes. When he went off into this "world of his own" it was impossible to follow his activities. They appeared to be detached and undirected, almost as if the higher integration at the cortical level fails or is rejected. This is not put forward as an anatomical explanation, so much as a description of what appears to happen. It may mean no more than the anaesthesia which marks the dissociation of, let us say, a hysterical limb.

When Russell Brain in his recent presidential address given to the Neurological Section of the Royal Society of Medicine (1950) said "the receptive function of the cerebral cortex is to provide us with a symbolical representation of the whole of the external world . . . and at the same time giving us similar symbolical information about our own bodies and the external world," and Melanie Klein can say of a schizophrenic child, "The ego has ceased to develop phantasy life and to establish a relationship with reality : after a feeble beginning, symbol-information in this child had come to a standstill," and Bender, "the disturbance is in identification processes ; that is, difficulty in identifying oneself and thereby relating to the rest of the world is the essential psychological problem," it seems that we may all be very nearly saying the same thing.

The whole study of these children calls now for greater accuracy. They are no longer the rare phenomena they were thought to be. They are now known to be sufficiently frequent to require units for their care. Every possible approach needs to be made, physiological, biochemical, by means of E.E.G. and by means of therapeutic work, analytical and otherwise. Meticulous casehistories are required, and inter-family relationships come into the foreground, since these children demand such peculiar adaptations from the adults round them. The fact that a patient's behaviour appears unintelligible does not preclude us from recording our observations of it, and I cannot help thinking that most illnesses have seemed unintelligible to those who did not know all the facts. The bold application of speculative imagination, provided it remains linked to observed fact, is as likely to take us forward as any other method.

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