

The Autistic Child

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In 1943 Kanner called attention to a group of children with a marked disturbance of affective contact which he felt could be differentiated from other severe non-neurotic childhood disorders. In this, and in subsequent, papers he and others further described a relatively uncommon psychotic illness which had the classical triad of inceptation in the first one-half to one year of life, an insistence on sameness, and an extreme isolation with respect to human contact but not inanimate objects. The new syndrome was named "early infantile autism."

I have had the opportunity to treat a 3½-year-old girl with many of the features of this illness. However, before I discuss the case material, I should like to present a somewhat detailed formal delineation of the syndrome.

The first of the members of this triad, the early onset of the illness, may be difficult to recognize even by a skilled observer. Since this is so, the parents often do not bring the child for a diagnostic study until he is several years old, forcing one to rely on the observations of a biased and unskilled person. Fortunately, the parental observations can, in this illness, often be taken a little more seriously than in other childhood psychiatric illnesses. This is so because of certain peculiarities of the parents, one of them being that they frequently keep precise, detailed diaries. These diaries, by their very revealing nature, dramatically demonstrated how little aware the parents are of an even later gross psychopathology. However, we shall forego the discussion of these parents for now and take it up a little later in the paper.

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Early signs of the illness are a lack of the anticipatory posture prior to being picked up and the failure of a smile response, with the assumption of a vacuous, distant stare. The stare often has the effect of making the child appear wistful or pensive and is perhaps the most striking physical symptom in these children.

Behavior problems are not usually present in the first 2 years of life. On the contrary, the parents will frequently say of their child that they had an obedient, well-behaved baby who didn't cry or interfere much in their lives, but who in retrospect did not seem to recognize them. A common parental comment is, "It seemed like he just wanted to be left alone."

Their passion for sameness may be recognized early as a keen awareness of even minute changes in the environment or favored objects, leading to an insistence on similar surroundings and play situations. If a preferred toy has this or that small scratch or defect which was not put there by themselves, they will often show rage or accentuation of withdrawal. No attempt to comfort them is successful. It is important to emphasize that these early signs, especially those occurring in the first year of life, are most frequently missed and become apparent only in retrospect.

Their extreme isolation is perhaps the most obvious major symptom. Except when they so choose to make contact to get something, humans seem to exist for them only as meddlesome intruders or agents of frustration. The autistic child will so completely ignore people while engaged in his activities that the parents will frequently suspect deafness. The child will further ignore efforts to interrupt the autistic preoccupation with his inner world even to the exclusion of such pleasurable games as peek-a-boo-

and patty-cake. The term "ignore" is perhaps an incorrect one, since the act of ignoring requires perception followed by a willful refusal to respond. At least with some of these children it would be more accurate to say they seem "unaware" of any stimuli other than those concerned with their autistic preoccupations. If the magnitude of the stimulus makes this lack of awareness impossible, they can react with an active turning away or rejection of the stimulus. If this fails, a common response is a catatonic-like rage.

In contrast to his poor relationship to humans, the autistic child relates well to objects and may violently resist efforts to take away a favored piece of string or torn cloth. When these children begin to play with toys, and this is usually late, it is noted that they have a good ability to handle these objects and will occupy themselves for hours, but that this play is highly repetitive and difficult to interrupt. The toys are frequently fingered, mouthed, and smelled long after this kind of behavior is normal. It eventually becomes obvious that the child does not perceive the function of the toys but treats them as objects per se.

Although many autistic children are mute, the majority can say words, and even the mute can occasionally speak under emergent conditions. I use the phrase "say words" advisedly. Although most of these children "say words," what they say may not be useful for purposes of communication. Either they may echo words or phrases without having any idea of the content, or they may demonstrate a delayed echolalia, in which the stored phrases may appear even months later, complete with the vocal inflection and even the posture, of the imitated speaker. In the latter case fragments of sentences and words may be placed in juxtaposition so that they are incomprehensible. However, the fact that they can echo speech does not mean that they are paying attention. It often takes many repetitions to get even an echoed response. When they do say something, one is immediately struck

by the peculiar wooden and mechanical quality of the voice, which makes it sound like that of a ventriloquist.

As the child gets into his second and third years, the parents may notice that even such routine activities as getting up in the morning are affected by their autistic tendencies. When they first arise in the morning they make no claim to ownership; i.e., they do not seem to place a personal value on their beds, and they can change beds without the emotional upheaval of the normal child. Often they will cover up their eyes and ears upon awakening, and when their parents try to dress them, they seem to wall off this effort by closing their eyes and turning their backs also. Some of the children do not get out of bed right away but get a toy or an object and then return to their bed, and only after awhile will they even acknowledge anyone else.

They apparently have a severe perceptual defect, manifested by difficulty in differentiating figure from ground and part from whole. They may recognize voices but not faces, pictures but not people. They rarely are aware enough to appreciate even simple dangerous situations and consequently are quite accident prone. Even the perception of their own bodies as an integrated whole with definite boundaries is severely distorted. They may attack their own hands or feet, inflicting injuries without apparently feeling them. This poor differentiation of self from nonself possibly explains a commonly observed reversal of pronouns and confusion of attacker with the one being attacked. Despite this severe perceptual difficulty and low intellectual functioning, their intellectual capacity may remain intact and even appear exceptional. Their memories and abilities to cleverly manipulate objects are often remarkable.

