

CONSIDERATIONS OF THE DEVELOPMENT AND TREATMENT OF AUTISTIC, CHILDHOOD PSYCHOSIS¹

I. Hyman Weiland, M. D. and Robert Rudnik, Ph. D.²

The difficulties in obtaining significant and long term gains in reality testing and in relatedness to others, through psychotherapeutic treatment of autistic children, are well documented by many authors (1,2,3) and there is a striking repetition of similar themes in the many treatment proposals. For example, in 1947, Barbara Betz (4) said of the treatment of childhood schizophrenia, "It is the task of the therapist to assume the initiative in negotiating a significant contact by some tactical approach near to the patient's particular receptive channels." She described her role with the schizophrenic child as a participation in his idiosyncratic activities to as great a degree as the child would permit, for the purpose of allowing or fostering greater satisfaction of the child's needs. In 1958, Prall, et al, (5) elaborated some of Betz's formulations and suggested that the therapist participate in those auto-erotic gratifications of the child which the child would permit. Thereby they could develop a symbiotic-like relationship with the child. Later, Augusta Alpert (6) described a similar technique, the essence of which is the establishment of an "exclusive, need satisfying relationship between the special teacher (therapist) and the child."³

The afore-mentioned as well as many other reports (7,8,9) describe "breaking through the autistic barrier," (Betz) by inducing the child to accept a relationship with a therapist which can be used for the apparent gratification of some of the child's needs. The essence of this relationship is the recognition by the child that the therapist can be the bearer of desirable gratification. The child will tolerate and may even seek out certain interactions with the therapist or others who can perform the same functions. This type of reaction, however, cannot be regarded as a "real" object relationship since it does not involve full awareness of the person as such but represents a toleration of the therapist's presence for need satisfaction.

This relationship is similar to the parallel play of pre-school age children but it serves quite different functions. It also bears some similarity to the symbiotic relationship of very young infants and of symbiotic psychosis, but it does not have the quality of frantic urgency nor does it have the quality of clinging stickiness. Therefore it is preferable to categorize this relationship as parallel play-like or symbiotic-like behavior. We are not aware of any reports of major progress beyond this type of relationship nor have we found any comprehensive suggestions for advancing treatment beyond this point other than those of a few investigators; such as Eckstein (10), who offer specific modification of more formal psychotherapy. His and similar recommendations seem more appropriate for the less severely ill, psychotic child than for the children of whom Betz, Prall and Alpert speak - even when this latter group of children have improved to the point of a parallel play-like relatedness.

We, too, face the same dilemma of not being able to progress beyond this parallel play-like relationship with most of our patients.⁴ Some may develop more or less normal object relationships but others still continue to use people in the same way that they use implements, relating only to that part of the human being which is an essential object for the attainment of their particular needs (i.e.: they may place the hand of the examiner on an object which is desired while not attending to the rest of the examiner).

Even after a need satisfying relationship has been achieved, the child often shows little interest in playing with his therapist or teacher merely for the sake of playing; he remains interested in the person only as a means to gratification of specific needs. DeMyer (11), by means of operant conditioning techniques, has shown that autistic children can be trained to respond to mechanical vending machines as a means of gratifying some of their

needs; her description of the relationship of these children to their favorite machines sounds quite similar to the parallel play-like relationship with people which we have described above.

Examination of the "child care plans" and "progress summaries" of our clinic reveals frequent comments to the effect that the child is only able to accept interaction and that it is the responsibility of the staff to pursue the child to make use of his acceptance. Seldom is there any indication in the records that a child developed a strong interest and need for interaction; instead the child is usually described as having developed a stereotyped pattern of interaction-seeking and of inter-personal response. In other words, he has learned a pattern of behavior with an adult (or child) and seeks the particular activity rather than seek after the other individual for a variety of interactions, (as one would expect a non-psychotic child to do).

Illustrative is the case of Danny, a nine year old psychotic boy who, for example, regularly greets various staff members with questions designed to reassure himself about certain painful incidents. This questioning is repetitious and accounts for almost all of his spontaneous contacts with some people; with other individuals he has another stereotyped set of overtures and questions.

