

DOES THE PRENATAL PERIOD INFLUENCE OUR LIVES ?

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INTRODUCTION

We now know that each stage of our lives has an effect on those which follow. Psychiatrists have demonstrated this, and we have all noticed it in our own lives or in the lives of those close to us.

This obvious fact is the result a long process of development.

During the first half of this century, developments in the psychology of deep-rooted behaviour revealed the importance of the emotional experiences of early childhood and their repercussions on the way an individual behaves.

For example if a psychological block occurs during this sensitive period, the resulting suffering remains with a person all his life, unless a psychotherapist is able to break down the barriers or extremely favourable circumstances allow the essential aspects of life to be experienced in a positive way, perhaps in a fulfilling marriage or in professional success. Then new forces come into play which will help the man or woman to overcome this initial handicap so that he or she can finally give free rein to that life force which was hindered or obstructed in early childhood.

On the other hand, if a young child is given enough love, and is acknowledged to be a human being with an inherent value, if his development is accompanied by the necessary gradual move towards independence, then this child has every opportunity of becoming a well-balanced adolescent and adult, who is serene, happy and has confidence in himself, in others and in life. If he is free to live, and to express his true essence, then he will become a stable, open and creative person.

During the 1970s new advances were made in our understanding of life, when obstetricians such as Frédéric LEBOYER and Michel ODENT, and psychoanalysts and psychiatrists all over the world made us aware that the great journey of birth and the quality of welcome afforded to the new-born infant, leave profound traces in the latter's psyche. They believe that 90% of our fears have already been established in us at the time of our birth, thus largely determining our behaviour as a child, an adolescent and an adult.

So we will now go on to examine the evidence to suggest that the antenatal period could be viewed as one of the constructive stages in human life which can have an influence on the future life of "the new individual".

So can an embryo or a foetus be influenced and educated? Can this have long term consequences?

What kind of education is this? Can we lay down rules and impose programmes for the developing person? Obviously not! Rules and programmes are concerned with instruction and not education.

The purpose of instruction is to transfer knowledge and expertise. It is based on methods of learning.

Education, on the other hand, aims to awaken and develop the faculties which are latent in the individual, involving physical, emotional, intellectual, moral and spiritual aspects.

So education can be defined as "the implementation of methods which can allow a human being to take shape and develop." In fact the person educates himself, that is to say shapes himself and develops by means of the movement of the life forces within him. He does this using the physical, emotional and mental building blocks he has been given by those around him and by his environment.

In a child who has already been born, education involves three essential processes: impregnation, imitation and experimentation. Obviously there can be no experimentation for a child in the womb, and probably no imitation either, whereas opportunities for impregnation are maximum. This is the initial programming of our cells. Life's experiences will of course leave their mark, but will only be superimposed. This shows the importance of this initial impregnation and these early foundations.

Antenatal education is therefore neither an invention nor an ideology someone has come up with. It is a combination of all the natural processes involved, whether or not we are aware of them and whether we like it or not.

Our suggestion is simply to make these facts known and be aware of them so that future parents, in full possession of all the facts, have the freedom and opportunity to give the embryo, and then the foetus, the best possible basic principles and the best possible conditions to allow it to develop to the best of its abilities within the natural process and in accordance with its own dynamics, all the potential and abilities contained in the initial egg.

We have been asked one question: for whom is this education intended? For the mother or the child? The reply is: for both of them. Because the symbiosis is such between these two beings that whatever the mother experiences, the child experiences with her. The mother, as the child's first universe, is the complete physical and psychological "living raw material" for him. She is also his intermediary with the world. The human being forming in the uterus cannot grasp the meaning of the external world directly, but is constantly receiving the sensations, feelings and

Marie-Andrée BERTIN – DOES THE PRENATAL PERIOD INFLUENCE OUR LIVES ?

thoughts of his mother as she reacts to the world. Within his developing psyche, his cellular tissue and his organic memory he registers these first shared experiences which will colour his personality.

When a child is born he already has nine months' experience which has largely moulded his future personality.

This knowledge, recently revealed using scientific methods, actually goes back thousands of years, and has always been present and ready to reappear in women's intuitive consciousness. Now increasing numbers of fathers are also involved. The importance of this period was well-known to ancient civilisations. The Egyptians, Indians from Asia and America, Celts, Africans, and many others, laid down rules about the way in which mothers, couples and society should live in order to allow the child to grow up under the best possible conditions.

A thousand years ago the Chinese set up antenatal clinics where mothers-to-be came to await the birth in serenity and beauty.

