

Joey: A "Mechanical Boy"

A case history of a schizophrenic child who converted himself into a "machine" because he did not dare be human. His story sheds light on emotional development in a mechanized society

by Bruno Bettelheim

Joey, when we began our work with him, was a mechanical boy. He functioned as if by remote control, run by machines of his own powerfully creative fantasy. Not only did he himself believe that he was a machine but, more remarkably, he created this impression in others. Even while he performed actions that are intrinsically human, they never appeared to be other than machine-started and executed. On the other hand, when the machine was not working we had to concentrate on recollecting his presence, for he seemed not to exist. A human body that functions as if it were a machine and a machine that duplicates human functions are equally fascinating and frightening. Perhaps they are so uncanny because they remind us that the human body can operate without a human spirit, that body can exist without soul. And Joey was a child who had been robbed of his humanity.

Not every child who possesses a fantasy world is possessed by it. Normal children may retreat into realms of imaginary glory or magic powers, but they are easily recalled from these excursions. Disturbed children are not always able to make the return trip; they remain withdrawn, prisoners of the inner world of delusion and fantasy. In many ways Joey presented a classic example of this state of infantile autism.

At the Sonia Shankman Orthogenic School of the University of Chicago it is our function to provide a therapeutic environment in which such children may start life over again. I have previously described in this magazine the rehabilitation of another of our patients ["Schizophrenic Art: A Case Study"; SCIENTIFIC AMERICAN, April, 1952]. This time I shall concentrate upon the illness, rather than the treatment. In any age,

when the individual has escaped into a delusional world, he has usually fashioned it from bits and pieces of the world at hand. Joey, in his time and world, chose the machine and froze himself in its image. His story has a general relevance to the understanding of emotional development in a machine age.

Joey's delusion is not uncommon among schizophrenic children today. He wanted to be rid of his unbearable humanity, to become completely automatic. He so nearly succeeded in attaining this goal that he could almost convince others, as well as himself, of his mechanical character. The descriptions of autistic children in the literature take for their point of departure and comparison the normal or abnormal human being. To do justice to Joey I would have to compare him simultaneously to a most inept infant and a highly complex piece of machinery. Often we had to force ourselves by a conscious act of will to realize that Joey was a child. Again and again his acting-out of his delusions froze our own ability to respond as human beings.

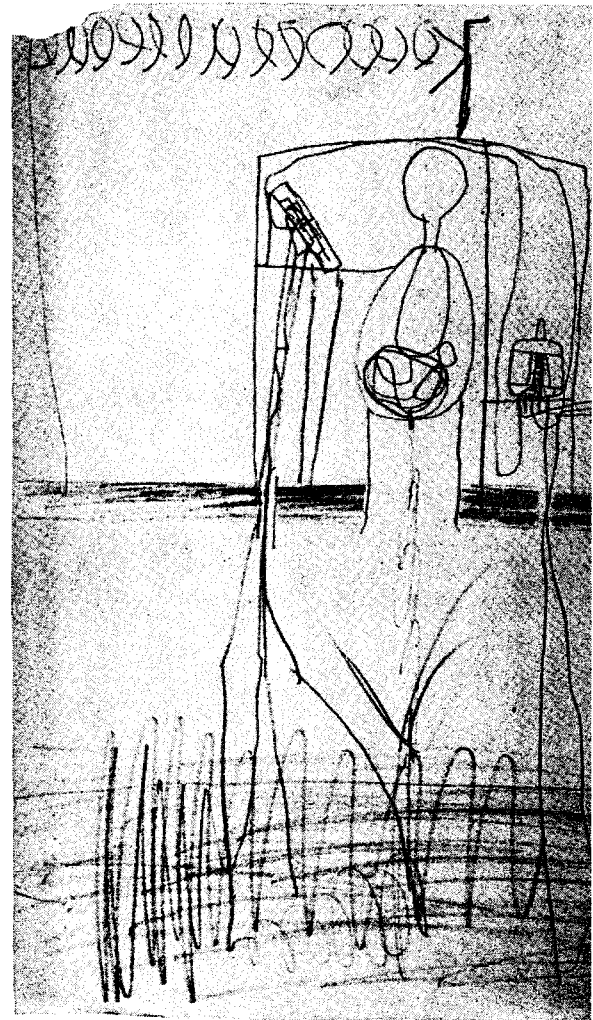
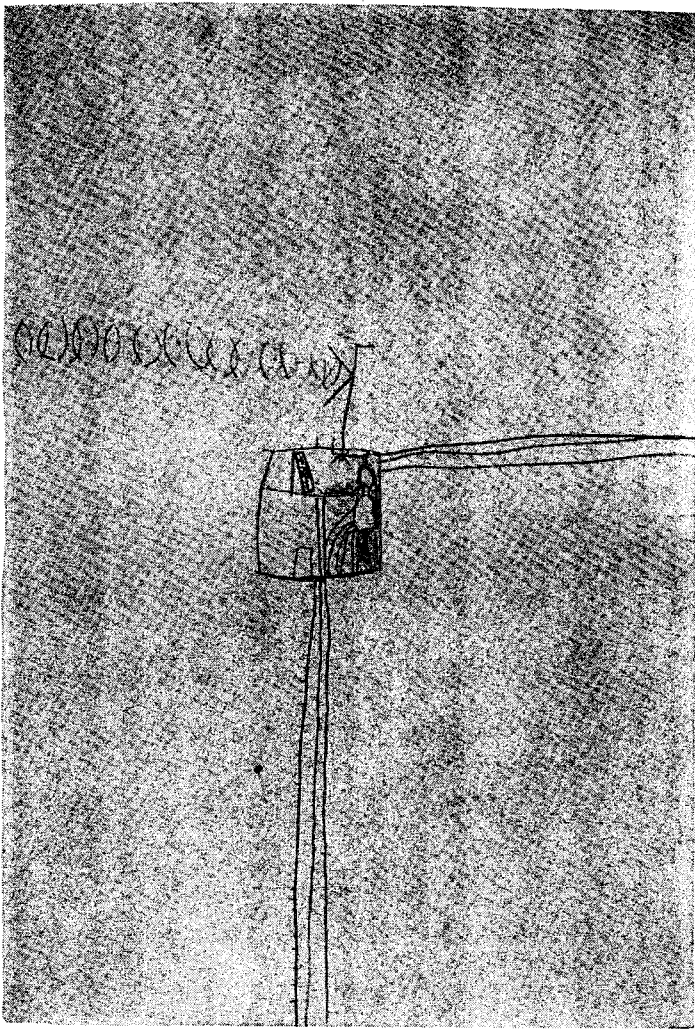
During Joey's first weeks with us we would watch absorbedly as this at once fragile-looking and imperious nine-year-old went about his mechanical existence. Entering the dining room, for example, he would string an imaginary wire from his "energy source"—an imaginary electric outlet—to the table. There he "insulated" himself with paper napkins and finally plugged himself in. Only then could Joey eat, for he firmly believed that the "current" ran his ingestive apparatus. So skillful was the pantomime that one had to look twice to be sure there was neither wire nor outlet nor plug. Children and members of our staff spontaneously avoided stepping on the