Rather than achieving a primary object relatedness, the psychotic child seems to have evolved pseudo-object relatedness in which the driving forces toward need satisfaction do not flexibly capitalize on the possibilities inherent in the therapist as a social being.⁵ Thus the child seems to maintain his fixation around an omnipotent, autistic frame of reference.

We might summarize our conclusions thus far by saying that some autistic children respond to "corrective object relationship therapy" (Alpert) by pro-

gressing to a working object relationship with the therapist out of which further gains can be made; many others fail to respond at all. A third group exhibits some changes but only develops a limited, pseudo-object relationship. In our experience this has proved the largest group.

Mahler (12,13), Rank (14) and others predicate the psychogenesis of childhood psychosis on early infantile experiences which have led to the expectation that object relationships are so dangerous⁶ that the child regresses to or becomes fixated at primitive levels of functioning - autism or symbiosis. It is postulated that the expectation of murderous attack or of symbiotic engulfment by a psychogenic mother⁷ results in a failure to progress beyond autism and in panicky attempts to escape from symbiosis into autism or in fear of loss of the object with a resultant regression to symbiosis. These children avoid certain types of behavior with people and modify other responses more in relation to their expectations of reality than on the basis of the reality of the experience offered by the current object. Significantly, these children may be quite aware of their objects, although they misinterpret their actions and intentions.

If the resolution of conflict is to be effected by more or less formal psychotherapy or by the corrective effect of the therapy described above it could be anticipated that progress should continue at a more rapid pace once the break-through is made. This does seem to be the case with some children who may progress to a more or less normal personality development. Most autistic children however, do not respond in such a satisfactory manner.

Our patients who progress to, but not beyond, "pseudo-object relationship" often seem to have other features in common, such as a relative absence of active defense against relatedness, even before treatment.⁸ In spite of this he still is unable to recognize and make use of people as a separate

class of objects. This occurs even if the child appears to be aware of the existence of the human object along with (but not distinguished from) other, non-human objects. Illustrative is Morton, a nine year old autistic child, who paid no attention to his therapist as long as he was happily spinning any object. When the therapist offered a "better" object for spinning, Morton became interested only to get the new toy. If the therapist interfered with Morton's activity Morton would brush the therapist away or would quietly turn away. When Morton became enraged, either in response to the therapist's persistent intervention or to unknown factors, he indiscriminately attacked the therapist, the furniture in the room, the walls or his own person. This child appears to use the examiner as a tool. He appears almost unaware of the existence of other human beings as a separate class of objects and/or seem to have no information on specialized ways of dealing with his fellow human beings. Another demonstration of the existence of this type of autistic child is seen in the following excerpts from diagnostic interviews. Jack, a seven year old psychotic boy, screamed, tore at his clothing, tried to crawl through the window and showed every manifestation of anxiety when the examiner approached within a few feet. When left to himself, he would sit withdrawn, ignoring the examiner, or he would engage himself in manipulating and mouthing objects. Another psychotic child, Nelson, aged five, would sit withdrawn, mouthing objects so long as he was left alone. He also paid little attention to the examiner and continued to ignore the examiner when the latter came near him, or even when he picked the child up. Nevertheless he gave evidence of an awareness of the change in his position in relation to the objects of his interest. He also permitted and enjoyed tickling games which Jack rejected with anxiety. When Jack desired something he tended to ignore the possibility of the examiner offering assistance, whereas Nelson would "use" the adult's hand

as a tool. Jack's interviewer was physically attacked when Jack wanted candy but he rejected the possibility of soliciting the examiner's assistance, even when this was offered him. If the adult obstructed the approach to a desired object Jack would retreat or would attack the examiner or would persist in attempts to get around the examiner, while Nelson would pull at that part of the examiner which was directly in his way and tended to be oblivious to the person of the adult. Thus Jack appears to be actively defending himself against relatedness while Nelson seems unaware of humans as a separate class of objects.

In contrast to the above formulation, it can be postulated that the apparent unawareness of human beings as a separate class of objects is only the ultimate autistic defense against a relationship with the feared object. It is quite possible that both hypotheses may need to be called on to explain the state of affairs in various children.

