THE CONCEPTION OF WHOLES AND PARTS IN EARLY INFANTILE AUTISM

LEO KANNER, M. D., BALTIMORE, MD.

In 1943, under the title Autistic Disturbances of Affective Contact, I published 11 cases of infantile psychosis noticed as early as in the first two years of life. Since then, I have seen nearly 100 such children, and knowledge of many others has come to me from psychiatrists and pediatricians in this country and abroad. To satisfy the need for some terminological identification of the condition, I have come to refer to it as "early infantile autism."

Briefly, the characteristic features consist of profound withdrawal from contact with people, an obsessive desire for the preservation of sameness, a skillful relation to objects, the retention of an intelligent and pensive physiognomy, and either mutism or the kind of language that does not seem intended to serve the purpose of interpersonal communication.

The syndrome of early infantile autism is by now reasonably well established and commonly accepted as a psychopathologic pattern. The symptom combination in most instances warrants an unequivocal diagnostic formulation.

Its own peculiarities and the close relation to the schizophrenias invite a detailed study of the various features of the illness. A previous investigation of apparently irrelevant speech and metaphoric utterances yielded highly instructive material. In this study, an attempt is made to learn how these patients view their world in terms of appraising and integrating their surroundings.

The autistic child desires to live in a static world, a world in which no change is tolerated. The status quo must be maintained at all cost. Only the child himself may sometimes take it upon himself to modify existing combinations. But no one else may do so without arousing unhappiness and anger. It is remarkable to what extent the children will go to assure the preservation of sameness. The totality of an experience that comes to the child from the outside must be reiterated, often with all its constituent de-

tails, in complete photographic and phonographic identity. No one part of this totality may be altered in terms of shape, sequence, or space. The slightest change of arrangement, sometimes so minute that it is hardly perceived by others, may evoke a violent outburst of rage.

This behavior differs from ordinary obsessive ritualism in one significant respect: The autistic child forces the people in his world to be even more obsessive than he is himself. While he may make occasional concessions, he does not grant this privilege to others. He is a stern and unrelenting judge and critic. When one watches such a child for any length of time, it becomes evident that, unless he is completely alone, most of his activities go into the job of serious, solemn, sacerdotal enforcement of the maintenance of sameness, of absolute identity.

It is, of course, impossible to live even in Kaspar Hauser fashion without the introduction of new situations. A child is weaned from the breast, then from the bottle; new food stuffs are introduced; he is taken out for his first walk; the family may move to a different location; he learns new songs and nursery rhymes, is given new toys.

The reports of the parents of our autistic children indicate, indeed, how exceedingly difficult it is to "teach" them these, or any, innovations. One may even say that these children learn while they resist being taught. Several children kept on crawling at a time when the parents felt that they could be walking.* Much effort was expended in propping them up and encouraging them to make steps. There was no success. But one day, suddenly, when it was least expected, the children got up and walked. The parents of Frederick W. spent hours each day "teaching" him to talk. They begged him to repeat words after them. He remained "mute," except for two words ("Daddy" and "Dora") that he had never been taught to say. But one day, at about 2½ years of age, he spoke up and said: "Overalls," a word which was decidedly not a part of the teaching repertoire.

But once a new acquisition has been made or a new situation incorporated in the child's routine, he clings to it with exasperating tenacity and watches over its unaltered reproduction. This pertains to things said to him as well as to things done to him.

The mother of Joseph C. stated: "If I have read a story [to him] and used some pronunciation, his daddy has to do it the same way; else he is upset about it."

Since the whole must be preserved in its entirety, the children become greatly disturbed at the sight of anything broken or incomplete. The sight of a broken cross-bar on a garage door that he passed on his regular daily walk so upset Charles N. that he kept talking and asking about it for weeks on end, even while spending a few days in a distant city and even after the cross on the bar had been fixed.

Among the toys laid out for John F. were two dolls, one of which had a cap, while the other was bareheaded. Generally John paid little or no attention to dolls. When he noticed that the cap of one of the dolls was missing, he immediately asked for "the hat," picked up the doll and ran up and down with it, shouting for the hat. He was not reassured until the cap was produced. He made sure that it fitted, then put the doll down and lost all interest in it.