"wires" for fear of interrupting what seemed the source of his very life.

For long periods of time, when his "machinery" was idle, he would sit so quietly that he would disappear from the focus of the most conscientious observation. Yet in the next moment he might be "working" and the center of our captivated attention. Many times a day he would turn himself on and shift noisily through a sequence of higher and higher gears until he "exploded," screaming "Crash, crash!" and hurling items from his ever present apparatus—radio tubes, light bulbs, even motors or, lacking these, any handy breakable object. (Joey had an astonishing knack for snatching bulbs and tubes unobserved.) As soon as the object thrown had shattered, he would cease his screaming and wild jumping and retire to mute, motionless nonexistence.

Our maids, inured to difficult children, were exceptionally attentive to Joey; they were apparently moved by his extreme infantile fragility, so strangely coupled with megalomaniacal superiority. Occasionally some of the apparatus he fixed to his bed to "live him" during his sleep would fall down in disarray. This machinery he contrived from masking tape, cardboard, wire and other paraphernalia. Usually the maids would pick up such things and leave them on a table for the children to find, or disregard them entirely. But Joey's machine they carefully restored: "Joey must have the carburetor so he can breathe." Similarly they were on the alert to pick up and preserve the motors that ran him during the day and the exhaust pipes through which he exhaled.

How had Joey become a human machine? From intensive interviews with his parents we learned that the process had begun even before birth. Schizo-



GROWING SELF-ESTEEM is shown in this sequence of drawings. At left Joey portrays himself as an electrical "papoose," completely enclosed,

suspended in empty space and operated by wireless signals. In center drawing his figure is much larger, though

phrenia often results from parental rejection, sometimes combined ambivalently with love. Joey, on the other hand, had been completely ignored.

"I never knew I was pregnant," his mother said, meaning that she had already excluded Joey from her consciousness. His birth, she said, "did not make any difference." Joey's father, a rootless draftee in the wartime civilian army, was equally unready for parenthood. So, of course, are many young couples. Fortunately most such parents lose their indifference upon the baby's birth. But not Joey's parents. "I did not want to see or nurse him," his mother declared. I had no feeling of actual dislike—I simply didn't want to take care of him. For the first three months of his life Joey "cried most of the time." A colicky baby, he was kept on a rigid four-hour feeding schedule, was not touched unless necessary and was never cuddled or played