Morton and Nelson, both of whom developed symbiotic-like responsiveness in corrective object relationship therapy, demonstrated another unusual response. Morton's first therapist was unable to induce him to do more than accept the therapist as a bearer of objects that Morton could spin, for two years. Morton's second therapist had the same experience for approximately one year. Then, in desperation and in order to force some reaction from Morton, the therapist decided to interfere actively with all of Morton's autistic activities. It was in this situation where the only source of gratification and the major source of frustration during the interview was the therapist, that Morton first began to relate actively. Nelson, who had equal difficulties relating was able to relate when his therapist refused to allow him to gratify himself.

The observation that such a combination of gratification and frustration could foster better relationship with people was frequently reported in casual observation of the daily life of the child but we have only recently begun to explore this phenomenon more systematically.⁹

Our experience to date suggests that some autistic children can be induced to relate more actively to human beings in a situation which contains elements both of frustration and gratification arising from a single source. It would appear that there is something in almost all gratification arising from one source that makes the individual significantly more important to the child, or that the pain of the frustration forces his attentions on to the therapist or both.

It is pertinent to consider an explanation for (1) the apparent difference in the various groups of psychotic children; (2) the fact that the one group of even more disturbed children may respond as well as, and sometimes more readily, to a more simplified means of treatment and, (3) the observation that the more disturbed group seems to remain more fixated at this new level of response rather than progressing to greater therapeutic benefits.

The etiology of the syndrome of the special group of autistic children who form a pseudo-object relationship, is suggested by three major observations that have been noted above, viz: 1. these children seem seem unaware of and do not defend against contact with human beings; 2. they respond to "connective object relationship" therapy by the development of behavior which has much in common with a conditioned response (pseudo-parallel play); 3. they can be induced to take cognizance of the therapist when the latter becomes the source of all gratifications in the immediate environment, and when he inhibits the patient from gratifying himself autistically. Further, these children seldom showed regression from a previously achieved level of function but were described as "always" odd - "never" interested in people except when they needed

something. The life long history of failure to develop adequate means to deal with other human beings rather than a history of developmental progression followed by arrest or regression places the onset of the disorder in very early infancy.¹⁰ Further, the absence of relatedness rather than an active defense against relatedness suggests that these children suffer from a failure to develop an important ego function rather than from only an avoidance of the use of a learned pattern of behavior. This failure may be due to an absence of the experiences crucial to the development of the function or to an elevation of threshold in regard these experiences or to both.

An explanation for these phenomena may be sought for in the concepts of imprinting (15,16,17) and of the "critical period." Scott (19), Blauwelt (20) and others have demonstrated that there are specific periods in the infancy of various mammals, more or less species specific, which are optimum for the development of certain interindividual and social responses. If appropriate experiences are not offered the infant at this critical period the responses may not be able to be elicited at all or only in modified form. It may be postulated that the human infant must be exposed to certain experiences at crucial times in his life in order to develop those functions which are referred to as object relatedness.¹² Blauwelt's (20) observations on the sucking reflex in human neonates and Spitz's (21,22) studies, together with the observations noted herein suggest that similar conditions for the development of certain ego functions are necessary in the human infant. Thus it may be postulated that appropriate conditions must exist in infancy to allow for the formation of at least two types of childhood psychosis. In one the symptoms may develop primarily as a defense against essentially traumatic and overwhelming experience with painful, primary objects. In the second group of psychotic children the symptoms may be related to a lack of exposure or an absence of crucial experiences

at some "critical period" and a consequent failure to be "imprinted" on human beings with appropriate responses. Just which parameters of developmental experiences are significant to developing object relationships are not known. Since major disturbances in this function are relatively uncommon, natural-life studies have not been too fruitful. The objections to experimental studies with infants are obvious. On the other hand, Harlow's (23) studies of the development of affectional responses in the monkey give detailed descriptions of the sorts of experiences which seem to be important in the development of functions in this sub-human primate which are similar to the functions which we call object relatedness.

