

PRENATAL TRAUMA AND AUTISM

Suzanne Maiello, Rome, Italy

SUMMARY

Through the clinical history of a little girl, this paper explores possible traumatic prenatal experiences of children who have autistic features from birth. It establishes a tentative connection between the precocity of the onset of pathology and potentially traumatic prenatal situations such as threats of miscarriage or pathological mental states in the pregnant mother. It is suggested that a psycho-physical retreat from the auditory experience of the mother's voice, which normally stimulates foetal proto-mental activity and may lead to the development of a 'sound-object', might contribute to the later autistic child's isolation and non-mental clinging to tactile sensations.

KEYWORDS

Prenatal auditory perception; sound-object; prenatal trauma; autism.

INTRODUCTION

Human beings seem to have a primary need and capacity for meeting the 'other' and creating links. Trevarthen (1979) refers to this phenomenon as 'primary intersubjectivity' and describes it as 'our innate sympathy for the feelings and interests of other persons' (Trevarthen *et al.*, 1996: X).

Autistic children lack this primordial search for communication. What has gone wrong, and at what point? And what are the reasons for autistic retreat?

Shortly before her death, Tustin (1994a) acknowledged the complexity of the processes which lead to autistic states by suggesting in the preface to the second edition of *Autistic Barriers in Neurotic Patients* that the term 'psychogenic autism', which she had used up to 1990 for children who had been assessed as not brain-damaged, should be changed into 'psychobiological autism'. By doing so, she not only recognized the contributions of other disciplines, such as genetics, biochemistry and neuroscience, for a deeper understanding of the genesis of autistic pathology, but also reaffirmed implicitly that nature and nurture are interwoven from the very beginning, and that the

further we go backwards in time towards the origins of life, the less it is possible to separate the physical and the psychic aspects of events. Tustin in fact refers to autistic encapsulation as a 'psycho-physical protective reaction rather than a psychodynamic defence mechanism' (1990: 154). With this definition she underlines the precocity of the onset of pathology. The earlier in development a traumatic event occurs, the more any protective reaction will be rooted in the body and the senses. On the other hand, it is equally true that from the moment of the first appearance of protomental activity, *every physical event has its psychic counterpart*. This is why we cannot exclude that even prenatal experiences can re-emerge in some form in later life.

Although Tustin never went into the question more systematically, she attributed the mental state of children who were born autistic to *prenatal* 'aversion reactions' (1990: 87). Her clinical experience led her to assert that some children 'seem to have suffered disturbances *in utero*, and so are born prone to be autistic even from birth' (1986: 98). She was struck by the frequency with which these patients evoked a watery medium and expressed psycho-physical states in terms of liquidity, which could be assimilated to the prenatal situation. I would add that the experience of 'freezing' to which these patients refer when they become capable of describing their sensations of autistic isolation could represent their reaction to the terror of falling at a time when the sense of existence still had a liquid quality. Freezing is a liquid's way of becoming a solid body. Its solidity however is precarious, because it cannot rely on an internal structure to ensure the maintenance of its state, but is at the mercy of environmental conditions.

Beside the idea of autistic retreat being a possibly prenatal psycho-physical protection, Tustin considered autism as '*a reaction that is specific to trauma*' (1994b: 14). Trauma can have both external and internal origins, but in both cases it leads to what she described as these children's 'traumatic awareness of bodily separateness from the mother...before their psychic apparatus was ready to take the strain' (1986: 23).

Whose trauma is it? The earlier it occurs, the more physical and psychic states are in near-at-one-ness, and the more the psycho-physical existences of foetus and mother are interwoven. Tustin stated that traumatic events during pregnancy or around delivery in

the lives of the future autistic children's mothers could have an impact on the child's psychic development and reported that *all* the mothers of her autistic patients had been clinically depressed before or after the birth of their babies (1986, 1990).

These are the three strands of Tustin's thinking which I shall pursue in the clinical part of this paper: the idea of both a *prenatal* and *traumatic origin* of autistic retreat, and its close *connection with maternal emotional and mental states*.

TRAUMATIC PRENATAL EVENTS

The most direct threat to the unborn child's physical survival is the danger of miscarriage. It manifests itself by contractions of the uterus which can entail a premature opening of the cervix and aim at the expulsion of the embryo or foetus. The foetus, being in contact with the uterus walls, will feel the contractions directly, and at the same time be exposed, like the embryo, to an increased pressure of the amniotic liquid on its body surface. In both cases, the child is liable to have uncontrollable tactile perceptions which differ from the normal situation.

The threat of miscarriage inevitably has an impact on the mother's emotional state. We know that the foetus reacts to the biochemical changes which occur in the maternal organism in correspondance with the fluctuation of her emotional states. Rosenfeld describes the unborn child's impotence in the presence of their 'osmotic pressure' (1987). Every physical event in the mother's existence has its emotional counterpart, and both seem to have an impact on the foetus's psycho-physical state.

Any unforeseen event which causes a sensation of helplessness brings about a reaction of flight and retreat. The foetus who is threatened by miscarriage may have alarming sensations which are elicited by a combination of tactile and biochemical elements. This may influence the child's further prenatal and later postnatal behaviour as described by Piontelli's observational study (1992). Incidentally, it is striking to note how many mothers of seriously disturbed children had a threat of miscarriage during pregnancy.