In Western countries, at the beginning of this century, we still protected pregnant women, who in turn protected their babies. In the village in the Haute-Saône where I grew up, it c circus set up its big top, mothers-to-be were not allowed to watch the show. People knew that if one of these women was accidentally knocked over then the child would also be affected.

After that our industrial societies focused their attention on a race for technological, economic and financial performance, and forgot about the things that go to make up life.

However, life is reclaiming its rights. With a degree of irony, since it is, technological progress which has allowed us to rediscover, supported by scientific proof, the essential elements of this authentic knowledge (we are not talking about superstitions which have grown tip over the years).

Indeed, nowadays, scientific work carried out within various fields is agreeing on the importance of antenatal education, itself a completely natural process.

The Associations for Antenatal Education would like to bridge the gap between research and the everyday life of future parents. They are gathering together current multi-disciplinary studies in order to present this as a coherent whole to the general public, to young people and to professionals who are still not fully informed on the subject. When viewed as a whole, this knowledge begins to make sense, offering a code for living to suit the developing person and for his parents.

Two principal areas of research are emerging. They concern the following:

- the sensory development of the foetus studied by researchers from many disciplines. These researchers are mainly French, but sometimes they draw on American experiments.
- emotions received in-utero detected by doctors, psychologists and psychiatrists from various countries.

We will then talk about the explanatory theories which have been brought forward in connection with the cellular registration of information by quantum physics and the theory of morphogenetic or biotic fields.

Finally, we will see that as a result of this work, some members of the medical profession are refining their practices. Future parents, for their part, have an opportunity to give their child an advantage, simply and joyfully, as part of their everyday life.

THE SENSORY DEVELOPMENT OF THE FOETUS

KNOWLEDGE

Let us remind ourselves that the sense organs and the corresponding cerebral centres are established by the end of the embryonic period, towards three months of intra-uterine life. Over the six months of the foetal period they develop and refine their owl, specialisations, in different ways, according to the nature of their functions and depending on the quality and intensity of the stimulation received.

Sight requires a light medium in order to operate. However, no more than the slightest orangey light reaches the child when his mother exposes her stomach to the sun.

On the other hand, from birth onwards, the baby looks actively for his mother's face. The meeting of the two looks is a special moment whose strong and profound emotions open up a new phase of the mother/child attachment.

The sense of smell develops, alongside that of taste, by means of a secondary olfactory organ specially developed during gestation and adapted to detect odorous molecules within an aqueous medium, according to Benoit SCHAAL. In the words of Marie THIRION, a paediatrician: "during the first hours of life, the new-born infant, confronted with the urgent need to find nourishment, goes in search of its mother, seeking out its mother's smell and more specifically the smell of milk close to her breasts. It is always fascinating to watch a baby "sniffing out" its mother, snuggling up into her breasts... and recognising the place responsible for its happiness and subsistence."

Marie-Andrée BERTIN – DOES THE PRENATAL PERIOD INFLUENCE OUR LIVES ?

The sense of taste comes into play on a daily basis and expresses its preferences. Each day the foetus absorbs a certain amount of amniotic liquid. If a sweet substance is injected into this liquid, the foetus greedily swallows a double portion. However, if a bitter substance is injected the foetus swallows very little and ultrasound pictures have shown it grimacing.

Through this intra-uterine liquid which takes on its flavour from the foods eaten by the mother, the infant becomes aware of the taste of the food it will eat within the region in which it is born. We can quote the example of a little Indian child adopted by a Parisian couple at the age of three months. When the infant began to take solid food, she obstinately refused rice prepared according to various Western methods, but willingly accepted curried rice, as eaten by her mother in India when carrying her.

"The senses of taste and smell," states Professor Jean-Pierre RELIER, constitute one of the fundamental aspects of the relationship between mother and child during pregnancy. They allow the new-born infant to re-create its sensory and emotional environment much more easily since it recognises the smell of its mother's skin and the taste of her milk. This is why the "skin-to-skin" contact which takes place during the first minutes of life outside the womb is so valuable.

However, the two senses which have been studied most are those of touch and hearing.

The sense of touch concerns the whole of the skin, which, in the case of the child, is continually massaged by the uterine muscle and the abdominal wall. A Dutchman, Frans VELDMAN, has been working on haptonomy, a method of emotional communication using the sense of touch, which allows the mother, and especially the father, to establish a deep relationship with the infant through the abdominal wall. Great benefits will be obtained from this at the moment of birth, when the infant is welcomed to the world, and parent-child links are reinforced.