The observations that autistic children may be more capable of recognizing and dealing with (relating to) their therapists when the therapist actively interferes with the child's attempts to gratify himself (autoerotically) and when the therapist becomes the sole source of gratification is an active replication of that ^{situation} which obtains during normal infancy. In this latter instance, however, the autoerotic gratification is limited not by intervention by an outside force but by the immature state of the infant. All that can be stated at the present time is that some activity attendant to the gratification of the infant when he is in a helpless condition is possibly related to the development of the social response in man as it is in lower primates. It matters little whether this experience is referred to as imprinting or is attributed to certain experiences which occur in the human infant at a time when he is most helpless and dependent. The only essential hypothesis is that some experiences are critical in that they serve to introduce the infant to his first human objects and perhaps, determine his subsequent behavior to them.

In accordance with the preceding are Freud's (24) observations which led him to suggest that certain libidinal responses develop in anaclitic relationship to the life instincts. It is conceivable that the behavioral responses under discussion as well as other social and inter-personal responses are similarly anaclitic to life instincts. The first three months of life is a very

needful period for the infant but it is probable that in the first three months the capacity to recognize the objects and to recognize the need for them have not adequately developed. From the third to the eighth month, or thereabouts, of his life, the parental object remains needed by the infant and it is at this time that he has developed those perceptual capacities which would enable him to "recognize" the object. If the child does not undergo the appropriate experiences at the critical period or if his constitution is so crippled that he cannot make use of the particular experiences which are assumed to engender object relatedness, we can anticipate that he may not become aware of, and deal with human beings. Such children would not be expected to develop defenses against the object since they would be unable to recognize humans as such and accordingly could not develop appropriate techniques of relating.

The child who defends himself actively against involvement with human beings because of his fear of them as potentially dangerous could respond to the kind of treatment described by Betz (4) Prall (5) and Alpert (6) only if it offers a therapeutically corrective life experience. Otherwise, the more that the teacher or therapist participated in activities with the child, the more anxiety would be induced. The child's transference expectations of human beings would color the relationship with the same fearful anticipation with which he greets all human beings in life. On the other hand the group of children who have not achieved the capacity to relate to others would not develop the same degree of basic suspicion and mistrust of human beings and therefor should be capable of learning to accept need satisfaction equally well either from people or mechanical objects. Since the development of this acceptance of need satisfaction from human beings does not occur in the framework of the intensive, needful situation of the infant, the object relationship is very tenuous, and differs significantly from that of the normal child in that it is based primarily on direct need gratification. By the time the autistic child enters therapy he has learned to provide most of his

limited needs for himself and has little motivation to relate to the therapist who is not sufficiently meaningful and cannot become so under the conditions of corrective object relationship treatment.

The fact that the children comprising the group that have developed no awareness of others cannot progress in therapy beyond the establishment of a "pseudo-object relationship" is attributable to the possibility that the child has merely learned how to accept into his life experiences another means of gratifying needs without the necessity of recognizing humans as a separate class of objects. The inclusion of a new function has not broadened the child's ego but has only added an additional means of gratification to the already existing functions.

These various considerations offer two possible approaches to the treatment of autistic children who have not developed the capacity to relate to others. If it is postulated that an intensely needful life experience is necessary for the development of object relationship, and that it cannot be recreated after some "critical period," then the only solution is to help the psychotic child make the best possible adjustment to as nearly a normal life situation as can be developed. This may be accomplished by teaching him as many experiences as possible in which satisfactions incidentally include human beings. Thus, in accord with DeMyer's (11) experiences with operant conditioning of psychotic children the autistic child may be conditioned to a large variety of experiences with others, in order that he may be able to move about in the environment, pseudo-self sufficiently (and, with increasing age, learn more formal skills) without essentially changing from his autistic orientation. In extension of this form of treatment the child may be conditioned not only to use another person for the satisfaction of those needs which he originally gratified autistically, but he may also be exposed to special techniques such as speech therapy and other similar experiences which could relate

valuable, socially desirable forms of activities to the need satisfying pattern of the child.

A more favorable prognosis ^{might} be anticipated if it could be assumed that the conditions necessary to facilitate the process of "imprinting" or primary object cathexis can be recreated beyond infancy, under special circumstances.