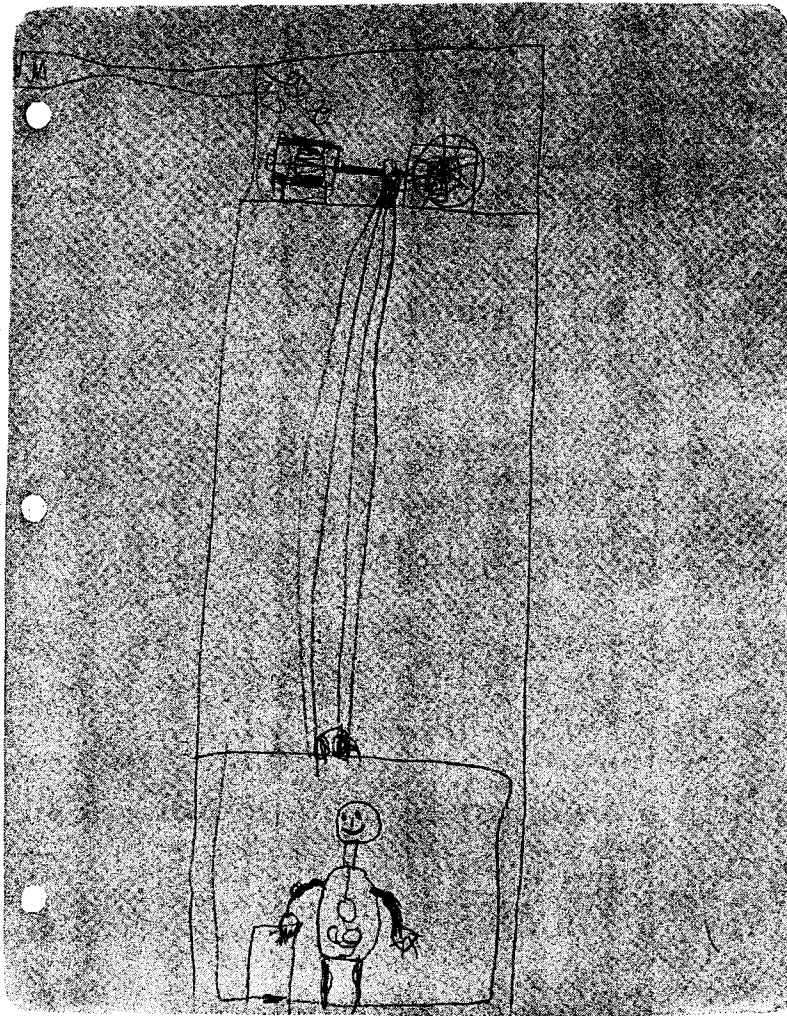
with. The mother, preoccupied with herself, usually left Joey alone in the crib or playpen during the day. The father discharged his frustrations by punishing Joey when the child cried at night.

Soon the father left for overseas duty, and the mother took Joey, now a year and a half old, to live with her at her parents' home. On his arrival the grandparents noticed that ominous changes had occurred in the child. Strong and healthy at birth, he had become frail and irritable; a responsive baby, he had become remote and inaccessible. When he began to master speech, he talked only to himself. At an early date he became preoccupied with machinery, including an old electric fan which he could take apart and put together again with surprising deftness.

Joey's mother impressed us with a fey quality that expressed her insecurity, her detachment from the world and her

low physical vitality. We were struck especially by her total indifference as she talked about Joey. This seemed much more remarkable than the actual mistakes she made in handling him. Certainly he was left to cry for hours when hungry, because she fed him on a rigid schedule; he was toilet-trained with great rigidity so that he would give no trouble. These things happen to many children. But Joey's existence never registered with his mother. In her recollections he was fused at one moment with one event or person; at another, with something or somebody else. When she told us about his birth and infancy, it was as if she were talking about some vague acquaintance, and soon her thoughts would wander off to another person or to herself.

When Joey was not yet four, his nursery school suggested that he enter a special school for disturbed children. At the



still under wireless control. At right he is able to picture the machine which controls him, and he has acquired hands with which he can manipulate his immediate environment.

new school his autism was immediately recognized. During his three years there he experienced a slow improvement. Unfortunately a subsequent two years in a parochial school destroyed this progress. He began to develop compulsive defenses, which he called his "preventions." He could not drink, for example, except through elaborate piping systems built of straws. Liquids had to be "pumped" into him, in his fantasy, or he could not suck. Eventually his behavior became so upsetting that he could not be kept in the parochial school. At home things did not improve. Three months before entering the Orthogenic School he made a serious attempt at suicide.

To us Joey's pathological behavior seemed the external expression of an overwhelming effort to remain almost nonexistent as a person. For weeks Joey's only reply when addressed was "Bam." Unless he thus neutralized whatever we

said, there would be an explosion, for Joey plainly wished to close off every form of contact not mediated by machinery. Even when he was bathed he rocked back and forth with mute, engine-like regularity, flooding the bathroom. If he stopped rocking, he did this like a machine too; suddenly he went completely rigid. Only once, after months of being lifted from his bath and carried to bed, did a small expression of puzzled pleasure appear on his face as he said very softly: "They even carry you to your bed here."