However, I would like to extend the notion of trauma and consider as traumatic not only events which disrupt an existing external or internal configuration at a certain point in time, but also include factors which impinge in a more subtle and continuous way on mental development, either through their depriving absence or their damaging presence.

It is difficult to assess the potentially traumatic impact on the unborn child of temporary emotional distress or pathological mental states in the pregnant mother. The foetus is receptive to them, but the degree of their traumatic effect seems to vary from child to child. Infant observation teaches us how differently babies react to frustrating situations. It is tenable that individual differences exist also before birth.

J. Grotstein's (1983) suggestion that maternal depression during pregnancy could have the effect of a biochemical assault upon the unborn child in the 'amniotic bath' is supported by Tustin's finding of the consistency of depression around the time of birth of their babies in the mothers of her autistic patients.

Knowing that the foetus actively listens to the mother's voice and reacts to it (De Casper and Spence, 1986, Masakowski and Fifer, 1994, Moon and Fifer, 1990, Spence and De Casper, 1987), it is probable that the unborn child receives clues of her state of mind also at the vocal level. A depressed mother's voice will have a flatter melodious line, a slower rhythm, a weaker tone and a lower pitch than the voice of a non-depressed mother. In normal circumstances, the maternal voice has a stimulating effect on the foetus (Tomatis, 1981) and may, as I have suggested elsewhere, represent an essential factor in the onset of foetal protomental activity (Maiello 1995). A low-keyed maternal voice may well have a different impact on the child's prenatal experience.

IMAGINING TRAUMATIC PRENATAL EXPERIENCES

The fact that during prenatal life the child's reactions to an event cannot be observed in a continuous way represents a difficulty if we want to think about foetal experiences. After birth, the infant can be seen, heard and touched, and its responses give the

observer immediate clues as to how he is affected by an event. Foetal reactions can be observed only for a limited time with ultra-sound exploration. The only means we have in order to gain some understanding of prenatal experiences, both in normal and pathological development, is sensitive and cautious inference from clinical and dream material or from infant observation.

Normal infants look and listen actively and show an immediate capacity for 'grasping' the environment and coordinating sensual information and responses. They create links. Autistic children avoid looking at people and do not listen, to the point that they may seem deaf. If touched, they either withdraw or merge with the other person's body.

Before trying to imagine what the quality of a foetus's traumatic experience might be, I would like to think about the intrinsic differences between tactile and auditory modes of perception in normal development (Maiello 1997), in order to understand what happens to their functioning in the case of the most extreme protective reaction to a traumatic event, namely autistic retreat.

Touch and hearing are the main sensuous channels through which the foetus establishes contact with its environment. Although they are likely to become 'clusters of sensations' (Tustin, 1981) in prenatal experience, tactile and auditory perceptions will be discussed separately for a fuller understanding of their functional specificity.

Touch conveys a concrete 'no-distance' experience around the quality of surfaces. It is essentially linked with twodimensional perceptions. If we extend Ogden's (1989) concept of the 'autistic contiguous position' to prenatal life, tactile sensations may bring about the first fleeting perceptions of bodily boundaries in normal development.

Hearing on the other hand is an immaterial 'long-distance mode of perception' (Tustin, 1990: 51). It may represent a bridge between twodimensional tactile perceptions and the first flickers of foetal 'protomental activity' (Mancia, 1981). The mother's voice comes from outside and penetrates *into* the ear. Although the vibratory component of sound may be associated with tactile sensations, there is more potential third-ness in hearing than in touch. Hearing may in fact lead the way to the first psychic proto-

introjective experiences. Spensley (1995:125) writes: 'Listening....means taking something in, aurally and psychologically'. The ear is an exclusively *receiving* organ. It is dependent on incoming sounds and has no active functional autonomy of its own. It is only after birth, with the first cry, that the infant acquires the capacity to produce sounds himself and to use his voice and mouth to initiate contact at sound level and to create autonomously a sensation of vocal fullness.

The unborn child's only means of active exploration is its motility, through which it makes contact with the environment and its own body. At the auditory level, the foetus has no means to either recreate the presence of the maternal voice or to influence its emotional quality.

Another difference between touch and (after birth) sight on the one hand, and hearing on the other becomes significant in the presence of objects or sounds which are experienced as disturbing or intrusive. We can withdraw our hand or close our eyes in front of an object which we do not want to touch or see. If the infant refuses the breast, he will keep his mouth closed or turn his head away. At the auditory level, there is no comparable possibility of active avoidance. We have no 'ear-lids' to shut out disturbing sounds, neither after nor before birth.

In a traumatic prenatal situation such as a threat of miscarriage, the priority of concrete physical survival may overtake other more immaterial needs. The autistic born infant may have been induced by catastrophic sensations of helplessness to retreat from a threatening environment with the ensuing breakdown of the very 'outposts' of proto-mental activity. The effect of this aversion reaction could be that of remaining *in* or returning *to* an asymbolic

state of 'unmentalized experience' (Mitrani, 1992). In dimensional terms, this would mean that the breakdown of the 'long-distance' sense of hearing with its potential for symbol-promoting threedimensional mental functioning could bring about the infant's clinging to surfaces in a twodimensional tactile mode which excludes the mental experience of distance and space. Tustin observed this phenomenon in autistic children

and writes: 'I have come to realise that vision and hearing, as a result of the undue dominance of the sense of touch, become excessively imbued with tactile sensations' (1986: 145).