Many wonderful revelations have been made with regard to the sense of hearing, viewed by ancient civilisations as the sense of wisdom. Night-time in the womb is far from being a silent environment. Microphones introduced into the maternal uterus have the sounds of the digestive system against an uninterrupted background of noises from breathing and heartbeats. The mother's voice emerges, singing its intermittent melody.

External noises and sounds hardly pass through the abdominal wall: they are mainly transferred to the foetus through the mother's auditory system, her resonators and her bone system: cranium, spinal column, pelvis. This is what happens with the father's voice, especially if the mother listens to him with affection, as well as with music she listens to attentively.

Put what does the baby perceive of all this?

The inner ear which selects sounds and transmits them to the brain is mature from around the fifth month. Jean FEIJOO has obtained significant motor and cardiac responses from this stage onwards, in terms of reactions to the stimuli produced by the bassoon phrase from Peter and the Wolf, directed towards the maternal abdominal wall. The mother was relaxed, listening to gentle music through earphones. She could not hear the bassoon. The reactions of the foetus were definitely its own.

However Dr. TOMATIS has shown that an infant perceives sounds well before his ear begins to function. He quotes the case of little Odile who began to emerge from the autism from which she suffered, and open up more each time she was spoken to in English. There did not seem to be any reason for this. The mystery cleared up when her mother remembered that at the beginning of her pregnancy, that is to say before Odile's ear was mature, she worked for an import-export company where she spoke only English. Obviously Odile did not "understand" the words in the English language, but she had perceived and encoded their rhythm, their melody and the hertzian frequency of this language which vibrates at 12,000 Hz, whereas the French language levels off at 8,000 Hz. She had retained an impression linked to a period of security prior to the origins of her problem.

In fact the developing person, from the embryonic period onwards, receives sound vibrations through the receptor cells of its skin, muscles and joints. On the other hand, when his ear begins to function, it filters out the low sounds and only receives high ones. This system of protection against the internal noises of the maternal organism, which continue day and night, is essential. Without this the foetus would never get any rest.

Marie-Louise AUCHER, a voice coach, made some interesting discoveries within the families of her pupils, professional singers who practise at home on a daily basis. Soprano mothers gave birth to children whose upper body was exceptionally well-developed. These children were able to grip very early by bringing their thumbs towards their other fingers, which is a sign of excellent motor-sensor co-ordination. On the other hand children of fathers with deep bass voices had particularly well-developed lower bodies. These children walked early, but what is much more interesting than this rather ephemeral early development is the fact that they remained indefatigable walkers.

In order to understand these phenomena, Marie-Louise AUCHER worked in various Parisian universities and hospitals with professors from various disciplines. Together they were surprised to see the impact of sounds from the musical scale, drawing out the "governor vessel", the energy meridian well-known to acupuncturists, on the human body.

We know from other studies that each sound is in vibratory resonance with a vertebra, a pair of sympathetic ganglions and the parasympathetic system. When one of these energy points, or nerve centres, is stimulated, this in

Marie-Andrée BERTIN – DOES THE PRENATAL PERIOD INFLUENCE OUR LIVES ?

turn stimulates the region it innervates, and the whole of the nervous system, including the brain, is dynamised by this. For Dr. TOMATIS the ear is a dynamo for the brain.

DEDUCTIONS MADE BY PRACTITIONERS

The "singing pregnancies" came into being as a result of the studies carried out by Marie-Louise AUCHER. They were begun in Pithiviers, in the 1970s, by Dr. Michel ODENT, and then spread to Paris, Rouen and many other towns. Fathers, mothers, brothers and sisters sing in choirs, alongside doctors, midwives and paediatric nurses, in order to create a friendly atmosphere between the medical staff and the future parents, especially the future mother. This almost family atmosphere greatly facilitates labour.

"This joint singing," says Marie-Louise AUCHER, "improves the general and nervous condition of the mothers who give birth to strong children, who are well-balanced between their upper and lower body - calm, happy children easily able to deal with the various situations in which they find themselves," which is the sign of good psychological equilibrium. This is a very useful quality to possess in the world which awaits them.

In the light of this knowledge of foetal hearing and the emotional repercussions which are indissolubly linked with them, gynaecologists and paediatricians have modified and enriched their practices.

For some time now Dr. TOMATIS has been re-stabilizing disturbed Children, as well as adults experiencing problems, by letting them hear the voice of their mother filtered through an aquatic medium, that is to say as they perceived it in the womb, through the amniotic liquid.