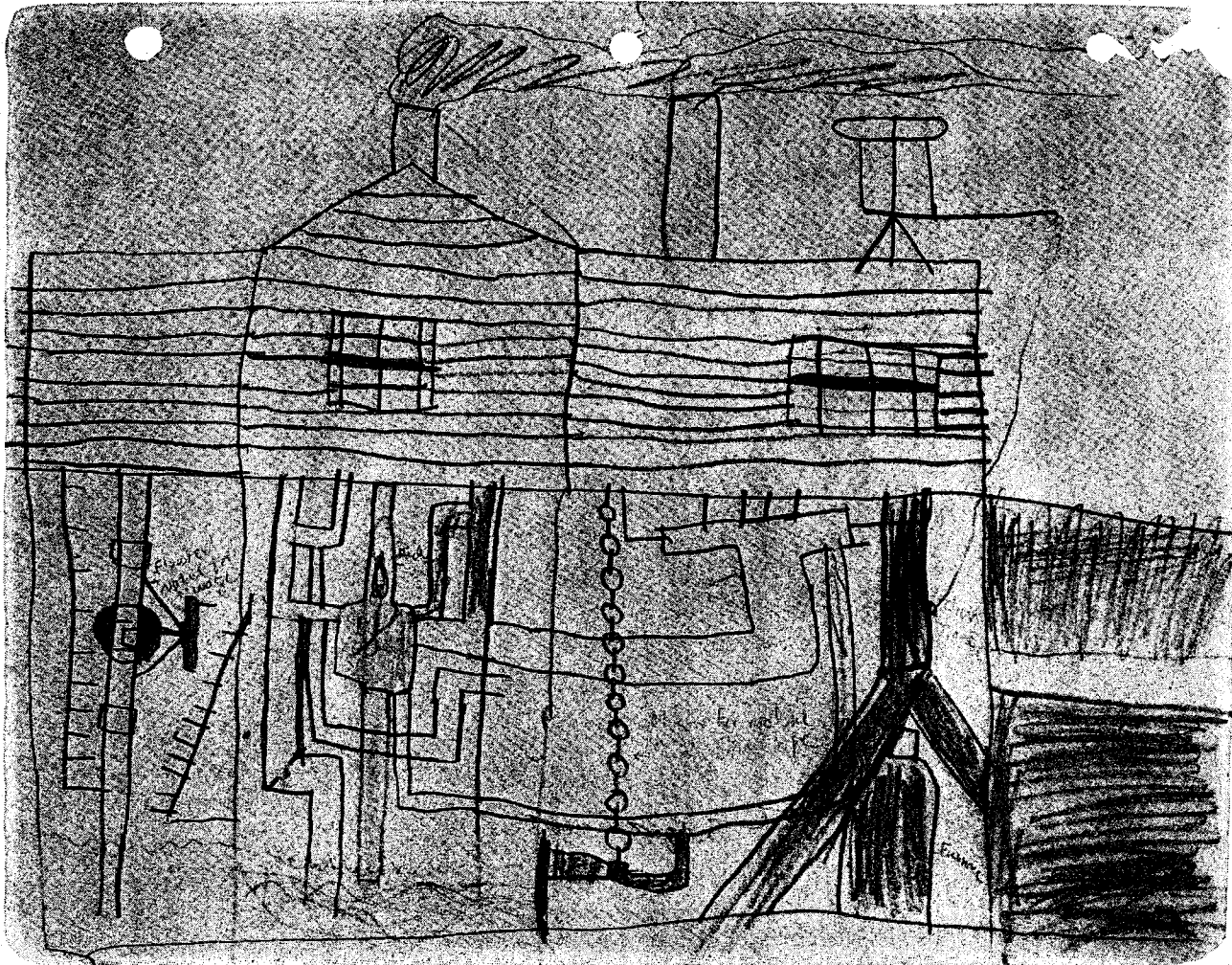
For a long time after he began to talk he would never refer to anyone by name, but only as "that person" or "the little person" or "the big person." He was unable to designate by its true name anything to which he attached feelings. Nor could he name his anxieties except through neologisms or word contaminations. For a long time he spoke about

"master paintings" and "a master painting room" (i.e., masturbating and masturbating room). One of his machines, the "criticizer," prevented him from "saying words which have unpleasant feelings." Yet he gave personal names to the tubes and motors in his collection of machinery. Moreover, these dead things had feelings; the tubes bled when hurt and sometimes got sick. He consistently maintained this reversal between animate and inanimate objects.

In Joey's machine world everything, on pain of instant destruction, obeyed inhibitory laws much more stringent than those of physics. When we came to know him better, it was plain that in his moments of silent withdrawal, with his machine switched off, Joey was absorbed in pondering the compulsive laws of his private universe. His preoccupation with machinery made it difficult to establish even practical contacts with him. If he wanted to do something with a counselor, such as play with a toy that had caught his vague attention, he could not do so: "I'd like this very much, but first I have to turn off the machine." But by the time he had fulfilled all the requirements of his preventions, he had lost interest. When a toy was offered to him, he could not touch it because his motors and his tubes did not leave him a hand free. Even certain colors were dangerous and had to be strictly avoided in toys and clothing, because "some colors turn off the current, and I can't touch them because I can't live without the current."