Among other miscellaneous and poorly understood symptoms are a predilection for rhythmical movements, such as rolling, jumping, rocking, whirling, and occasionally a preference for play with water.

This syndrome has incorporated into it many symptoms commonly found in other severe disturbances of childhood. Although the concept is widely acknowledged, there are serious and thoughtful students of child psychiatry who do not accept it and consider the symptoms as a reaction to more basic defects common to all the schizophrenias. The reader is referred to Bender's papers on her theories of maturational lag and dysplasia. The major aspects of this important controversy will not be covered in this paper. I do feel, however, that at least an attempt at differentiating this illness from others may be useful.

Perhaps the entity with which autistic children can be most readily confused is mental defectiveness. In fact, one investigator considered autism as an oligophrenia with an affective defect. Indeed, as will be discussed later, if the disease goes untreated, the autistic child will virtually be impossible to distinguish from a defective child. However, even in the later stages the unusual memory of the former, the extreme isolation and aloneness, and the greater intellectual potentiality serve to differentiate the autistic child from the defective one.

On psychological tests the mental defective and the brain-injured child show a need to succeed and will withdraw to avoid the so-called "catastrophic reaction" in the face of failure. The autistic child ignores or resents the examiner and his tests. Also, the repetitive activities of the retarded child are not as elaborate or solitary as those exhibited by the autistic child. In addition, the latter rarely shows EEG changes or any other physical abnormalities. In general, one may say that the defective child uses his limited resources to adapt to reality, while the autistic child ignores his potentialities and reality.

Another superficially similar illness is "anaclytic depression." This syndrome has been described by Spitz in his study involving the effect on infants of being separated from their mothers at the age of 6 months, and then being reared in a foundling home.

These children become apprehensive at first but, unlike the autistic children, retarded in physical and mental development. Perhaps the major differentiating factor here is affect. The autistic child is affectless, if not disturbed, in his preoccupation, while the anaclytically depressed child is sad, forlorn, and later apathetic. Also, the latter condition can be reversed if a mother figure is replaced with a certain period. However, some anaclytically depressed children may closely resemble autistic children in advance stages.

Another syndrome discovered by Spitz is "hospitalism." This is a general retardation of all ego and somatic functions as a result of long hospital confinement without adequate human or environmental stimulation. The autistic child does not usually demonstrate such a panretardation.

Finally, the autistic child can be differentiated from other schizophrenic children, at least in the early stages, by the early onset within the first year of life versus onset at 2 or 3 years of age in the schizophrenic child, the marked insistence on sameness, and the higher degree of autistic withdrawal. Schizophrenic children, if they have not reacted to their overwhelming terror and anxiety with a secondary autism, will cling to the observer and try to get him interested.

In addition, the EEG of as much as 80% of these schizophrenic children is abnormal.

Of considerable importance is the low incidence of schizophrenia in the family of autistic children and the relatively typical parents versus the high incidence of schizophrenia in the families of schizophrenic children and, according to many, noncharacteristic parents.

As a clinic case, I was asked to see a 3½-year-old white girl, Mary X., who was referred by her nursery school for psychiatric evaluation. Since her entrance into this school, just before the age of 2½ years, she had been quite difficult to reach and unpredictable in her behavior. She was noted to be in a daze, content to sit in a corner in repetitive play. If interrupted,

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she would pinch herself and others, grimace, posture, and occasionally have a bowel movement. If not watched, she would wander off the grounds or nonchalantly walk across the blocks and toys of other children without realizing what she was doing. The mother took the child for an evaluation, although neither she or her husband, or the grandparents saw anything really remarkably wrong with the child. They attributed the complaints of the nursery school to an accentuation of the child's tendency to be stubborn and spiteful, secondary to an adjustment reaction in the school. The parents concluded that the nursery school did not know how to handle Mary, since before her entrance she had been generally obedient. They took her out of school and brought her to the clinic, not for a psychiatric evaluation, but to have her hearing tested. When the parents were told that the child had a very serious emotional disorder, they were quite skeptical. However, after three independent clinic observers and one private observer presented a uniform opinion to them, they agreed to treatment, but not without much anger toward the therapist and the clinic for bringing the psychiatric illness to light. The child was seen three times a week.

In order to understand this case X, I think it advantageous if we start with a condensed history of the mother. Joan X. is an attractive 21-year-old woman who is superficially charming but, by her own admission, inwardly detached, interested largely in herself, chronically angry and depressed. Mrs. X. was born in a Middle European country. Her mother and father separated upon her birth, and she went to live with her mother and maternal grandmother. She had almost no contact with her father, two brothers, or her father's family. Her mother was a business woman, who paid very little attention to her. Mrs. X. was left in the care of the more or less stern, distant grandmother. She was contented with living with her grandmother for the first five years of her life. At least she cannot remember