If the foetus's or the infant's traumatic experience is not caused by a specific event but is, rather, connected with the mother's emotional or mental state, the situation is even more complex. By what means does a normal child manage not to be affected by the mother's distress or pathological mental state, at least not to the point of resorting to autistic self-protection? Can we hypothesise the existence of some form of a prenatal protomental precursor of the 'contact barrier' (Bion 1962) with a filter function, in analogy to the role of the placenta at the physical level? We know that although the mothers of Tustin's autistic patients were all depressed, not all children of depressed mothers escape into autistic isolation. In children who are born with autism there may have been a deficit of this prenatal 'protomental filter' resulting in them being exposed even more helplessly to the osmotic pressure of the maternal emotional and mental state.

From the point of view of prenatal auditory experience, a distressed or mentally disturbed mother's voice may not give the unborn child sufficient emotionally enlivening, or alpha-element containing, nourishment and may emit instead unemotional or undigested vocal beta-elements (Bion, 1962). The later autistic child may have protected himself massively from the impingement of such intolerable contents by 'unlinking' his hearing capacity at a deep psycho-physical level, with the effect of it losing its bridging function towards pre-symbolic mental development.

Elimination of auditory receptivity could result in the lack of, or damage to, the prenatal 'sound-object' which in normal development seems to be nourished by proto-introjections of the maternal voice, and which seems to function as a precursor of the postnatal maternal object (Maiello 1995). Could the absence of this link be among the reasons why some autistic-born children seem not to 'recognise' the breast and take to it? I suggest that the later vicious circle of an isolated child and a mother hesitant in soliciting a response, might have a prenatal precursor in the mother's distressed

emotional or disturbed mental state as it reveals itself in her voice, and the foetus's auditory retreat.

ROSETTA'S PRENATAL TRAUMA

Early history

Rosetta was a five-year-old only child with severe autistic features when she was referred for psychotherapy.

Before her birth, the mother had 'several miscarriages', as she put it when we first met. Tustin states that among her autistic patients' depressed mothers, some 'had had a previous miscarriage, the emotional effects of which were still being felt when the later, autistic child was in the womb and was born' (1986, 95).

When the mother was pregnant with Rosetta, there was again a threat of miscarriage, at five months gestation. A cervical ring was placed and saved the baby's life. The delivery was at term without complications. Rosetta was breast-fed for seven months, but gaze aversion was reported from the first weeks of life. After weaning, she refused the bottle and passed directly to spoon-feeding. She did not crawl, but pulled herself to her feet at nine months and was put in a walking ring to move around. The mother fell pregnant again one month later, but had a miscarriage and lost the new baby in the fifth month. At one year, Rosetta said her first words, but there was no progress and she lost her initial capacity. When she started walking at eighteen months, her mother became pregnant a second time, but again lost the baby. The doctors finally found out that her organism produced antibodies which attacked the embryos.

I was alarmed not only at the thought of Rosetta being the only surviving child among a number of dead babies, but even more by the mother's angelic smile and the lack of emotions with which she reported both Rosetta's progress and failures and her own miscarriages. The mother saturated every moment of possible reflective silence with an uninterrupted flow of words. Her tone of voice was both high-pitched and infantile, flat

and impersonal, and her speech was very inarticulate. It felt as if the words slipped almost unshaped out of her mouth and away, unseen and unheard by herself.

The father did not hide his impatience and violent disappointment towards both his 'childish' wife, whom he tried to exclude from our 'adult' conversation, and his 'retarded' daughter. During Rosetta's psychotherapy, his personal problems came to the fore. He drank heavily, and his behaviour in the family was violent and abusive. Later, he accepted psychiatric treatment.

Mother and child had never been separated since Rosetta was born. In the mother's mind, they seemed to live in a perpetual state of 'dual unity'. Tustin uses this term to describe the abnormal adhesive at-one-ness between mother and child which precedes autistic retreat (1994b).

Rosetta's mother and her 'twinning' phantasies

Before the first interview with the parents, the mother surprised me by asking if her sister could participate in our meeting. When therapy had been arranged on a three times-a-week basis, Rosetta was regularly brought to the sessions by the mother and the aunt. The two women had a striking resemblance. Perhaps the mother found it too difficult to be on her own during the child's session. When she came to fetch her daughter, she took the five year old girl in her arms and carried her away as if she were a baby.

At the beginning of therapy, the mother had wanted to fulfil what she presented as Rosetta's wish, namely to buy her a puppy. Later, she planned to take a child of Rosetta's age into foster care, so that her daughter would have some company. Both needs seemed to originate in herself more than in the daughter.

The mother's 'twinning phantasies' aimed at excluding the danger of separation and of safeguarding a condition of on-going fusional 'sameness'. In thinking about a patient, Bion writes: '...the imaginary twin...was an expression of his inability to tolerate an object that was not entirely under his control. The function of the imaginary twin was thus to deny a reality different from himself' (1950: 19).