Observations of autistic children and of neonates suggest that the essence of cathecting the primary object is determined by the helplessness of the infant, coupled with the ability to recognize the source of his gratification as well as by the fact that the gratification arises primarily from one source (the mother). That this extremely needful and dependent condition can be recreated later in life is suggested by the hypnotizability of humans; even more extreme degrees of dependence in which the patient approaches the conditions of infancy, are observed in traumatically brain injured patients, who gradually learn, at first primitive and then more complicated functioning abilities. In order to develop the impetus for a change in the child's orientation to other persons it is essential to induce an intense sense of helpless dependence, similar to that assumed to be present in normal infants at the time of "imprinting" on humans. Although electro-shock or insulin coma can induce a state of extreme dependency, the effects are quite transitory. Such operations, however, as well as psychopharmacological aids could play some role in the overall program.

In the ideal therapeutic program, the total environment of the child should be organized to allow all of his gratifications to be offered by some single person who could erect such barriers as to make it impossible for the child to achieve these gratifications by himself (autistically). Practical aspects however, preclude the availability of a single person who could tolerate the intense, intimate

interaction. Consequently, it would be necessary to organize the child's care around one or two persons per shift. They, in turn, could maintain a constant observation of the child restricted to a relatively small area. Gratification without asking for the assistance of his specific worker(s) would not be permitted while withdrawal would be obstructed by the persistent efforts of the worker. The child would be offered certain activities or objects which were known to be of high desirability to him. These would be given, however, only if the youngster specifically asked the worker for them.

The proposed therapy is similar to the technique that is used by Mildred MacGinnes in her speech therapy of aphasic children (25). Apparently she is very forceful in her persistent demands that the child speak in order to obtain a gratifying response from her. Some observers (26) believe that MacGinnes may be dealing with autistic children in some instances and that her techniques are applicable to autistic children.¹³

It is important to note that the above procedure could be expected to be effective only after an initial period during which the child has learned that gratification can come from the worker. It is quite possible that MacGinnes also holds out the offer of gratification in order to stimulate the child to accept her demands. Accordingly the techniques of Alpert, Betz or Prall could be applied until the symbiotic-like relationship has been established and then gradually transfer the therapeutic program to the type described herein. Such a therapeutic program could be approached by one or two teams of therapists who would spend three to four 45 to 90 minute periods of the day with the child for at least five days a week. Two or three of these sessions would occur during mealtimes and the remainder should be oriented about activities of special significance to the child. These and other practical problems are now being

evaluated in several pilot studies in progress at Eastern Pennsylvania Psychiatric Institute.

SUMMARY

An evaluation of the therapeutic progress of autistic children exposed to various therapeutic procedures made it apparent that all procedures result in the development of a pseudo-object type of relationship by many patients. Progress beyond such a state is rarely attained. Therapeutic and other observations on autistic children raised the possibility that such children consist of two distinct groups. The development of the syndrome of one group is attributed to severe traumatic experiences during the period at which object relationships are just "learned"; the object-relationship thereby attains the potential of danger. One second group is composed of children who have failed to experience those particular operations at some "critical period" essential to the organization of behavior that characterizes object relatedness. On the basis of these observations and interpretations, modifications in therapeutic techniques are proposed.

APPENDIX

Since writing the above we have applied the proposed treatment modifications in a more controlled manner to one child. We selected Nelson as an autistic child who had developed a symbiotic-like relationship with the child care staff following three years of psychotherapy but who had never developed a meaningful relationship with any person and who, at the age of eight, had not achieved the use of speech. Because of limitations in time and personnel we used volunteers from the child care staff¹⁴. Space limitations restricted us to the use of the "normal" ward environment. The child care staff were asked, instead of cuddling Nelson, singing to him etc., as usual, to spend as much time as he would tolerate offering his favorite toy (a ball) on the one condition that Nelson would ask for it by saying the word. No other change was to be made in the child care plan and no additional time was to be spent with Nelson beyond that which had been customary in the past. We found that Nelson could tolerate brief periods of frustration several times during a shift and ^{would} the workers ^{show} Nelson the ball at these times but not give it to him, indicating that he must say "ball" in order to obtain it. Within 12 weeks Nelson first said "ball" and shortly thereafter he frequently began to request the ball from the staff even when it was not offered. At this time we decided to repeat the procedure with doughnuts, a favorite of Nelson's. Within 11 days he had added this word to his "vocabulary". Within another week he began adding an average of one or two words a day and by the end of this week Nelson had taken the lead and was eagerly learning words to communicate his wants to the child care worker. At the present writing, Nelson has use of several dozen nouns and verbs to indicate his desires to the staff and eagerly plays games of identifying objects as a pleasurable activity in itself. He even

enjoys singing simple songs.