any serious difficulties. At about 5 or 6 years of age she began to be lonely for her mother, who would visit her only between business trips. She also wished to have a father like other children. However, she hastened to assure the interviewer that she wasn't too distressed over her loneliness, because she alleged she distinctly remembered making a decision at that time that she would have to rely on herself and not expect love and attention from others. Consequently, she became an aloof, distant child who was no longer unhappy, and in fact was content, with her solitude. She did not remember playing much with toys. She had one expensive doll locked in a closet that she would go to look at every once in a while, but not play with. Although she had acquaintances among other children, she had her first friend at the age of 9, but was not too close even to this girl. Most of her day was spent either traveling to the homes of relatives and family friends or on long walks through surrounding neighborhoods. At about 12 years of age she and her mother left her native land because of political upheaval. Her mother went on to New York, and Mrs. X. remained in Europe with family friends until she rejoined her mother, in New York, at the age of 13. By this time the mother had suffered a second severe financial loss, which wiped out her remaining family fortune. Mrs. X. said that her mother changed remarkably at this time. Although she was cold and sophisticated before, she now became bitter and extremely frugal. This caused Mrs. X. great unhappiness, accentuated by the newly imposed material limitations.

When she was 15, the family moved to California, where, while in high school, Mrs. X. met her future husband, then a Navy recruit. He was actually her first unchaperoned date. She was lonely, frightened, and very unhappy here in the United States and immediately accepted the attentions tendered by Mr. X. When she became pregnant, at the age of 16, she became even more frightened and depressed. Abortion

was considered but rejected by her. She got married and did not tell her mother that she was pregnant. The couple had neither previously considered marriage nor deeply loved each other at the time. The child was delivered without incident after a normal uncomplicated pregnancy. However, during the postpartum period she did suffer a kidney infection. Mrs. X. felt trapped by her responsibility and weakened by her poor health. She fell into a profound depression and became virtually uncommunicative for several months, suffering a weight loss of 30 lb. She felt overwhelmed, confused, and frightened by her role of mother, one she had learned nothing about in her early years of being jostled around Europe from one family friend to another. She tried to nurse the baby for the first three weeks. The child cried continually and did not gain weight. The mother finally went to a physician, who told her she was literally starving the baby to death because of a poor milk supply. A change to the bottle solved this particular problem.

Her subsequent method of feeding the child is significant. She rarely held the child to her body but sat it on her knee at arm's length and held the bottle in the child's mouth. Feeding was accomplished at four-hour intervals, according to the suggestions on a printed form. The child was never spoken to except to receive issued commands or to be chastised. She was rarely held or cuddled. From birth she was placed in her own room, and contact was limited to feeding. Crying was usually ignored but occasionally punished. Mrs. X. felt that even at 3 or 4 months of age the baby was crying to spite her and has admitted she expected Mary to be able to control herself much as one would expect it from an older child. At first Mrs. X. told me she didn't know better, but later admitted that she and her husband agreed that they were too young to be robbed of their budding social life and decided that they would not let the baby interfere.

The child's development was retarded. Her father noted she would not grasp his finger, would not follow an object with her eyes even until the age of 4 months, and did not seem to recognize her parents up until treatment time. She did not play with toys or reach for them until the end of the first year and indeed rarely smiled or showed any kind of emotional response. Interestingly, this lack of smiling is substantiated by her baby album. Of the 30 odd pictures in it only one shows the child with a smile.

She did not crawl at all, but suddenly, at about 18 months of age, got up and walked. At this time she was put in a playpen. Most frequently this playpen would be placed in some secluded corner far enough away from the mother and other people so that any crying would not be too disturbing. In general the playpen and her own room made up the entire environment of the child until the age of 2½, when she was enrolled in the nursery.

Speech also started precipitously. She said virtually nothing intelligible until about the age of 2 years, when she suddenly spoke in brief sentences. Bowel and bladder training was started at about 18 months and accomplished rapidly and easily for daytime control under very harsh conditions of threats and spankings. It was started under pressure of comments of friends and neighbors, and also to facilitate placing the child in a nursery. It was admittedly not started earlier, as might have been expected from this compulsive mother, because of a lack of interest. Nighttime bladder control remained a problem up until five months after the start of therapy, handled by the parents by waking the child up routinely every night at 1:00 a.m. to visit the toilet. This practice was discontinued only after considerable discussion and suggestion, with the result that the child wet infrequently just one week after they stopped the mentioned activity.

Of equal importance to the direct traumata to the child was the atmosphere in the home. There was always extreme tension, while each parent vied for the dependent position,

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each one accusing the other of being a spoiled child. On the one hand, Mrs. X. frequently became angry and depressed because her husband did not help her in the house and wanted everything done for him. He seemed to pay more attention to his Service and later college work and his own affairs than to her. She felt and, indeed, he appeared clinically to be passive, immature, and chronically irritable. On the other hand, Mr. X. considered his wife's demands burdensome and unjustified.

There were many sexual problems. Mr. X. suspected his wife of dating other men that she met on her job as a model and movie extra. He also complained of her frigidity. Mrs. X. complained that her husband continually fondled her and made excessive sexual demands.