Joey was convinced that machines were better than people. Once when he bumped into one of the pipes on our jungle gym he kicked it so violently that his teacher had to restrain him to keep him from injuring himself. When she explained that the pipe was much harder than his foot, Joey replied: "That proves it. Machines are better than the body. They don't break; they're much harder and stronger." If he lost or forgot something, it merely proved that his brain ought to be thrown away and replaced by machinery. If he spilled something, his arm should be broken and twisted off because it did not work properly. When his head or arm failed to work as it should, he tried to punish it by hitting it. Even Joey's feelings were mechanical. Much later in his therapy, when he had formed a timid attachment to another child and had been rebuffed, Joey cried: "He broke my feelings."

Gradually we began to understand what had seemed to be contradictory in Joey's behavior—why he held on to the motors and tubes, then suddenly de-



ELABORATE SEWAGE SYSTEM in Joey's drawing of a house reflects his long preoccupation with excretion. His obsession with

sewage reflected intense anxieties produced by his early toilet-training, which was not only rigid but also completely impersonal.

stroyed them in a fury, then set out immediately and urgently to equip himself with new and larger tubes. Joey had created these machines to run his body and mind because it was too painful to be human. But again and again he became dissatisfied with their failure to meet his need and rebellious at the way they frustrated his will. In a recurrent frenzy he "exploded" his light bulbs and tubes, and for a moment became a human being—for one crowning instant he came alive. But as soon as he had asserted his dominance through the self-created explosion, he felt his life ebbing away. To keep on existing he had immediately to restore his machines and replenish the electricity that supplied his life energy.

What deep-seated fears and needs underlay Joey's delusional system? We were long in finding out, for Joey's preventions effectively concealed the se-

cret of his autistic behavior. In the meantime we dealt with his peripheral problems one by one.

During his first year with us Joey's most trying problem was toilet behavior. This surprised us, for Joey's personality was not "anal" in the Freudian sense; his original personality damage had antedated the period of his toilet-training. Rigid and early toilet-training, however, had certainly contributed to his anxieties. It was our effort to help Joey with this problem that led to his first recognition of us as human beings.

Going to the toilet, like everything else in Joey's life, was surrounded by elaborate preventions. We had to accompany him; he had to take off all his clothes; he could only squat, not sit, on the toilet seat; he had to touch the wall with one hand, in which he also clutched frantically the vacuum tubes that powered his elimination. He was terrified lest his whole body be sucked down.