Before meeting Rosetta herself, a later event which involved her mother must be anticipated. One day, five months after the beginning of therapy, she brought the child to a Monday session carrying her in her arms. Rosetta's face was swollen and heavily bruised around her eyes and nose. It was unthinkable to separate them, and the mother held Rosetta on her lap for the whole session.

During a walk with her father, the child had fallen from a wall and had been in hospital over the weekend.

A few days later, the mother was to tell me that she was pregnant again. She then interrupted her own therapy which had been arranged with another therapist from the beginning of the child's treatment.

I did not feel that she had fled into this new pregnancy to escape a feeling of *emptiness*, which would have presupposed some perception of a three-dimensional inner space, but rather that the idea of a new baby was another realisation of her adhesive 'twinning' phantasy, which she had so far realised in the mutually clinging at-oneness with Rosetta. The mother intuited that the quality of their relationship would change as the child's psychotherapy progressed. Incidentally, the timing of the two preceding pregnancies followed by miscarriages is striking if it is seen in relation with Rosetta's early developmental stages. The first pregnancy had begun shortly after Rosetta had learnt to stand on her own feet, and the second shortly after she had started walking.

The mother's flat substanceless body seemed the specular material counterpart of her mental state. I was deeply worried by the idea of the absence of both physical and mental space for a new baby inside her. I also feared that Rosetta's treatment might be in danger. Two more miscarriages lay in the air.

The family did manage to keep their commitment to Rosetta's treatment, but at the end of the sixth month of pregnancy, in the middle of the summer break, the mother gave premature birth to a little boy. His life was in danger for a long time, and he spent four months in an incubator.

When the mother brought Rosetta back to therapy after the holidays, I expected to see a woman in her seventh month of pregnancy. Instead, she pointed to her flat body and

said, with her angelic smile 'the tummy is gone', leaving me for the whole first session with Rosetta after the long separation with the doubt whether the baby was alive or dead.

The parents told me later that there had been a threat of premature birth, and the attempt to place a cervical ring had failed. They had not told Rosetta anything about her little brother, because they feared that she might be traumatised if he died. Another child was in danger to slip away unseen and unheard like the preceding unborn babies.

Meeting Rosetta

Rosetta was a graceful little girl. Her hair was gathered in two pig-tails at the sides of her head. When I first saw her, she wore two elaborate long ear-clips, obviously her mother's, which dangled on her shoulders and gave her an incongruous look. From the beginning, there were brief moments when she looked at me with her wide eyes, and also seemed to listen to what I said. But most of the time, she had one of two mask-like expressions on her face, with the corners of her mouth pulled either upwards in a radiant smile very similar to her mother's, or downwards to make her look gloomy and withdrawn. Both masks protected her from emotional contact. By alternating the two expressions in rapid sequence, any potential communicative meaning was further confused.

Her language was mostly echolalic, but after I had presented some toy animals to her, she named some of them. She found the cow, looked for the calf, touched the cow's udder and said 'milk' with an almost inaudible voice. Also, her speech was so inarticulate that the words often disappeared before I could pick up their sound and work out their meaning. I felt induced to speak like her, in an almost voiceless whisper, as if the idea that there could be a dialogue had to remain unseen and unknown by both of us.

When manipulating the animals, she had touched and looked into their mouths, especially the crocodile's. Were the teeth dangerous? I remembered that Rosetta had

refused the bottle as a substitute for the breast. Or did the danger lie in the voice and in verbal language?

There were moments of intensely aggressive action. She violently bent back the legs of the toy horse (I heard later that the mother was a passionate horse-woman) and banged the cow's head on the figure of a lamb lying down. Or she clutched a toy animal tightly in her hand, pressed her lips together and ground her teeth. There was more to her violent clutching than the need to merge with an autistic object.

Other aspects of Rosetta's behaviour had a more autistic quality. The immobility of objects was so important that sitting down at her little table was difficult. The chair had to remain stuck to the floor, and she could hardly slip herself into the narrow space.

Rosetta's assessment showed that she did present severe autistic features, but there had also been more hopeful moments of either persecutory phantasies or fleeting communications.

Liquidity: rain and tears

When she became less isolated, Rosetta showed me her need for physical containment. She would ask me to make 'the little house'. Her low table had to be covered with the blanket. She would crawl underneath, and crouching in there would talk in almost inaudible fleeting whispers. If I wanted to grasp any of her words, I had to bend down and put my ear to the blanket. Sometimes, a little dialogue developed, but more often I was unable to catch anything of what she said, and no contact could be established. Usually, she entered her little house because it rained, but the house did not seem to offer adequate shelter. It always rained inside as well.

Sometimes Rosetta cried, but when she did so, she was not in contact with any felt pain. To her, crying seemed to be something like coughing or having a hiccup, and she called her tears 'drops on my cheeks'. She seemed not to know about the link between her anguish and distress and the tears. I was reminded of the emotionless voice with which her mother had reported the dramatic events before and after Rosetta's birth.