Absorbed in their own problems, Mary was frequently made the object of both the parents' anger but was oftener ignored. As soon as possible, the child was placed in a nursery at the age of 2 years 3 months. For the next nine months the increasing complaints made by the nursery were considered the result of adjustment to a new environment and went neglected. In the summer, when the child was 3 years old, the parents borrowed money from the senior Mr. X., a physician, withdrew the child from the nursery, placed her in the care of the maternal grandmother, and went on a trip to Europe in an effort to save the failing marriage, as had been suggested in a consultation by a psychologist. Upon their return in the fall the child was again placed in the nursery, and it was this institution that insisted on a psychiatric evaluation. As previously stated, the parents saw absolutely no basis for such a request, but conceded that something was wrong. They concluded it was her hearing and took her to the pediatric clinic. Of interest is the continuing opinion of the maternal grandmother that Mary is a perfectly normal child, not very different from the way she remembered her own daughter, Joan, at the same age. I first interviewed Mary when she was 3 years 9 months

old, and the following is a report of this interview.

"The child and her father were greeted in the waiting room. The first thing that impressed me was the father's own lack of emotional tone and his rather abrupt, unfriendly manner. As for the child, she hardly seemed to notice me, even when the father called her attention to my presence. I took her hand, and she went with me without any complaints whatsoever and without looking up to see who was taking her where. By error I opened the wrong door leading into a small foyer containing a wash basin. She went up and looked into it, saying to herself, 'I can't wash my hands.' She repeated this several times, but the meaning of the communication could not be ascertained. We then found a playroom, and she expressed no emotion either of delight or unpleasantness upon entering the room. She first took up the doll and kept saying over and over again, 'Close your eyes.' I asked her whether or not the doll was sleepy, but she did not answer. She rapidly fingered several other objects, occasionally staring at one for several seconds in a somewhat manneristic way. Often she would look up at me without changing her distant expression and stare into my face for 15 or 20 seconds. She then discovered two holes in the floor and peered down through them to the ground below. She found a long piece of plastic that would pass through the hole but would not put it through herself and pulled me toward the hole, indicating to me by pointing that she wanted me to do it. I said, 'Oh, you want me to push it through,' and she repeated my words. When I did so, she quickly went to the hole, looked down at it, and stared into it, mumbling incoherently to herself for several minutes. She then found another object and asked me to push it through. Immediately after I did this, and while I still was stooped over, she put her hands on the back of my neck and with remarkable strength tried to push my head toward the hole. I complied, but later she would not let me up. I finally had to restrain her. After

I did this, she came up to me and stared into my face. Suddenly she began slapping me violently saying, 'Cry; I want you to cry.' When I told her that I thought she might be angry with me, she slapped me again. She stopped for a few moments and then struck me, saying, 'Cry, bad Daddy; cry.' She stopped spontaneously. Before I could again restrain her, she went to the door, saying monotonously, 'I have to see Daddy.' I asked her to come back and continue playing, and she did. She pushed a toy steamroller around for awhile and then discovered a small closet. She got inside and asked me to close the door. As soon as I closed the door, she pushed it open, indicating to me that I should close it again. All the time she kept mumbling something. She did this for about five minutes. She then got out and began to sing a song in a remarkably melodic voice about a pussy cat. She did not change her facial expression. It was just as if someone was animating a wooden doll. I joined her in singing, and this possibly pleased her, although, in keeping with the remarkably reduced affect of this child, this pleasure was barely perceptible. She went on to play with a little doll and kept telling it to shut its eyes and asked me to shut the doll's eyes. I again tried to engage her in play, but when I could not do as she asked (as the doll was broken) she ignored me. She played with this doll over and over again in a very repetitive way, trying to make the lids function. I put some clay over the doll's eyes to simulate lids, and she took this up and added some more clay. Several of my verbalizations were echoed verbatim by the child several times without her apparently understanding them. When I told her our time together was up and we had to go, she made no response but continued playing. When I took the toy from her, saying we would have to put it away, she became very angry—resisted and tried to pinch me. I put her hand in mine, and she suddenly stopped. It seemed that placing her hand in mine was a signal for to obey any commands. In the hall she said, 'I want a

drink,' but spent most of the time sucking at the stream and rolling her tongue around in it. She splashed some of the water on me in a disjointed way, without any obvious playful, or even angry, intentions. During none of these maneuvers did her facial expression change. When I brought her back into the waiting room, she did not appear to be particularly affected one way or the other by seeing her father. When he approached her, she said, 'No,' and sat down on the bench. She then asked, 'Where are we going?' He roughly picked her up, and for perhaps 30 seconds she stiffly retained her sitting posture. He then answered her question in a sarcastic manner by saying, 'Maybe we'll go to the race track.' Again I was struck by the hostile, anxious manner of the father. He did not produce even the conventional smile when I offered to shake hands with him upon leaving."

Over the next few weeks I came to appreciate the marked autism of this child, which on the first interview was only suspected, since she did react somewhat to me. Her useful vocabulary was limited to perhaps 20 or 25 words, employed to order me around as though I were an automaton. There was little two-way communication via play or words. After several visits she allowed me to carry her, and she soon began rubbing her cheek and lips on my face. She seemed to be functioning on a gross body contact level, and I decided to invade her autistic world on this level. I noticed she liked the feel of water on her tongue, and I fed her from my fingers by letting the water drip off onto her tongue. This permitted the first real contact with the child. I noticed that she also liked to fly through the air into my arms from the bench top, and I permitted this also, although it was months before she recognized who was catching her. One time she jumped at me, even though I had my back turned. I carefully explained the front from the back of me, and she echoed my words for a few weeks each time that she would jump.