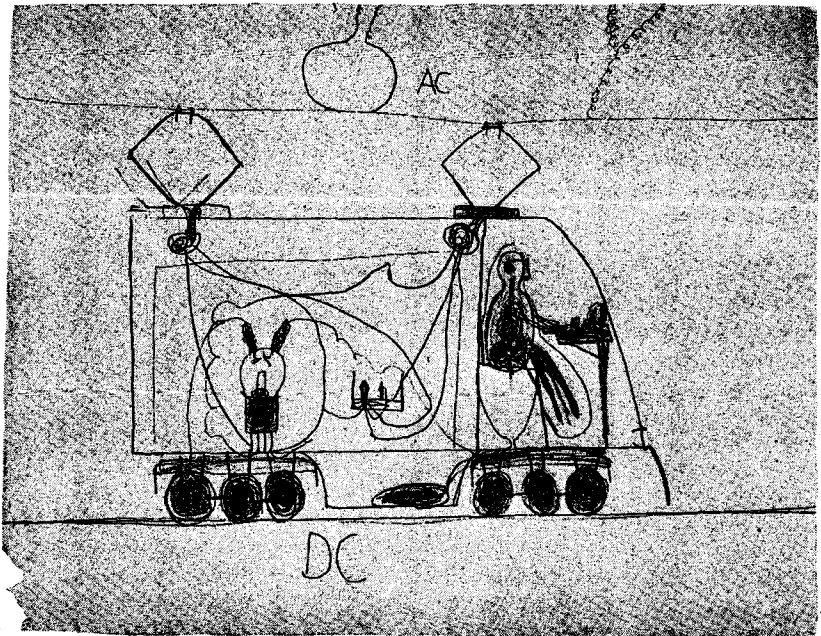
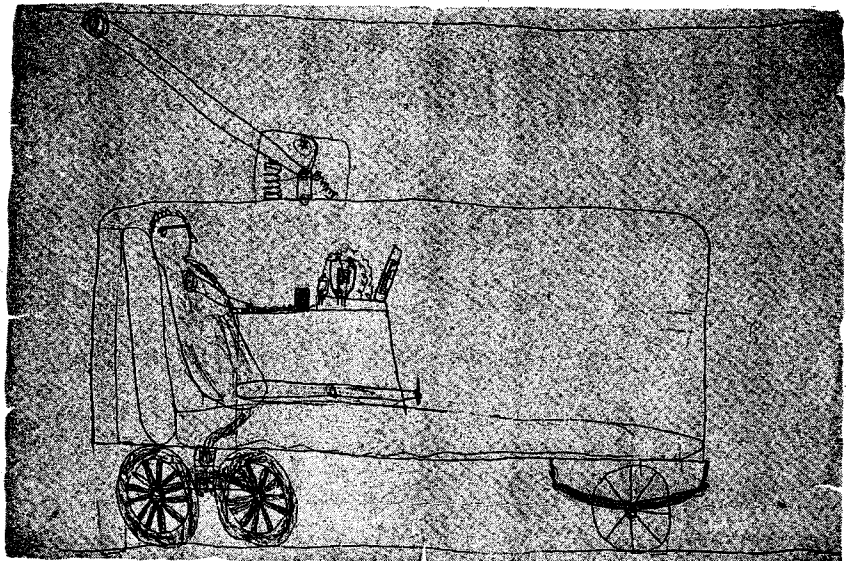
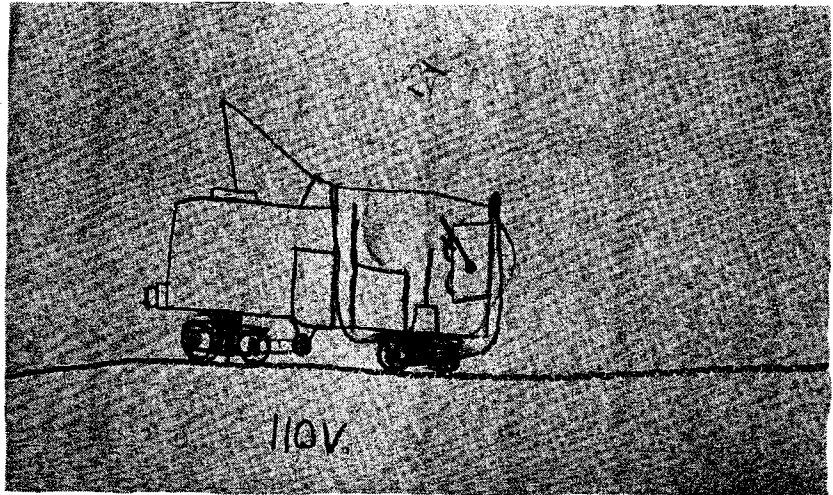
To counteract this fear we gave him a metal wastebasket in lieu of a toilet. Eventually, when eliminating into the wastebasket, he no longer needed to take off all his clothes, nor to hold on to the wall. He still needed the tubes and motors which, he believed, moved his bowels for him. But here again the all-important machinery was itself a source of new terrors. In Joey's world the gadgets had to move their bowels, too. He was terribly concerned that they should, but since they were so much more powerful than men, he was also terrified that if his tubes moved their bowels, their feces would fill all of space and leave him no room to live. He was thus always caught in some fearful contradiction.

Our readiness to accept his toilet habits, which obviously entailed some hardship for his counselors, gave Joey the confidence to express his obsessions in drawings. Drawing these fantasies was a first step toward letting us in, however

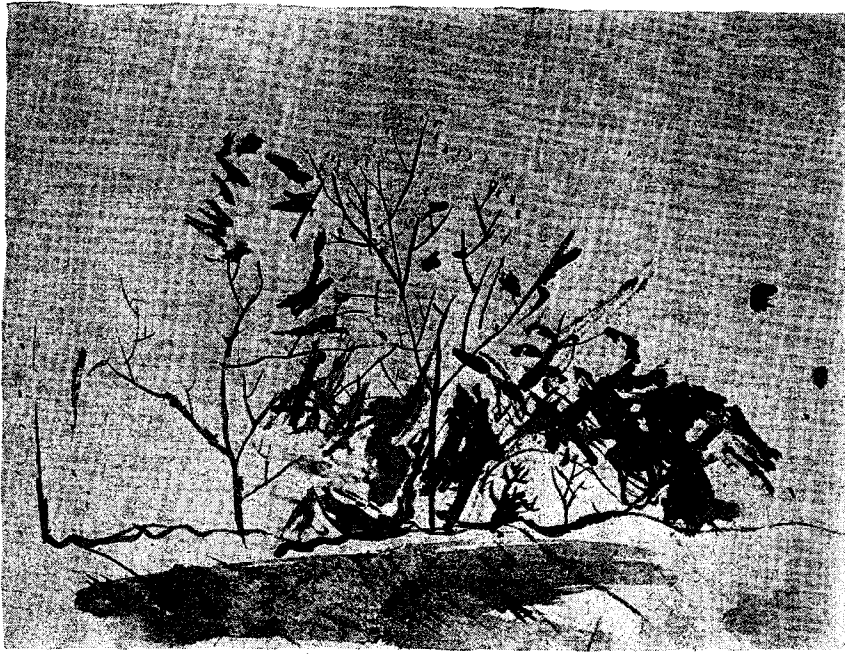
distantly, to what concerned him most deeply. It was the first step in a year-long process of externalizing his anal preoccupations. As a result he began seeing feces everywhere; the whole world became to him a mire of excrement. At the same time he began to eliminate freely wherever he happened to be. But with this release from his infantile imprisonment in compulsive rules, the toilet and the whole process of elimination became less dangerous. Thus far it had been beyond Joey's comprehension that anybody could possibly move his bowels without mechanical aid. Now Joey took a further step forward; defecation became the first physiological process he could perform without the help of vacuum tubes. It must not be thought that he was proud of this ability. Taking pride in an achievement presupposes that one accomplishes it of one's own free will. He still did not feel himself an autonomous person who could do things on his own. To Joey defecation still seemed enslaved to some incomprehensible but utterly binding cosmic law, perhaps the law his parents had imposed on him when he was being toilet-trained.