This regression to the antenatal stage allows his patients, both old and young, to establish a new contact with their primordial energy and to start to develop normally again.

More recently, Dr. COURONNE, head of the neonatal department at Metz Hospital, and therefore responsible for premature babies, created what he terms "the sound umbilical cord" which links the baby with its parents.

What is a premature baby? A foetus uprooted before it has reached full maturity. It functions in an environment other than the one in which it ought to have continued to develop, but with the physical "equipment" of its antenatal age. It needs the presence of its mother even more than the new-born infant. However when this presence, for various reasons, is insufficient, or even impossible, Dr. COURONNE asks the parents to record a cassette containing 50% of the maternal voice, 30% of the paternal voice (with the parents speaking freely, from the heart, to their baby) and 20% of soft music. A small tape recorder placed in the incubator allows this recording to be played to the baby for 1/2 an hour each day, outside treatment periods. We can then see a smile flit over the little face, its limbs relax and it goes off to sleep peacefully. The child has rediscovered its reference points of love and security.

Initial experiments with control groups have shown that these premature babies recover faster than other ones when they are ill and that they all develop much better than those who do not have an "sound umbilical cord."

For their part, parents who often feel guilty because they have not been able to carry the pregnancy to term, regain their affection for their baby. They also shake off the frequent impression that the members of the medical team have "kidnapped" their child, who considers them to be its parents. The parent/child relationship is greatly improved. These are all elements which facilitate the reunion between parents and child and we will see how important this is for the future equilibrium of the latter.

Cost: one cassette. This practice is slowly spreading to other baby units in France and beyond, as I was able to see in Oslo.

Dr. KLOPFENSTEIN, a gynaecologist in charge of the maternity unit in Calais, has carried out an interesting study based on the TOMATIS method, to which he was attracted, intrigued by what happened to the few patients who had followed it elsewhere.

He fitted young pregnant women volunteers with an electronic ear (a hearing device which progressively eliminates low sounds) for 1/2 an hour per week before the traditional antenatal class. Statistics put together over four years show a clear reduction in anxiety, a reduction of average working hours from 4h to 2h 40, a drop in Caesareans to 1/3 of the national average, and a significant reduction in the number of technical interventions.

Leaving aside tests and tables containing figures (as there are no ways of definitively quantifying happiness and freedom - and this is doubtlessly for the best) the medical team noted excellent mother-baby relationships and, adds Dr. KLOPFENSTEIN, "we are confidently waiting for these children to develop, knowing that certain handicaps associated with their mothers' anxieties, will have been dispelled. Their potential is under study, but is promising."

Can we hope to fit all pregnant women with electronic ears, so that we can raise their vibratory level and dynamise their enjoyment of life? That would be difficult! But we can probably achieve similar results using simple practices which can be incorporated in everyday life. And this is something which is feasible wherever a child is born.

DEDUCTIONS ABOUT THE PARENTS-TO-BE

If the pregnant woman adds singing to the spoken voice she will produce far more intense resonances, with a powerful physical and neurological impact. It is much more balancing and complete for the child, and also very stimulating for the mother." (Marie-Louise AUCHER).

And what if the father sings along with her or if the whole family adds its vocal resources!

In addition, if the mother – and the child – frequently listen to gentle structured and structuring music then both will benefit.

An English doctor, Mme Michèle CLEMENTS has studied the reactions of fetuses to different kinds of music. She has found that BRAHMS and BEETHOVEN make it agitated, whereas MOZART and VIVALDI calm it down. MOZART is very much enjoyed, especially the work he produced in his youth. Rock music makes the fetus angry. We have seen mothers-to-be forced to leave rock concerts because they were receiving so many unbearable kicks and blows. Marie-Louise AUCHER's work can help us to understand why. Bass sounds, which are very strong in this type of music, thump on the base of the mother's spine and reach the child directly and too strongly, thus making him react and defend himself. So the mother needs to choose the music she likes, of course, but must always be sensitive to the reactions of her baby.

Repeated listening can even lead to actual learning. An American orchestra conductor, Boris BROTH, was once interviewed on television. He was asked where his love for music came from. He replied that his liking for music started long before he was born. When he studied certain works for the first time, he knew the cello part even before he turned the page. He could not understand this phenomenon at all. He spoke about this with his mother, who "by chance" was a cellist. She searched through her memory and her programmes. The pieces whose cello parts her son knew by heart were those she had studied and practised while expecting him.