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She was preoccupied with spinning objects, although she herself did not whirl. I had to keep a top going the entire hour, even though she was afraid of it. Later, when I repeated explanation and demonstrations of the innocuousness of the top, she conquered her fear and no longer insisted on this activity but replaced it with the revolving record turntable.

Her play was highly compulsive and repetitive. If I interrupted her, she would pinch herself and, later in therapy, the therapist. Often she would posture and grimace as a reaction to this interruption, although occasionally she did this spontaneously. Her poor delineation of her body awareness and boundaries was graphically demonstrated one day when she accidentally pinched her finger severely enough to leave a welt. She hardly seemed to feel it and told me, "You hurt yourself; cry." I pointed out directly to her that it was her finger that was hurt and not mine, but she monotonously repeated this request until I finally simulated crying, after telling her I would pretend because she wanted me to.

Her aggressive acts toward herself and the therapist presented a difficult problem. With a few exceptions, the early aggression was self-directed and appeared to be related to anger arising out of frustration of this or that wish. Apparently, she could select only herself as an object for this hostility, since from the history the parents severely punished her hostile acts toward adults. At first I encouraged her to direct her aggression outward, and it took the form of pinching, striking, and kicking the dolls. In an unwary moment the therapist became the target for these assaults but, fortunately, it was not difficult to direct it toward the life-sized dummies. Through constant verbal repetition of her actions, I tried to give her words for her feelings, such as "I made you angry, Mary, because I wouldn't let you break the toy." When I felt she mastered the concept (and this took months), I added, "You pinched me because you were angry with me," and even later I said, "That hurt,

and you can tell me when you are angry." After several months the aggression became a minor problem. Now when she is angry, she will say, "Go away," or she will announce her departure into another playroom.

The child reacted to my efforts to help her control her other impulsive behavior in an interesting way, exemplified by the following part of the 24th hour.

"I told her that we had to leave the xylophone in the room so that other little girls and boys could play with it. I said that it would be there if she wanted it the following day. She stood in the middle of the room with the toy clutched tightly in her hand. Her countenance suggested that she was working very hard at overwhelming her impulse to keep the toy (she had previously not been able to give a favorite object up). Then suddenly she ran over to the desk and put it down. This new control seemed to release a great deal of energy. As soon as she put the xylophone down, she dropped her tense expression and jumped up and down excitedly. I told her that I knew how difficult it was for her to give up things that she liked. I commended her by saying, 'My, you're getting to be a big girl now.' In the hall she had me hold her up to the fountain, and she rolled her tongue and face in the water. It seemed as if she needed this immediate gratification to make up for the deprivation of the previous incident. In the waiting room she hugged me and said goodbye."

As with any child, limit setting is a continuous process, and this is so with Mary too, but it has ceased to be a problem per se.

The child's grimacing and posturing was at first a complete enigma to me, but gradually I noticed she responded this way to any overwhelming emotion, even if it was a pleasurable one. Of perhaps greater significance was the suggestion that she also had this reaction to uncomfortable internal somatic stress, such as abdominal distress due to gas, but often not to external painful injury.

After failing in my attempts to understand the specific symbolic meaning of the various facial and body postures, I decided to approach it from a different point of view. I felt that if I could make the child aware of these movements and then bring them under her control, preferably in the form of words, she might be encouraged to give them up. This was done by a combination of techniques, exemplified by the following comments I made to the child in briefer sentences over several months. "My, Mary, you got real excited again"; then I imitated her gestures and tried to make a game out of it. When I made contact with her, I would usually say, "That was a real funny face, wasn't it?" After about 50 such efforts, this behavior virtually disappeared. Recently the child aborted an attack herself, saying, "I'm making my funny faces again," followed by engaging me in a game of mutual imitation of the specific gesture.

Her difficulties in abstracting ideas and organizing thoughts have yielded steadily, though very slowly, to persistent verbalization of her actions and attempts at simple integration. An example of this defect and the child's reaction to my therapeutic efforts follows in this excerpt from her 32d hour. "She asked me to play the record machine. The machine was in the playroom, but I could not find the records. I told her we had no records and therefore could not play the machine. She did not seem to comprehend that the records were needed to make the instrument function, even though she herself had put records on many times before. I told her that the records were needed to make music, and she kept saying, 'Let's go find the record machine' in a monotonous whine, even though it was directly in front of her and I had informed her of this. It seemed that her concept of the record machine was records plus the record machine, and if one part was missing the entire thing was missing. I continued to explain to her what the situation was, over and over again. Eventually she began to show some sign of

understanding when I discovered that holding her close and speaking softly in her ear seemed to reach her more effectively. When she finally comprehended what I was trying to tell her, she became elated, jumped up and down, and began kissing me. She repeated to me several times, 'we need the records to play the record machine.'"

This kind of rapid comprehension was somewhat unusual. More characteristically, she would at first merely echo my words of explanation or clarification concerning a particular concept without really understanding. Then gradually, after several weeks of repeating the same idea, she would come to have a useful, though stilted, verbal and intellectual grasp of that concept. However, even recently I failed in an attempt to convince her that the painted cane on a life-sized dummy could not be taken from the clown and given to her, even though I took her hand and ran it over the surface to show her that it was not three-dimensional.