It was not simply that his parents had subjected him to rigid, early training. Many children are so trained. But in most cases the parents have a deep emotional investment in the child's performance. The child's response in turn makes training an occasion for interaction between them and for the building of genuine relationships. Joey's parents had no emotional investment in him. His obedience gave them no satisfaction and won him no affection or approval. As a toilet-trained child he saved his mother labor, just as household machines saved her labor. As a machine he was not loved for his performance, nor could he love himself.

So it had been with all other aspects of Joey's existence with his parents. Their reactions to his eating or noneating, sleeping or wakening, urinating or defecating, being dressed or undressed, washed or bathed did not flow from any unitary interest in him, deeply embedded in their personalities. By treating him mechanically his parents made him a machine. The various functions of life—even the parts of his body—bore no integrating relationship to one another or to any sense of self that was acknowledged and confirmed by others. Though he had acquired mastery over some functions, such as toilet-training and speech, he had acquired them sepa-



GROWING AUTONOMY is shown in Joey's drawings of the imaginary "Carr" (car) family. Top drawing shows a machine which can move but is unoccupied. Machine in center is occupied, but by a passive figure. In bottom drawing figure has gained control of machine.



GENTLE LANDSCAPE painted by Joey after his recovery symbolizes the human emotions he had regained. At 12, having learned to express his feelings, he was no longer a machine.

rately and kept them isolated from each other. Toilet-training had thus not gained him a pleasant feeling of body mastery; speech had not led to communication of thought or feeling. On the contrary, each achievement only steered him away from self-mastery and integration. Toilet-training had enslaved him. Speech left him talking in neologisms that obstructed his and our ability to re-

late to each other. In Joey's development the normal process of growth had been made to run backward. Whatever he had learned put him not at the end of his infantile development toward integration but, on the contrary, farther behind than he was at its very beginning. Had we understood this sooner, his first years with us would have been less baffling.



MACHINE-LIKE CONSTRUCTIONS controlled Joey's life. Shown here is the apparatus he built to "live him" as he slept. Other "machines" controlled his eating and elimination.

It is unlikely that Joey's calamity could befall a child in any time and culture but our own. He suffered no physical deprivation; he starved for human contact. Just to be taken care of is not enough for relating. It is a necessary but not a sufficient condition. At the extreme where utter scarcity reigns, the forming of relationships is certainly hampered. But our society of mechanized plenty often makes for equal difficulties in a child's learning to relate. Where parents can provide the simple creature-comforts for their children only at the cost of significant effort, it is likely that they will feel pleasure in being able to provide for them; it is this, the parents' pleasure, that gives children a sense of personal worth and sets the process of relating in motion. But if comfort is so readily available that the parents feel no particular pleasure in winning it for their children, then the children cannot develop the feeling of being worthwhile around the satisfaction of their basic needs. Of course parents and children can and do develop relationships around other situations. But matters are then no longer so simple and direct. The child must be on the receiving end of care and concern given with pleasure and without the exaction of return if he is to feel loved and worthy of respect and consideration. This feeling gives him the ability to trust; he can entrust his well-being to persons to whom he is so important. Out of such trust the child learns to form close and stable relationships.

For Joey relationship with his parents was empty of pleasure in comfort-giving as in all other situations. His was an extreme instance of a plight that sends many schizophrenic children to our clinics and hospitals. Many months passed before he could relate to us; his despair that anybody could like him made contact impossible.

When Joey could finally trust us enough to let himself become more infantile, he began to play at being a papoose. There was a corresponding change in his fantasies. He drew endless pictures of himself as an electrical papoose. Totally enclosed, suspended in empty space, he is run by unknown, unseen powers through wireless electricity [see illustration at left on pages 4 and 5].

As we eventually came to understand, the heart of Joey's delusional system was the artificial, mechanical womb he had created and into which he had locked himself. In his papoose fantasies lay the wish to be entirely reborn in a womb. His new experiences in the school sug-

gested that life, after all, might be worth living. Now he was searching for a way to be reborn in a better way. Since machines were better than men, what was more natural than to try rebirth through them? This was the deeper meaning of his electrical papoose.