This proves the existence of accurate registration and enduring memorisation. RUBINSTEIN, Yehudi MENUHIN and Olivier MESSIAEN said similar things. If only we could ask MOZART!

No-one would go so far as to promise that a mother who listened to, and played, a lot of music and sang during her pregnancy would give birth to a composer, a virtuoso or a singer, but she can be sure of having made her child aware of the musical arts. Leaving aside any abilities within this field, she will have given her child a liking for music and this resource will accompany him throughout his life.

How does this stimulation act in the brain?

A new-born mammal gets to its feet very quickly and, after a few hesitant steps, starts to gambol about. Animals are genetically programmed to perform in this way as it is essential for the survival of the species. Their motor-cerebral network is already wired and ready to go into operation at birth.

However man's destiny is different. The human fetus is equipped with different apparatus consisting of very skilful sensory systems and non-genetically programmed cerebral zones which occupy at least a third of the brain. Their neurones are taking in information while they develop.

"What is programmed into man is his non-programming. This "genetic vacuum" may be at the origin of man's potential. These (unoccupied) areas become progressively "associative" by integrating the multiple experiences which they register and then make up into a linked network, a wired unit within which the child's skills are gradually registered." (Dr. DELASSUS).

However the developing person does not only store up sensory acquisitions, he also encodes in his cellular memory the emotional impressions he receives from his mother, in the main, and also from his father and even those around him.

EMOTIONAL IMPRESSIONS

KNOWLEDGE

An absolutely essential factor has been revealed by psychologists and psychiatrists. This is the quality of the emotional bond between the mother and her child.

Dr. VERNY, a Toronto psychiatrist, tells us "the love a mother has for her child, the ideas she cultivates about him, and the richness of the communication she has with him have a determining influence on his physical development, the lines of force of his personality, the predispositions of his character!"

Marie-Andrée BERTIN – DOES THE PRENATAL PERIOD INFLUENCE OUR LIVES ?

An enquiry involving 500 women showed that almost a third of them hardly ever thought about the child they were carrying. They gave birth to children of lower birth weight than normal, who suffered from digestive and nervous problems which were more serious and more frequent than those suffered by other children. They cried a lot and, during the first years of their life not enough time has gone by to allow us to examine their reactions as adolescents and adults - they experienced difficulties in adapting to other people and to life. Their mothers were unaware of the fact that the child feeds his developing psyche on their feelings and their thoughts and that this need for love is absolutely primordial even before birth. Already within their mothers' bodies, these children had been emotionally abandoned.

Dr. Sylvie RICHARD, a paediatrician in Tours, has produced a thesis which studied the influence of the emotional experiences of the pregnant woman on the temperament and health of the tiny baby."

She monitored a hundred mothers and their babies during pregnancy, through childbirth and eight months later, splitting them up into three groups according to the normal, average or extreme stress of a more or less permanent kind experienced by the mother-to-be. The statistics revealed an obvious link between the emotional disturbances experienced by the mother-to-be and the health and psychological problems suffered by the child.

This study corresponds to the one carried out by Dr. ODENT, in accordance with which primal health, the basic physical and psychological health of a human being, is established during the period of close dependency on the mother, that is to say during the nine months of pregnancy, the extremely important hours of birth and the breast-feeding period.

And this can sometimes involve problems.

This is why in 1964, in Holland, an unusual number of obese people came forward before the review board. They had come from an area which was starved out by the Nazis in 1944. Those who were worst affected were those whose mothers had been starving during the first four or five months of their pregnancy, at the time when the hypothalamus, which among other functions, controls food intake, was developing. The anxiety of the mothers had had a biological effect on the hypothalamus of the foetus.

Another study conducted in Finland involving children who had lost their father before or after birth showed a clear difference between the two groups. The children who had shared their mother's stress whilst in the uterus were more disturbed than those who were already born when the event occurred. The proportion of psychotic disturbances was higher in posthumous children: 16% of schizophrenics as opposed to 6%. Again in this case researchers maintained the hypothesis of anatomical damage to the hypothalamus.

These examples concern extreme distress: famine and the death of a spouse are fortunately infrequent events.

Usually problems are of a functional or psychological kind, and can therefore be solved.

Pr. P. FEDOR-FREYBERGH from Stockholm University, told us of a little girl called Kristina who, from birth, obstinately refused to take her mother's breast, although she avidly drank from a bottle when this was offered to her and grabbed another woman's breast and began to suck vigorously. The Professor's intuition led him to ask the following question: "Did you really want this child, madam?" "No," admitted the woman. "I wanted to have an abortion. But my husband wanted the child and so I kept it."