Another area of severe pathology in which she has improved somewhat is that of her distorted, disjointed body image, as exemplified by the following excerpt: "She tried to dismember a doll. I told her the doll's arms did not come off. She then grasped her own head and said, 'It won't come off,' and I assured her that it wouldn't. She then grasped my head and said questioningly, 'It won't come off?' I said, 'No, it would not' and assured her that her neck or head would not come off either. She seemed very pleased and reassured." This behavior was common in the first 50 hours, but the following excerpt from the 56th hour further demonstrates her improvement.

"She engaged me in tracing out her hand, and then mine, on paper. At first this pleased her, but as she stared at it, she appeared worried. She looked first at the tracing and then at her hand and said, pointing to the outline, 'That's my hand.' I explained to her that it was only an outline and that she still had her hand. Later on, she said that her hand was hers, her eyes were hers, her hair was hers, and her body was hers. I agreed

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to all of these, and she again seemed pleased and said this over and over again. I gave her a piece of candy as a present to link the reconsolidation of body image with a gratifying experience. She then had me trace out my own hand and then her feet." Her father subsequently told me that he liked to play a game with her in which he would play at taking her nose. He wanted to know whether this was all right, since he noted that Mary would become extremely anxious and could not be convinced that her father really did not have her nose. He was asked not to engage her in such play, after explaining to him the reasons behind such a prohibition.

Building on this basic delineation of body image and body boundary, I taught her the idea of possession, of what was hers and what was someone else's. With this came an early stilted appreciation of the meaning of an exchange of gifts, a concept of differentiation from the environment that had been entirely absent before.

As the child has become increasingly more integrated, she has developed neurotic-like symptoms. In general, these are mild compulsions and phobias, which are clearly different from the stereotyped play and terror reactions related to her previous severe autistic state. I feel that now that some of the chaos is gone, her formerly vaguely perceived conflicts have begun to flow in more orderly and understandable channels. For instance, for months, with tense countenance, she would suddenly pinch the nipples and genital areas of the dolls or herself. After months of doing this without comment, she began saying along with this activity; "Pinch Mommie's titties," or "Pinch Mommie's potty," or "Mommie's potty hurts." Only recently, when she asked me to make the father doll do this to the mother doll did the meaning become clear. I told her that Daddy wasn't really pinching or hurting Mommie, he was just touching her because he loved her. The child responded to this interpretation, that is that the child misconstrued love play between the parents,

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by showing an initial elation, followed by gradual decrease of this activity. Interestingly, I obtained recent information that Mr. X. used to follow his wife around the house continually fondling her despite her angry complaints.

I wish to conclude the presentation of the clinical material with another example of the child's increasing abilities to express her problems in play. An example which I feel dramatically states what I consider a major, if not central, area of frustration was taken from the 71st hour.

"The child said that she wanted to go into my office to feel the cool air, i.e., my air conditioner. I took her into the office and immediately she asked me to shut the lights. Since my office windows are lined with aluminum foil, it was quite dark. She was not frightened but asked me to put the lights back on again. There then followed a period of having me put the lights on and off at her command. This really excited her and she began shouting the commands 'on' and 'off.' Then she finally asked me to keep the lights off, saying that she was going to sleep and she crept into my lap with her head on my chest. She asked me to cover her, and I did so with a large clinic coat. She lay in a prone position on my lap and moved her head from one side of my chest to the other, making sucking sounds. She then took my arm and put it around her as though she wanted me to hold her tight. She continued her apparent simulated nursing for a few minutes, then rested her head on my shoulder, and appeared to be relaxed. She said: 'Hi, Dr. Eveloff'; as I noted before, this was her way of getting reassurance that she was not doing something wrong, and I said 'Hi, Mary.' She looked up at me, and her face reflected the very essence of satisfaction. She put her head on my chest and mumbled to herself. I was able to decipher 'Go to sleep, sun,' 'Go to sleep, grass,' 'Go to sleep, house,' from her continuous stream of softly spoken words. After 10 minutes of this activity she asked me to open and shut the door much as she

had done with the closet door in the play-room. I could not help feeling that for the purpose of mastery the child was actively reenacting passively endured early frustrations centering about her oral deprivation and her isolation. The child's actions did not appear to have sexual significance, although this has to be considered a possibility. The father reported that at home the child appeared to him to be more human every day."

The treatment of these children is certainly in the experimental stages. I attempted to unify into one procedure some of the methods which seem generally in current favor rather than enter into the pros and cons of this or that treatment plan. Before I discuss the treatment proper, I wish to explain why Mary was treated as an out-patient. There are strong arguments on both sides over the issue of whether or not psychotherapy or any other treatment should be carried out in an institution. One cannot generalize but after the initial evaluation it was felt that an institution would be better for Mary because the parents were considered to be impenetrable. They rejected this suggestion of hospitalization because they could not afford private care and had heard disquieting stories about the State institution. I agreed to see her but only after making it clear to the parents that I had to have complete authority to manipulate her environment. Because of their relative disbelief that Mary was ill, I cautioned the parents against missing any appointments without an excellent excuse. Also Mr. and Mrs. X. were quite reluctant to come for collaborative treatment, but I insisted on this, too! They promised to cooperate.