Susan T. noticed some cracks in the office ceiling and walls. She kept asking anxiously and repeatedly who had cracked the ceiling and could not be calmed by any answer given her. She was obviously unhappy and every time she was in the office, she kept exclaiming: "Who cracked the ceiling?" "How did it crack itself?" Anthony F. became aware of the same cracks and asked almost literally the same questions as Susan. He touched some of the cracks within his reach and said, very seriously: "I don't know whether it's right or not—the wall."

People as well as objects must be "whole." A visible scar or wart evokes instant comment. There is no sympathy, no solicitude for the person as such. The attitude is rather one of annoyance—again not with the person but with the fact itself. Susan T., on the train, became upset and talked obsessively

about "that one man sleeping with an open mouth." When a taxi driver cleared his throat, she kept asking him: "Did you have phlegm in your throat?" While she was fully absorbed and seemingly inaccessible in the office, I happened to clear my throat. Susan instantly looked up and asked: "What was that?"

Once blocks, beads, or sticks have been put together by the child in a certain way, they are often regrouped later in exactly the same way, even though there was no definite design. The children's memory is phenomenal in this respect. After the lapse of several days, a multitude of blocks could be rearranged, most astonishingly by Donald T. and Susan T., in precisely the same unorganized pattern, with the same color of each block turned up, with each picture or letter on the upper surface of each block facing in the same direction as before. The absence of a block or the presence of a supernumerary block was noticed immediately, and there was an imperative demand for the restoration of the missing piece. If someone removed a block, the child struggled to get it back, hitting the hand which held it and going into a crescendo panic tantrum until he regained it, and then promptly and with sudden calm after the storm returned to the design and replaced the block.

At home, the furniture arrangement, the Accation of bed and high chair, the position of the dishes on the table must not be changed. Frederick W.'s mother reported: "On one of the bookshelves we had three pieces in a certain arrangement. When this was changed, he always rearranged it in the old pattern." Herbert B. "wants the same arrangement at the dining table, the same dishes; if he notices changes, he is very fussy and cries." Tay S. "is very fussy about where things go, for instance, a certain tea set; he fusses till it is put right, cups, handles etc.,-just so." Joseph C. even "sees to it that the coal bucket is always turned in the same certain position." Gary T.'s father related: "Everything must be put in its proper place. He insists on closet doors being closed rugs being straightened. He is very upset if the table order is changed and makes an effort to bring it back to the pattern he knows. He has a plaque of a sandman over his bed, of

hich he is very fond; it was moved to mother wall but he moved it right back. The miniture was rearranged lately and it bothers him. We bought him a new bed, and he was looking for the old one." Garv originally lived in Philadelphia; the family then moved to Greenbelt, to Chicago, and hack to Greenbelt. At 5½ years, about 3 years since they had left Philadelphia, he still kept saving insistently: "Let's go back to the old house," meaning the home in Philadelphia, which he could describe in every detail. Richard F.'s high chair "always has to be in a certain place." Susan T.'s father said: "When we would sit down on a certain chair on which another member of the family usually sits, she would scream." Stephen N. "just can't stand things different from their usual appearance; for example, if my dress slips over my knee, he will pull it down."

Joseph C. had a definite notion about the arrangement of the parts of human bodies. While being observed, he at once became aware of an assistant's foot up on a chair. He became upset and rushed to the chair, saying: "Down, down," took her leg and put it down. When she put it up again, he repeated the procedure. He also became upset when a person had the legs crossed. He objected to hands being on the table or a person resting the chin on a hand. He demanded: "Down, down," and if his wish was not complied with, he became agitated and tried forcibly to bring the limbs into the position that seemed proper to him. Feet belonged on the floor, and arms alongside the trunk; no deviation was tolerated. He saw me smoke a cigar; he did not seem to notice it so long as the cigar was in my mouth. When I held it in my hand, he took my hand and pointed to my mouth, indicating that the cigar should be there. When he did not get his wish, he impatiently pulled the cigar out of my hand, pushed it between my lips, drew my hands down, and placidly turned to other pursuits.