No doubt Kristina sensed her mother's rejection and sent it back to her. The mother understood this, and, as her heart had been touched by her child, she changed her attitude and matters improved.

Not all children show such an immediate reaction. For example, once a German doctor Paul BICK was consulted by a man suffering from sudden hot flushes accompanied by fears of death. The psychiatrist tried the usual techniques without success. He then put the patient under hypnosis and asked him to regress. During his early childhood and birth there was nothing unusual. The doctor went further back. In the 9th month of gestation, and then the 8th month, everything was tranquil and the man was fine. However, in the 7th month his voice became choked, he became very upset, very heated and wanted to kill himself. This was where the origins of his problem lay. The psychiatrist brought him back to normal consciousness. Talks were arranged with his mother, who released her son from this horrible handicap, confiding in him that in the 7th month of her pregnancy she was so distressed that she attempted to induce a miscarriage by taking extremely hot baths.

Thirty years later she had left her problems far behind, but her child had encoded in his subconscious memory, not only the feeling of excessive heat, but the wish for death present in the maternal consciousness, and this muddled memory tormented his life as an adult.

In order to attempt to understand the process which results in this kind of phenomenon, we will make a detour and look at the studies carried out by Dr. LEVINE, a dental surgeon in Manchester. Over a period of several years this dentist collected milk teeth and observed their cross sections under an electronic microscope.

Teeth are a kind of stone archive of our body (the crowns of milk teeth are formed during the second half of pregnancy and the first year of life). The layers of enamel can be dated exactly just as a geologist dates the various layers of ground. This dentist first of all noticed a greyish line which he named the "neonatal line" as it corresponds to the "trauma of birth". This is sometimes absent when the birth has taken place under optimum conditions.

Marie-Andrée BERTIN – DOES THE PRENATAL PERIOD INFLUENCE OUR LIVES ?

The layers of enamel located below this line were deposited in the dental buds while they were developing in the jaw of the foetus. In these layers he noted frequent anomalies, even going as far as imperceptible gaps. What had happened over a varying period of time to hinder the process of building up milk teeth... and probably the soft and noble organs such as the heart, the liver and the brain which have not retained any discernible anatomical traces?

Dr. LEVINE joined up with a psychiatrist who spoke to the mothers. There proved to be an exact correspondence between these anomalies and very violent types of stress suffered by the mothers during their pregnancy. How could these phenomena occur?

When we suffer stress, our organisms, and our adrenal glands in particular, produce adrenaline and catecholamines, the so-called "stress hormones" which allow us to face up to stressful events. In a pregnant woman these hormones cross the placental barrier and swamp the foetus, creating a physiological state in the latter which corresponds to the mother's emotion, but much stronger and even more significant, as the adult has developed defence strategies in the course of his or her life whereas the child is completely lacking in these.

Pregnant mums reading these words should not be worried, as we are talking about very severe shocks. Do not be concerned if something has gone wrong temporarily. Only very serious shocks affect the baby, or deep and long-lasting problems - for example a very bad relationship with a partner - which are repeated and established over time, compromising the security and the future of the mother and baby. You should also be aware that the mother-to-be possesses what Dr. VERNY refers to as a protective shield for her child: the protection of her love. This can fail under very bad conditions.

Fortunately the opposite is also true, and this is when the mother can act positively. When we are feeling happy and joyful, and feeling good, our brain secretes endorphins, the "happiness hormones" which, in a pregnant woman, convey to the child the state of maternal relaxation and *joie de vivre*. If these conditions are frequently experienced in the uterus, they are memorised and are highly likely to determine the character of the future man or the woman who will have a taste for enjoyment, an innate capacity for happiness and will quite naturally create in their life conditions which can allow this to come true.

If the baby in the womb is hungry for affection, it is also able to return this, as revealed by a fascinating study started using ultrasound by Dr. Alessandra PIONTELLI of Milan.

She recounts as follows:

"Madame D was expecting twins. The first ultrasound showed the little boy (Luke) to be much more active than the little girl (Alicia). Luke turned around constantly, kicking and stretching his legs, pushing against the uterine wall. His mother felt he was impatient to get out. He gave me the same impression. From time to time he interrupted his gymnastics to turn his attention to his sister. He held his hands out to her and touched her face gently through the membrane which separated them.' She responded by turning her face towards his and for a brief moment they caressed each other, cheek to cheek. We nicknamed them the loving twins".