The mother was struck when she heard her daughter use the word 'crying' spontaneously for the first time. Rosetta did so when one of the mother's sisters was pregnant. Putting her ear to her aunt's body, she said: 'The baby is crying'. In listening to this unborn child, the drops on her cheeks and the rain that used to fall into her little house in the session, seemed to have become meaningful tears.

A new-born baby cries when he is in distress. Through crying, he evacuates unbearable strain and at the same time he signals his need to the environment. But the foetus is voiceless and *totally* impotent.

Tactile sensations and panic

Rosetta often insisted on wearing a pair of tights on her head, with the leg-part hanging down on both sides of her shoulders. While the pant-part and the elastic seemed to have a containing function, the hanging leg-part excited her. It was related to the softness of the mother's long hair, and also to the dangling ear-rings which Rosetta had worn when I first met her. They all belonged to the same area of eroticised sensuousness which united mother and child. However, this mental state usually broke down very soon and revealed the underlying uncontrollable terror of annihilation. Rosetta would urge me, in an state of rapidly escalating panic, to tie a string around her head or fix something better, but she was unable to explain what I could do to help her, and my attempts to give her a feeling of being safely held almost invariably failed. There seemed to be nothing I could do but share her feeling of total impotence.

Rosetta's pig-tails had a similar protective function. They were fixed with round elastics. When she was anxious, she felt them to be loose. She would first try to fasten them herself, usually without success, and then, as her terror intensified, I had to intervene.

On other occasions, she pulled off the elastics of the pig-tails and let her hair flow freely. She would shake her head and wrap herself in its sensuous and exciting softness. But then the anxiety inevitably came back. In her panic of falling and spilling away, she wet her pants, and I had to do her pig-tails again and fasten the elastics as tightly as I

could. This usually happened towards the end of the session. At a later stage of therapy, her request to tighten them was accompanied by her saying with a sense of urgency: 'I want mummy'.

We know that Rosetta's life was saved by the cervical ring, the function of which was to close the mother's prematurely loosening uterine sac. It was, perhaps, my perception of Rosetta's liquid mental state, together with the paroxysmal quality of her panic, and her total inability to show me *what* I could do to hold her together, that made me think of the utter helplessness of the foetus when there is a threat of miscarriage. It is a matter of life and death, and there is *nothing* the foetus can do about it.

Rosetta's three voices

The vocal register which Rosetta used most frequently at the beginning of therapy had an artificial high pitch, similar to the mother's and the aunt's voices. I knew that she watched cartoons on TV for hours. When she was echolalicly adhesive to her cartoon characters, her speech was clear and articulate, pronouns and verbs were used correctly, but she was inaccessible to any verbal exchange with me and placed her odd pseudo-adult stereotyped sentences here and there to create a sound pattern that resembled a dialogue, but was totally artificial. When she did so, she usually wore her expressionless 'smiling mask', with the corners of her mouth showing upwards. When she sang the melodies of her favorite video stories, it was as if she dissolved in their musical shapes.

Rosetta's own personal voice had been little more than a fleeting whisper at the beginning, and I had to be very alert to catch what she said. Often I only got the sound track of her communication which I 'incubated' silently within myself, trying to imagine what she could possibly have said in the context of the moment, until, hopefully, the rhythm and melody of her communication released a possible meaning. As the therapy proceeded, her voice became louder and more confident, but her speech remained blurred and inarticulate, very similar to her mother's.

There was a liquid quality to Rosetta's language just as with her whole being. It was as if her words too had remained immersed in a musical continuity and had not acquired the structural autonomy which is necessary for them to have a neat sound-shape and to form meaningful links between each other. This development can take place, both in thinking and consequently in language, only if the process of separation has not been arrested at a very early stage. Rosetta was able to articulate clearly as long as she was in echolalic adhesive at-oneness with the TV voices, but when it came to her own voice, the anxiety connected with the perception of her separateness seemed to be too intense, and the words remained agglomerated in indistinct clusters.

Much later, during the third year of therapy, the parents told me about Rosetta's ongoing primary nocturnal enuresis. Once more, the fact itself struck me less than the belated and mindless way in which they told me. They had never thought about the direct and obvious relation between the great quantities of water Rosetta used to drink before bed-time, and her bed-wetting. Here again, the problem of setting limits was the issue, and there had been an unconscious collusion of the mother with the absence of Rosetta's sphincter control. After a few months, she was dry. Much to the parents' surprise, her speech simultaneously became clearer and more articulate.

A similar phenomenon of clustering occurred in the time sequence of our verbal interaction. In a normal dialogue, two speakers talk and listen alternately, according to a rhythmical pattern of reciprocity. With Rosetta, it happened that when we had been silent for a while, she would start speaking at exactly the same moment as I did. I would stop immediately, in order to hear what she was saying, but she would stop as well. I would then wait for her to speak again and listen. If she remained silent, at some point I would try to say something about my wanting to hear what she was telling me, but she would start speaking again the very moment I did, and once more I could not hear what she said.

The absence of rhythmical alternation had the effect of non-communication. It was as if we were both deaf, and in a way also mute. In echolalic speech separateness is obliterated by the adhesive sameness of verbal productions. In our situation the

potential dialogue broke down into an indistinct cluster of words because the pattern of reciprocity that develops in time had collapsed. There was a temporal no-distance situation. Two voices coincided and annihilated each other, and two pairs of ears were made useless.