We present this brief case report as an indication that the procedures described can be carried out but we do not lay claim to any proof of our hypotheses from it. Our working assumption was that Nelson was enabled to learn to talk as the result of his needs being aroused by the "teasing" behavior of the workers who permitted gratification only when addressed appropriately. Although this is somewhat different from our earlier suggestions, it does make use of the same general principles of establishing a situation wherein the human being is the only possible source of gratification and must be reckoned with as capable of severely frustrating the subject. Whether a similar response could have been obtained by the use of a device for operant conditioning (using the word as the response) or not, we can not say. It is also too early to tell whether Nelson's relationship to the staff is such that it will be more than a further extension of the symbiotic-like relationship which we had developed before or whether Nelson can begin now to make use of a more normal relationship with people. Nelson's pleasurable use of naming objects with and for the child care staff certainly suggests that the act of naming as well as, perhaps, the relationship with adults, too, have achieved a special significance.

FOOT NOTES

1. This study supported in part by National Institute of Mental Health research grant No. M-3890 (CI).
2. Dr. Weiland is Assistant Director, Children's Unit, Eastern Pennsylvania Psychiatric Institution. Dr. Rudnik, formerly Supervising Psychologist at Eastern Pennsylvania Psychiatric Institute is now Executive Director of the Fairlawn Mental Hygiene Clinic.
3. Italics added
4. The patients who form the basis of our observations are more than 30 children who have been in residential treatment at Eastern Pennsylvania Psychiatric Institute for from one to four years. Their symptomatology is characterized by severe disturbances in object relationship, reality testing and other important ego functions. Many of the children are non-verbal or have limited use of speech which is essentially non-communicative in function. The diagnoses are autistic, symbiotic or mixed psychosis but elements of autism exist in all. Many are rather typical examples of primary infantile autism.
5. We do not mean to say that the child may not differentiate between certain individuals - in somewhat the same way as he differentiates between inanimate objects.
6. The terms object and object-relationship will be used throughout in the commonly accepted sense of human beings for the former and inter-personal relationships for the latter.
7. The implication is often made that the mother or her psychopathology is responsible for the development of the psychosis. We do not believe that this has been demonstrated conclusively but there is considerable evidence to indicate that her personality is intimately involved in the disturbance of the child. For the present purposes it is sufficient to say that the patient acts as if his mother is the source of his psychotic

fears and he attributes the potentiality of the same responses onto other humans.

8. Since these and the following observations arose out of empirical observations of development in a clinical program they were not subject to rigid control, as is the case in most investigations growing out of a service program. However, it is the consensus among clinicians that children who have a history of clear cut traumatic relationships with significant persons and who subsequently retreat from and defend against relating to people have a better prognosis than those who have never related to human beings adequately.
9. See Appendix for a description of the results of an experiment with this therapy in one non-verbal child.
10. The ability to make the first social responses to human beings presumably develops somewhere between three to five months.
11. Whether imprinting is a special form of learning dependent on the release of certain innate potentials by specific releaser mechanisms, as the above authors believe; or whether, as Moltz (18) suggests in his thorough critique, imprinting is more related to conditioning, though influenced by the special circumstances in which it occurs; we are not prepared to discuss.
10. Expressed in psychoanalytic terminology, imprinting may be equated with primary object cathexis in which the primary object is invested, setting the pattern for subsequent relationships with this and with like objects.
13. Unfortunately Dr. MacGinnes has not published detailed descriptions of her work and details of her technique come mainly from speech therapists whom she has trained or from those who have observed her.

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