We noticed that Alicia took the initiative for making contact less often than Luke. Most of the time she seemed to be asleep or moved her head and hands imperceptibly, but each time she responded to her brother's advances.

After the birth I went to visit them in hospital. The mother told me that Luke had been born first and that the difference in weight between the two children was fairly large. The little boy had a sturdy frame and was very lively and alert, whereas the more dainty little girl was very calm. Their characters were the same as they had appeared when their behaviour in the uterus was observed.

When they were a year old they were walking, starting to talk and playing a lot together. Their favourite game was to hide behind a curtain, apparently using it rather like the membrane which had separated them in the uterus. Luke would push his hand into the curtain, Alicia would bury her head in it and they would start to caress each other."

Dr. PIONTELLI's study was very significant. She showed that right from the very beginning of life, and probably right from conception, babies have specific personality traits. These initial patterns of behaviour seem to persist beyond the first year of life, showing constant development of the same personality. And whatever this is, the need and ability to communicate are evident right from the womb.

DEDUCTIONS OF THE PRACTITIONERS

What conclusions can the medical world draw from this knowledge, and put into use in practice?

In the thesis discussed previously Dr. RICHARD suggested that gynaecologists and midwives; should go beyond the strict monitoring of the somatic development of the pregnancy, and take into account the psychological problems of the women. She suggests that paediatricians should look for any antenatal causes of problems being experienced by babies and children. "Acknowledging them, allowing the mother to express them, then reassuring her, and taking away her guilt can only help to eliminate the child's symptoms, often definitively."

WHAT CAN WE SUGGEST FOR THE FUTURE PARENTS

They need to express their love and free their creativity so that they can establish their very own link with their baby according to their own nature and their own culture. In total freedom. Retaining all their spontaneity.

Keep young people informed

Retaining spontaneity requires this knowledge to be integrated in the consciousness as one of the natural elements of life. And this means that it needs to be made available to young people long before they envisage conceiving a child. It ought to accompany the anatomical, physiological and contraceptive information which currently constitutes the "sex education" part of the school syllabus. In this way it would form part of the deep instincts of young people, would nourish their emotions and shore up their personal esteem when confronted with life, and their own ability to become parents. It would give them the hope of working together, consciously and responsibly, to create a new life. I can confirm this as I have noted it frequently when talking to young people. I see a young girl who exclaims, delighted: "Well, the first "duty" of a pregnant woman is to be happy!" Of course! But it is not always as simple as all that. A mother-to-be, depending on the current conditions of her life, and her own history – that is to say her own gestation, birth, childhood, and even her adolescence – can sometimes have fearful feelings, feelings of doubt and ambivalence. She should consider these to be normal, accept them and try to find a positive inner state drawing on everything which makes her happy: nature in which everything sings and is vibrant, or works of art which inspire her. Her child will acquire a taste for beauty. The mother could also get involved in artistic activities herself.

The role of the father

The role of the father is very important within this area. Who is better placed than him to make his child happy by ensuring that its mother is happy and secure? A Chinese proverb says that if the mother carries the child, it is the father's job to carry the mother and the child. A Western saying suggests to the father that although he does not carry the child in his body, he can carry it in his heart and in his thoughts. So somewhere in his developing psyche the child will feel himself loved, expected and acknowledged, and he will open up confidently to the forces of life.

The difficulties of life

But, you might say, life can disturb this ideal ambience by causing violent stress (a car accident), a serious problem (the father has lost his job), or a painful period of mourning. The mother-to-be might lose her own mother, another child, her partner. So will the mother's pain and suffering have repercussions on the foetus? Yes. This cannot be avoided. But she can talk to her baby, as Françoise DOLTO recommends. She should reassure him and tell him, for example, "It's true baby, I am suffering today. But all this will pass. One day we will be happy together and you will see, life will be good for you." And the child will register that life can administer hard knocks, but that these can be overcome. The courageous efforts made by his mother will develop the beginnings of a strong character in him.

MENTAL IMAGES

However, leaving aside this emotional point of view, do the mental images of the expectant mother reach the foetus? Numerous factors seem to suggest that they do. We may remember the story of the man who perceived the intention of death in his mother's consciousness when she attempted to induce a miscarriage by taking very hot baths.