Reciprocity begins where fusion ends. If, during prenatal life, tactile no-distance sensations shut out the normal auditory experience of the mother's coming and going voice then, I suggest, the foetus might miss out on basic temporal and, in particular, rhythmic experiences which lay the ground for the later capacity for reciprocity which finds its first active postnatal expression in the co-operative rhythm between the sucking mouth and the milk flow of the breast .

At some point, the alternation of Rosetta's echolalic cartoon voice and her personal timid, blurred whisper was interrupted by a third voice, which broke forth unexpectedly and dramatically. There was an outburst of non-verbal sounds and vocal noises of overwhelming power and with an archaic, primordial quality. They evoked the roaring, moaning and howling of wild animals. In those moments, usually at the beginning of the session, the little girl stood upright in front of me, looked straight in my face while producing the powerful sounds which came from somewhere in the depth of her being. It is not easy to describe my countertransference feelings. Her 'jungle voice' was not mad, not frightening, not aggressive, it just *was*. A powerful self-affirming sound-presence. Sometimes, Rosetta would close the shutters and roar in the dark.

After she had evoked and imitated animal sounds for some time, she started naming wild animals such as black panthers, sharks and crocodiles, and expressing feelings which were related to oral aggression. Gradually, her vocal productions got closer to the human world. Pointing an imaginary gun in my direction, Rosetta emitted the sounds of shooting. Another transformation of the animals' voices was their turning into the voice of a witch. On those occasions, Rosetta started screaming in a frightening crescendo. At its highest pitch, her voice became an almost unbearable ear-piercing shriek. The first time, she stopped all of a sudden, literally collapsed and went into a panic. In her anguished mumble I could make out: 'Mummy doesn't want, mummy is

weak'. It was important that my ears could take, contain and survive the almost unbearably piercing sounds which Rosetta could now evacuate and project into me.

Towards the experience of a threedimensional vocal container and the primary sound-object

My feeling was that Rosetta herself perceived her first roaring outbursts as coming from *within*. The discovery of a primitive, but strong vocal part of herself seemed to coincide with a physical experience of a threedimensional internal space. It certainly conveyed to *me* a strong countertransference sensation of a vibrating volume inside her. This was in contrast to both her adhesive cartoon voice and her inarticulated whispers. The powerful new sound-base had gradually expanded over the whole scale of her vocal resources and allowed her to move forward by inventing variations to the initial archaic sounds and by attributing them to animals which she could name. This helped her to enter into contact both with her terrors and her aggressive feelings towards her mother.

This evolution in the area of her vocal production had occurred during the first months of Rosetta's therapy. Five months after we first met, she had her traumatic fall which was followed by the session during which mother and child could not be separated. When the accident occurred, the mother herself did not know yet that she was pregnant again.

During the week that followed her fall, Rosetta had moments of intense anxiety and needed to have the elastics of her pig-tails tightened more often, but, strangely enough, she was more communicative, her speech was less inarticulate than usual, and she actively explored her vocal, preverbal and verbal capacities:

Rosetta talked swiftly and clearly and reproduced the voices of animals such as chicks, pigs and dogs. For the cow, she produced long 'muuuuuuh...'s. Then she imitated gun shots and a car engine.

I commented that today she was full of voices and noises inside and could let them come out, and I could hear them too. They were all different from one another. I named the animals, the gun and the car.

She ground her teeth, started yelling and screaming, let her saliva drop on the window-sill and spread it with her sleeve.

I said that now she had got frightened and angry, because she was not sure any more that it was safe to know so many different voices, to let them out and give them names. By spreading her saliva, she wanted everything to become the same again, Rosetta and a Rosetta-window and a Rosetta-window-sill.

She continued spitting and spreading saliva. Then she said, maybe commenting the different sizes of her spits: 'A big one and a little one'.

Amidst her same-making autistic shapes, she was again noticing differences.

She undid her pig-tails and cut a piece of string, as if she wanted to ask me to fasten them again, but she stopped and said instead: 'When does mummy come'? She tried to open the door, but desisted and said instead: 'Mummmmmmmmm....', as long as her breath lasted. She repeated this many times.

I said that now she was feeling full of a mummy-sound, and this helped her to feel good inside and to wait for her mother to come back.

After my comment, she started singing, not her usual TV or cartoon songs, but melodies that she clearly invented on the spur of the moment. The words were also of her own invention. I could make out a few of them: 'Kitten - cries - midnight'.

The mother came to fetch her with the 'twin' aunt who left with Rosetta. She herself remained behind to tell me that she was pregnant.