The treatment was carried out in essentially three phases. The first was to establish contact with the child; the second, to help the child differentiate herself from the therapist and later other aspects of the real world, and third, a socialization of the patient by supportive and educational methods. As for the first stage, I tried to initiate contact via inanimate objects, rhythmical activities, music, and so forth. These ma-

neuvers did not seem to reach the child, and I felt I would have to approach her on her lowest level of adequate communication. For Mary this meant oral gratification, such as feeding, and body contact, such as rocking and holding. In general any pleasurable stimulation of a receptor organ was employed to lure the child out of her shell. Communication remained on this primitive level until she appeared strong enough to move on to a more mature level. The occasionally reported reaction of terror and withdrawal to body contact measures was not seen with Mary, possibly because I employed them quite cautiously.

At first little attempt was made to have the child differentiate herself from the therapist. I functioned for a while solely as an addition to her ego, acting and later speaking for the patient. Few restraints were imposed, and her every wish was satisfied without regard for its logicity. Early attempts at initiating the second phase of therapy, i.e., differentiation, were made by imitating or mirroring the patient's actions, forcing the child to test reality to see whether the "mirror image" was real. This also enabled the child to externalize first in action and then in words the aggressive impulses and bizarre elements in her life with some one other than herself. When I felt I was firmly established in the child's favor, further attempts at differentiation from the therapist were made via play, such as peek-a-boo and teasing games. The latter form of contact, i.e., teasing games, proved especially helpful.

This ushered in the third phase of treatment, i.e., an attempt at socialization. If this goal was to be accomplished, I realized the former permissiveness used to establish contact should gradually give way to firm control, and even physical restraint, of impulsive behavior, because permissiveness, once perceived by this child, seemed to make her more excited and chaotic. Therefore as awareness increased, behavior had to be progressively structured. It seemed to me fruitless, if not dangerous, to permit her

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disorganized and undifferentiated behavior to go unchecked for long periods in an attempt to understand the meaning of her autistic gestures or verbalizations. If any interpretations were made at all in the early phases of treatment, they were very simple and usually amounted to confronting the child with her ongoing actions and thoughts, such as "You hit me because I made you angry." Thus, the main emphasis was on lending some semblance of order to her chaotic mind, rather than application of analytic techniques of minimal interference and interpretation.

After several months of treatment, I felt I could recognize a definite trend toward integration. This recognition was soon followed by clinical examples of neurotic behavior, for instance, such compulsive symptoms as avoiding cracks. The parents spontaneously reported similar behavior at home and in the nursery. I was encouraged and pushed the child. She reacted with disconcerting regression to posturing, grimacing, and withdrawal. I soon realized that with each level of awareness acquired by my patient she became flooded by newly perceived stimuli leading to the paradox that when she seemed most integrated I had to proceed more slowly, and vice versa. At present, I do not hesitate to employ the methods used to contact the child during the initial phases of treatment, especially during her frequent regressions. However, when she demonstrates what I consider integrated meaningful behavior, I try to use an approach more appropriate to the material, that is, along analytic lines. I do not intercede and do not try to control her activities.

Perhaps I have given the impression that the child's progress has been smooth. This would be entirely false. Even events such as a slight cold or a small finger wound have caused much regression, followed, however, by a rapid step-by-step repetition of all her gains. Perhaps I have also misled you into thinking my efforts have been solely or even largely responsible for the improvement in the child. This, too, is not so. There

are several other important factors. Through therapy in our clinic, the father has worked hard to control his former hostile behavior toward Mary, with considerable success, and is in effect my co-therapist. He devotes a great deal of time and effort to discharging, and even elaborating, upon my therapeutic suggestions. Although the mother still finds it difficult to accept the child, the effect of her hostility has been less damaging, since she is now occupied with taking care of a new baby. Mrs. X. is not suffering from another postpartum depression, apparently as a result of her increased acceptance of the marriage, her husband's more understanding attitude, and her greater ease of handling this new child. Mary's reactions of regression with respect to Mrs. X.'s deleterious effect on her are now seen only when the child is forced to stay away from the nursery. In addition to the factors which have improved her home environment, the nursery Mary attends has been most cooperative and very intelligent in their care of the child, even though it is not a therapeutic institution.

I have saved the most intriguing question for the last. What causes this peculiar illness? Perhaps we can dismiss the almost hackneyed controversies centering about the issue of heredity versus environment with the observation that most researchers feel that both factors play a role. The only theoretical concept that in my own way of thinking explains this illness in an understandable and useful manner is that of Margaret Mahler. Her theory, while not directly entering into the heredity-versus-environment controversy, stresses environmental and postnatal factors. This viewpoint seems reasonable if one remembers that with a very high percentage these children have characteristic parents, as I feel Mary's parents are. The typical mother is cold, impersonal, and ritualistic. She may be sophisticated and charming on the surface, but this is a thin crust for profound narcissism. As Mrs. X. has said: "I can get along with people quite well if I want to,

but I don't want to." The fathers tend to be detached, perfectionistic, and intellectual. They do little to protect the child from the mother. These parents are in a sense successfully autistic adults. This is not to say that they are actually psychotic. In fact, the reverse is true, since the incidence of psychoses in grandparents, parents, and siblings is less than 3%. This would also tend to support the importance of environmental factors. Using Mahler's ideas as a framework, I have incorporated the thoughts of others and my own in the following hypothesis of what happened to Mary.