Anthony F. was given the Seguin Form Board test, which he completed in 25 seconds. But he became disgusted with the star-shaped form. While quickly fitting it in the appropriate space, he said: "Star, you are bad." He took it out, hit it violently, and shouted: "Stay up in the sky!" He returned to the form board several times afterwards and

each time again became angry at the wooden "star" which was not up in the sky. He was then presented with the Healy Picture Completion set. He picked out the clock, found the right place for it, put it there with considerable anger and vehemence and said to it: "Stay there, you." He then had some difficulty in fitting the other pieces. This disturbed him very much. At first he "revenged himself" by squeezing the pieces wherever they would go, laughing uneasily and uproariously. Then he no longer could stand it, suddenly got up, ran to the door and, slamming it, went out, saying: "I think I go."

Malcolm H. liked to sit for hours turning the pages of books and magazines. Once he saw a picture in an encyclopedia and asked his mother what it was. She said that it was the Taj Mahal in India. He then went through the whole library for days looking for another picture of "India" (the Taj Mahal), really found two (one in a book on India, the other in a volume on architecture), and recognized them even though one was much smaller and the other was presented from a different angle. But he was very unhappy because of these differences, growing steadily unhappier and more agitated when further search proved unproductive. He finally found solace in getting the encyclopedia and looking at the picture he had seen there first.

The retention of sequences is as important to the children as the maintenance of appearances and space relations. Malcolm H., when taken for a walk, "insists on covering the same ground that has been covered on previous walks, resisting strongly any change in the route." Stephen N.'s mother stated: "Daily walks, when changed, used to make him furious; now he can be persuaded with some difficulty to go in a different direction." Richard F.'s father gives him a bath every night: "They go through a ritual. When I [the mother] give him a bath, he pulls me to show me what to do next. If the things on his bed aren't just right, he won't go to bed." When Elaine C. was sent to fetch a specific object, she always brought it if it was in the place where she knew it usually to be; if it was not there, she would not bring it even if it was very near and plainly visible. If Herbert B.'s bath time was changed in relation to supper, he became very upset; usually he got his bath after supper. Of John F., his father said: "The daily routine, the route taken on the daily walks with his mother, the succession of events must be repeated in the same manner. Any change, even the slightest, gives rise to unhappiness and temper on his part." Donald T. would not leave his bed after his nap until after he had said: "Boo, say: Don, do you want to get down?" and his mother (whom he called "Boo") had complied. Donald then climbed out of bed. But this was not all; the act was not considered completed. Donald continued: "Now say: 'All right.'" Again the mother had to comply, or there was screaming until the performance had run its prescribed course.

The same Donald T., at 9½ years of age, had been "going to school" since he was 6 years old; a school principal friend of the mother's had agreed to let him attend. On one afternoon, the session had been dispensed with; no one in the family knew about this. Donald went to school as usual. Though no other child was in the classroom, he sat down in his seat, took out his books, did some writing, and left when the bell rang. He evi-

dently could not accept an "irregular" free afternoon contrary to established routine. The part had to be made to fit in with the accustomed whole, regardless of whether or not the teacher and the classmates chose to disrupt the ordinary sequence of events.

In summary, it can be said that autistic children show a peculiar type of obsessive-ness that forces them to postulate imperiously a static, unchanged environment. Any modification meets with perplexity and major discomfort. The patients find security in sameness, a security that is very tenuous because changes do occur constantly and the children are therefore threatened perpetually and try tensely to ward off this threat to their security.

BIBLIOGRAPHY

Kanner, L. Autistic disturbances of affective contact. The Nervous Child, 2:217, 1943.

Early infantile autism. J. Pediatrics, 25:211, 1944.

----. Irrelevant and metaphorical language in early infantile autism. Am. J. Psychiat., 103: 242, 1946.