The function of the sounds which Rosetta had produced during this session was different from the defensive use she made of them when she wrapped herself up or dissolved in musical shapes. This time she seemed to experience her going-on-being at a sound level, with a feeling of consistency and continuity within herself which she now had the power to reproduce vocally when she needed it. After this session,

interestingly, the 'jungle voice' was never to appear again. New sounds seemed to have developed out of those primordial noises and were human language. They seemed to be usable as elements for building and shaping parts of what I described as a sound-object. Shortly before the summer break, the parents had not yet told Rosetta about the pregnancy, because they wanted to be reasonably sure that there would be no problems. When the mother was four months pregnant and Rosetta was still not supposed to know, she produced the following material:

Rosetta lightly touched my stomach when she came in. She then asked me to help her to fasten a long piece of string around her neck and around mine. When we were tied together, she pulled me down to the floor on my hands and feet and wanted to use me as a refuge, as she usually did with the little house when it rained. She sought shelter under the arch of my body and then crawled out and got to her feet. There was a knot in the string that tied us together, half-way between her and me. She asked me to undo it and to tie her and myself to two separate hooks near the window.

I made a descriptive comment about being tied together and getting out and separating.

All of a sudden, there was something wrong with her forehead, and I had to intervene in what appeared as a dramatic emergency situation requiring tying or holding or tightening. But none of my attempts seemed to help. She went into a panic and cried out loud: 'It's no good'.

She began screaming words and holding the last vowel as long as she could, in a dramatic crescendo: 'andareeeeeeee...' (gooooooooo...). Her whole body stiffened and she trembled all over in her tremendous muscular effort. Tears shot out of her eyes and saliva dropped from her mouth as she screamed.

I tried to say something about her being terribly frightened of coming out and being on her own, but I felt that my words did not reach the roots of her panic.

She went on screaming: 'Nell'acquaaaaaaaaa...' (in the wateeeeeeeeeer...), and then a sequence of words that ended with 'poooooo...' (a water welllllll...).

I said that something terrible must have happened. Had somebody fallen down into a well? Was there water in that well? I told her that I wanted to rescue this somebody and

accompanied my words with the gestures of a person who pulls up a bucket on a rope from a water hole.

Rosetta watched me and calmed down, and then joined me by pulling on an imaginary rope of her own.

After a while I stopped and said that maybe we had pulled up this somebody now and asked her whether she was alright.

She said yes and remained calm until the end of the session.

Rosetta seemed to have reexperienced terrors which may have been connected not only with her birth, but also with the threat of miscarriage to which she had been exposed during her prenatal life. Many elements may have contributed to making this dramatic representation possible at that very moment. For her pregnant mother, the time of her former miscarriages was approaching. Was Rosetta still so much part of her mother mentally that she still underwent the prenatal 'osmotic pressure' of her phantasies and fears, although she was not supposed to know about the pregnancy? Or was she the receptacle of the mother's split off emotions? In other terms, did the mother's dread of another miscarriage reach Rosetta via her mother's projections in the here and now, or did the present situation re-evoke in her her own prenatal traumatic experience of almost falling out of her mother's womb?

If she was able to re-live and to represent this event now, could this be linked also with the fact that she had met her own strong primordial voice and could use it to tell me verbally *about* her trauma, while remaining *in* the trauma physically with her body stiffening in panic? The well and the water and somebody falling down reproduced her own history with amazing precision. I felt that my mental and verbal containment were insufficient and that my hands had to help, rescuing the person who had fallen down, just as at the time the cervical ring had been necessary to reinforce the maternal container and save Rosetta's life.

As to the use of her voice in this session, I think that she tried, as she had done earlier, to ensure her going-on-being vocally, but in the traumatic event that she herself had re-

enacted by representing a birth situation or the threat of a miscarriage, it was not sufficient to counteract the physical danger of falling.

When exposed to the risk of miscarriage, the foetus may well react to the contractions of the uterus and to the threat of being expelled by increasing its muscular tension. Perhaps Rosetta was showing how the psycho-physical autistic shell may be the last resort when there is nothing else to cling to.

Discussion

Rosetta's history, in which traumatic events occurred during prenatal life, and signs of autistic retreat were present from the beginning of postnatal life, is used to make a tentative connection between the child's intrauterine experience and her pathology. The hypothesis of some form of relation does not imply a linear monocausal relationship between the two. As mentioned in the introduction, the earlier in life protective reactions occur, the more the individual is to be seen as a psycho-physical entity, and the more likely it is that genetic, biological and neurological factors are involved in pathological development.

From the psychoanalytic vertex however, knowing that proto-forms of mental activity are present in the foetus, and that the child keeps traces of memory of his pre-history, my hypothesis is that traumatic experiences may, as suggested by Tustin (1990), lead to prenatal psycho-physical aversion reactions. This view is supported by Piontelli's observational and psychoanalytic study (1992), which gives striking evidence of the prenatal behavioural precursors of postnatal defensive patterns.

In Rosetta's psychotherapy, three factors converged to stimulate my thinking about prenatal trauma: her mother had had a serious threat of miscarriage during the pregnancy; the little girl had severe autistic features without being totally autistic; and the mother's new pregnancy during therapy represented a re-edition of past traumatic events.

However, the threat of miscarriage which Rosetta survived should not let us forget the possible impact of the mother's internal state which had probably been aggravated by

her previous un-mourned miscarriages. The threat of miscarriage and the mother's massive splitting of painful emotions can be seen as two sides of the same coin.