As Joey made progress, his pictures of himself became more dominant in his drawings. Though still machine-operated, he has grown in self-importance [see middle illustration on pages 4 and 5]. Another great step forward is represented in the picture at right on the same two pages. Now he has acquired hands that do something, and he has had the courage to make a picture of the machine that runs him. Later still the papoose became a per-

son, rather than a robot encased in glass.

Eventually Joey began to create an imaginary family at the school: the "Carr" family. Why the Carr family? In the car he was enclosed as he had been in his papoose, but at least the car was not stationary; it could move. More important, in a car one was not only driven but also could drive. The Carr family was Joey's way of exploring the possibility of leaving the school, of living with a good family in a safe, protecting car [see illustrations on page 7].

Joey at last broke through his prison. In this brief account it has not been possible to trace the painfully slow process of his first true relations with other human beings. Suffice it to say that he ceased to be a mechanical boy and be-

came a human child. This newborn child was, however, nearly 12 years old. To recover the lost time is a tremendous task. That work has occupied Joey and us ever since. Sometimes he sets to it with a will; at other times the difficulty of real life makes him regret that he ever came out of his shell. But he has never wanted to return to his mechanical life.

One last detail and this fragment of Joey's story has been told. When Joey was 12, he made a float for our Memorial Day parade. It carried the slogan: "Feelings are more important than anything under the sun." Feelings, Joey had learned, are what make for humanity; their absence, for a mechanical existence. With this knowledge Joey entered the human condition.

JOEY: A "MECHANICAL BOY"

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I. SUMMARY

Bettelheim describes the case history of an autistic child named Joey who behaved as if he were a machine. Normal children frequently withdraw into a world of fantasy, but they are easily recalled from these excursions. Autistic children, however, may remain permanently in their worlds of delusion and fantasy, unresponsive to external stimulation. Joey's behavior was so much like that of a machine that people reacted to him as if he really were one. On entering the dining room, for example, he would string an imaginary wire from an imaginary electric outlet to his seat, where he would insulate himself with paper napkins before plugging himself in. So skillful was his pantomime that one had to look twice to be sure that neither wire nor outlet existed. Other children and the nursing staff spontaneously avoided stepping on the "wires" for fear of interrupting what seemed to be his very source of life. On other occasions Joey would turn himself off and sit motionless for hours.

What was the cause of Joey's condition? Such evidence cannot be gathered from a single case study but the author presents his own personal view that the major factor in the development of Joey's illness was his early experience with his

parents. For the first three months of his life Joey was maintained on a rigid four-hour feeding schedule despite his crying, was not touched unless necessary, was never cuddled or played with, and was subjected to rigid toilet training. Both parents seemed to be completely indifferent to his presence. "I had no feeling of actual dislike," his mother said. "I simply didn't want to take care of him."

Joey's recovery was reflected in his drawings. Initially, Joey's drawings were of machines alone or of himself as a minor figure completely encased in and controlled by the surrounding machinery, but as his condition improved he became a prominent part of his environment and he changed his passive role. First his drawings of himself acquired hands with which to manipulate the immediate environment; eventually the initial relationship was fully reversed and in his pictures he gained complete control of the machines.

Joey's recovery was a painfully slow process. He did not cease to be a mechanical boy and become a human child until he was almost 12 years old. Although Joey's situation is difficult—in a sense he lost the first 12 years of his life—the difficulties of his subsequent life have never made him regress to his original mechanical form.

II. GLOSSARY

autism — mental illness of childhood characterized by extreme withdrawal and absorption in fantasy; childhood schizophrenia.

megalomania — a mental disorder where the subjects have delusions of grandeur.

neologism — "new word."

schizophrenia — psychotic disorder characterized by a distortion and disturbance of thought processes and the withdrawal from reality.

III. ESSAY STUDY QUESTIONS

- Describe Joey's symptoms.
- What factors does the author assume to be the cause of Joey's illness?
- The behavior of Joey's mother seemed to be somewhat pathological. Bettelheim assumes that this behavior was one of the major causes of Joey's condition, but it raises the possibility of genetic influences. Discuss.
- Evaluate the basis for each of the following statements. In each case, if possible, describe an experiment that could be performed to test this statement.
 - "By treating Joey mechanically his parents made him a machine."
 - "Joey had created these machines to run his body and mind because it was too painful to be human."
 - "It is unlikely that Joey's calamity could befall a child in any time or culture but our own."
 - "In Joey's papoose fantasies lay the wish to be entirely reborn in a womb."
- Compare and contrast the experimental approach and the case-history approach as techniques for understanding human behavior problems.

The Author

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Behavior in Extreme Situations," which General Eisenhower made compulsory reading for all U.S. military-government officers. Bettelheim has headed the Orthogenic School since 1944.

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