It is quite possible that Mary was born with a primordial ego defect, since her father noted that she had no grasp reflex, even in the first weeks of life. However, although he noticed it early, he cannot say whether she had the defect at birth. But perhaps we do not need to rely too heavily on inborn aberrations for an explanation of her difficulties. Her first experience with her mother was maximally traumatic. Even if we allow that the child could not appreciate Mrs. X.'s profound depression and admitted rejection of the child, we know that Mary at least sustained the important frustration of her oral needs. If you will remember, she was literally starved during her first three weeks of life. This kind of somatic insult is important for several reasons. When the baby's attention is constantly directed toward its body for reasons of illness, injury, or unsatisfied drives, little energy is left over for investment in recognizing or loving its mother or becoming familiar with the surroundings. Also, when the mother cannot or will not serve as an organizer or buffer against inner and outer tensions, the child is thrown by these tensions into an affectomotor rage, which, if not relieved, results in a state of organismic stress and even stupor. We learn that this did happen to Mary, not only in her neonatal starvation period but even later, when she was put in her room and allowed to cry without the mother's ministrations. Therefore the normal autistic phase of infancy,

which usually ends at 3 months, when the baby dimly begins to recognize the mother's breast, face, and hands, became permanent; i.e., the child's perceptual system, and hence the mother as an object, never fully became invested with mental energy. In short, this infant could not use the mother for normal symbiotic purposes and turned away from or ignored this first frustrating human being and all subsequent human beings. Coupled with the above traumata was the lack of opportunity to develop body boundaries. The development of a body image is more dependent on the early proprioceptive stimuli, such as deep pressure, warmth, and kinesthetic experience supplied by the environment, than it is on the function of the distance perceptors (i.e., eye, ear, nose) that the child is born with. As you recall, when Mrs. X. finally solved the feeding problem, instead of recouping these lost experiences for the baby, she then took the child from the breast and fed her on her knees. Rarely ever again was Mary held close to her body. This body image defect probably caused a poor concept of a sense of self. Briefly, a sense of self apparently depends a good deal on the integration of the body image with properly cathected, well-functioning distance receptors of sound, sight, and smell. This integration occurs at about the age of 3, when the child begins to refer to its mirror image as "That's me" or uses "I" in conversation. Mary lost out not only on these components of a sense of self but also on the necessary stable mental picture of a gratifying, consistent mother.

As if these psychological insults were not enough, the child was subjected to the equivalent of a sensory isolation experiment, even up to the age of 2½, when she was placed in the nursery. If you remember, she was rarely spoken to except to be given orders or to be chastised. Little attempt was made, either in action or in words, to organize or explain even the restricted world around her. Until her nursery experience, she spent the majority of her early days surrounded by the four walls of her room

or tucked away in the corner of the yard. Both these experiences yielded a limited amount of meaningful visual and auditory stimuli. If she came away from her infancy with any concept of the self apart from the world, it was lost, since this kind of isolation left only herself on which to discharge her few libidinal and many aggressive drives. Even the relatively intact adult can lose the organization of thought processes and appear schizophrenic if subjected to deprivation of meaningful sensory input.

And thus Mary came to the clinic relatively isolated from reality, existing almost totally in her own autistic world. The contact she did have served mainly to avoid intrusion by others into this world or to get her the things she needed to maintain it. Whenever she did attempt to perceive the environment it probably appeared to her as a series of poorly related confusing and frustrating scenes. Even an adult would have difficulty in discriminating part from whole and foreground from background under these circumstances. Distance perception lost much of its usefulness in satisfying the need to investigate the environment leading to the marked reduced awareness of this child. Stated more formally, there seemed to be little relevance of sensory experience for ongoing processes, and each experience apparently had to be memorized in rote fashion in order to be dealt with on any level.

If one inclusive statement concerning the early pathological relationships between mother and child can be made at all, it is this: Prior to treatment, Mrs. X. either did not know how to or was not able to communicate a feeling of love to her child.

And now permit me one final question; "What will happen to Mary?" Kanner says that virtually 100% of these children who cannot talk before the age of 5 degenerate to a state difficult to tell apart from mental retardation or severe schizophrenia, except perhaps that they rarely hallucinate. Fifty per cent of those who do have speech before the age of 5 meet the same fate, while the

remainder make some limited adjustment as sterile schizoid characters who have a poor sense of identity and resemble the As If characters described by Deutsch. Their lack of empathy, *savoir-faire*, and an appreciation for the essence of a situation betrays their early autistic defect, and they get angry and confused when others do not see things their way. The most discouraging aspect of the prognosis for these children in Kanner's experience is that therapy, be it psychotherapy or any of the physical therapies, is relatively ineffective. He goes on to say of psychotherapy that the commonly seen initial improvement in these children is often misleading and unrelated to the prognosis.

Unfortunately, I do not have enough clinical material to refute or confirm this pessimistic attitude. Mary has suffered greatly from the end-result of two or more generations of frozen existence in an emotional Antarctica. It is certainly impossible to accurately predict what the prognosis is for this particular child. There is no question that she has improved greatly, and there is considerable evidence to support the contention that this improvement is the result of psychiatric treatment both with the child and with her parents.

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