For Rosetta's mother, the un-differentiation of self and other was meant to protect her from unbearable separation anxieties, which intensified with every miscarriage. The twodimensionality which characterised her personality expressed itself equally at the physical and mental level. Both her body and her mind seemed to have no volume and no internal space. Her unborn babies had slipped away from her like her unthought words during our meetings. Her repeated miscarriages could be seen both as the realisation of a non-containing internal object *and* as the model for yet another repetition of the failure of her womb to contain a child. And every failure increased the splitting off of emotions and reinforced mental adhesiveness in an endless vicious circle.

It took many months after the premature birth of Rosetta's little brother for the mother to accept resuming her own psychotherapy, for which she had never felt intimately motivated. She frequently missed sessions, because she forgot about them. Her fragility was such that the rare moments of insight were followed time and again by new absences. No introjective experience seemed tolerable.

Returning to Rosetta's material, I suggest that the discovery of her own powerful voice may have broken the circle and opened the way to freeing herself from the terror-stricken adhesive closeness to her mother and to feeling the emotion of existing as an individual. I described how difficult it had been to attribute a particular emotion to her 'jungle voice'. But it *was* emotion, the primary stuff emotions are made of, and my countertransference feeling was of her communicating: 'I AM'. Here and now, Rosetta was. She was her voice. I could hear and see her, and she looked at me, saw me and heard herself. Had she found in herself the primary emotional containment which had been missing in her prenatal experience of her mother's womb-mind-voice? Did the 'jungle voice' give her the auditory-mental *and* the physical awareness of an inner space which could become a container of internal objects and contribute to setting in train projective and introjective processes? I suggest that meeting her voice represented

the core from which she could begin to bear the reality of distance and move away from her former state of adhesive at-oneness and attempt to complete and repair her insecure original sound-object.

CONCLUSIONS

The clinical material of autistic children whose mental development stopped at a very early stage in their life gives us access to a deeper understanding of the most primitive protomental processes. If the onset of a child's self-protective reaction to a traumatic situation reaches back as far as prenatal life, his postnatal behaviour gives us clues about the 'missing links' in the earliest processes of psycho-physical integration, which seem to be closely connected with sensuous experiences.

Psychoanalytical thinking has traditionally moved from the observation of pathological phenomena to thinking about normal development. In this paper, I followed Tustin's view of autistic retreat being a reaction to a traumatic separation experience whose origins may in some cases reach back to prenatal life, and I gave the question of the failure of prenatal protomental processes further thought, with particular attention to auditory experiences.

The paper also illustrates Tustin's idea that autistic retreat is connected with a pathological psycho-physical closeness in the mother-child relationship. This aspect is likely to be particularly relevant in those cases in which autism is rooted in prenatal life. The earlier pathological development begins, the less distinct the psycho-physical boundaries are between the mother and the unborn child. Referring to the foetus's 'protomental nucleus', Mancina writes that 'it is permeable to the representations that reach it from the internal world as well as to the sensory experiences that reach it from the external and maternal world' (1981: 353).

Much thought has been given to the role of the mother's personality in the genesis of autistic pathology. Kanner described the mothers of autistic children as tending to be

'cold and intellectual' (1943). This view generated the term 'refrigerator mothers'. The tendency was to see them as the cause of their children's pathology. The ensuing counter-reaction may have shifted the ideas about the origin of autistic retreat excessively to the internal difficulties of the child. Later, Meltzer (Meltzer *et al.*, 1975) and Tustin (1986) recognised that it was undeniable that maternal depression was a factor which could contribute to the breakdown of the primary relationship, but they also made it clear that this does not imply that mothers are *responsible* for their children's pathological development.

In recent years, developmental psychology and infant research have contributed to the recognition of the central role of reciprocity in the development of the primary relationship, and it has become possible to explore these deep primal interdependencies without blaming the mothers, who often are at risk themselves. Kanner's metaphor of the 'refrigerator mothers' is met perfectly by Tustin's image of the 'frozen child'. Container and contained share an experience of coldness. The mother's internal world may be inhabited by a child who is as frozen as her external autistic child. Her mental state may be related to the burden of previous traumatic experiences that have not been worked through. These mothers need to be helped to 'thaw' emotionally as much as their withdrawn children.

If it is true that the maternal voice may be one of the vehicles through which the foetus receives clues about the quality of maternal representations and the state of her internal world, it is likely that in situations of maternal distress or mental disorder, the foetus's potentially traumatic experience may be connected not only with the absence of a needed 'good object', but also with the presence of an impinging 'bad object'. The maternal voice-mind, and the postnatal breast-mind, may offer the same range of actual good or bad nourishing qualities and quantities. In other terms, the badness of the internal object may result not *only* from the infant's intolerance to frustration.

The fact that auditory experience is immaterial, as opposed to tactile perception, increases its primordial importance for the development of the foetus's protomental activity in the direction of presymbolic openness. It is this predisposition which seems

to be at risk of breakdown in a prenatal traumatic situation. Under certain conditions, the trauma may bring about the foetus's retreat from the auditory level of experience to the more secure, concrete, no-distance tactile mode, in an extreme attempt to escape the threat of annihilation. The seemingly deaf and stiff-frozen autistic child tells the story of the impact of early traumatic experiences with the ensuing failure of primary tactile and auditory proto-integrations, which normally are likely to begin in prenatal life and can be seen as the prerequisites for the development of later threedimensional symbolic mental functioning.

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