Some facts

Drs PICARD and ANTONINI, in their book "How to treat rheumatism" in a chapter dealing with the influence of the mental state on health, quote an extremely striking case, which stands out from all the rest. We quote:

- Man is an animal with a conscience, and the whole of his life and all his substance is impregnated with his soul and thoughts.
- During her pregnancy, the pregnant woman shapes her child using her body and her spirit.
- Here is a true story, both dramatic and astonishing, which we witnessed personally.
- In April 1940 a young soldier on leave made his young wife pregnant. In May, at the time of the German offensive, a comrade came back and told the young wife: "Don't be worried, your husband is safe. He is a

Marie-Andrée BERTIN – DOES THE PRENATAL PERIOD INFLUENCE OUR LIVES ?

prisoner in Germany. Unfortunately he was shot and his arm had to be amputated above the elbow." The shock this young woman received must have been enormous: in January 1941 she gave birth to a lovely little boy with a congenital amputation of the arm... An incredible story! No, this is how we are made. It is not always so marked or so clear, but our thoughts do largely dominate our health.

A number of similar testimonies have been recounted to us by mothers or midwives, during conferences.

In the case reported by these two doctors, the shock must have been a deep one, but surely it was the **mental image** of the amputee husband, **strongly emotionally charged, which obsessed this young woman over a long period.** This vision seems to have interfered powerfully on the natural pattern structuring the embryo.

So we need **to ask the question: how can this be avoided?** By substituting, in the place of the negative emotion and image, that of a superb baby filling his parents with joy. If this is difficult, then resort to appropriate psychological help. In order to be able to turn the situation around, we must be informed of the dangers we risk and the ways in which we can avoid them.

This example, fortunately extremely rare, suggests that, **on the contrary**, but in accordance with the same process, **positive images imbued with happy certainties can be an advantage**, in all ways, to the baby being formed. And this is absolutely wonderful! What hope, what a feeling of worth for the woman who is creating a life!

Looking for an explanation

What are the processes by means of which mental images take effect? At the moment traditional science cannot supply any answers. However quantum physics proposes "examples", explanatory patterns which, if reinforced over the years, could constitute reliable and converging leads.

SCHROEDINGER showed experimentally how an observer's consciousness could extract elementary particles from their state of improbability by introducing order into their behaviour.

In addition, French, British and American doctors (such as CHARON, VINCENT, BOHM and CAPRA) noted that particles are able to register the information they receive, re-memorise it and communicate it to other particles. And they claim that the nature of the information integrated modifies the vibratory quality of the particle.

In the west, biophysicians such as R. SHELDON speak of universal fields known as morphogenetic or biotic fields, which ensure that forms specific to a species continue to exist while enriching the experience of the individuals of this species.

In the east, researchers conceive in a similar way of a biological field consisting of free particles forming an overall neutral electromagnetic field which regulates the reproductive and developmental process of the various forms of the living creature. This biological field may also be a carrier and vector of all the information. Each cell, regarded as a complex electronic system, would be in constant interaction with this information-carrying field.

But whilst awaiting for these hypotheses to be definitively proved, life needs to be lived, and for many years, the ability of the consciousness to improve the functions, structures and organs of the human body has been used in treatment, in prophylaxis, in education and in rehabilitation.

Life today

We have now seen that a mother can "have a positive effect" on the education given naturally to the child throughout pregnancy. In other words, she can supply the data bank which has been accumulated in the baby's cells since its conception with positive information. **The mother-to-be can, through the quality of her inner state, her feelings and her thoughts, introduce more order, health, stability and adaptability into the psyche and into the actual cells which, day by day, form the child's body.**

Once the mother is aware of this, will she abandon her inner life to the fluctuations of her existence or will she decide to give this a direction which will be favourable to her child? **Joyfully, in terms of what is possible, and without any guilt for what is not.** This decision also involves the father and the other family members and friends of the couple.

No guilt! Let's stress this. Parents can only do what they can. The child can continue by working on himself. And so the pattern of life unfolds.

In short, **what thoughts can the mother-to-be cultivate in order to give her child an advantage?** (Let's not forget that she herself will benefit from this.)

A woman has great powers of imagination. She can put this to amazing use in shaping her child. Imagination is the creative faculty of the human spirit. If she channels it into beauty, intelligence, goodness and wisdom, she can work wonders.

For example, the expectant mother can relax and visualise ("see" in her imagination) men and women, her future child ... exhibiting the finest of human qualities. The child will be permeated with these.

Marie-Andrée BERTIN – DOES THE PRENATAL PERIOD INFLUENCE OUR LIVES ?

The greatest **vigilance** is then necessary to avoid projecting personal desires onto the child. The child cannot compensate for any failures and frustrations experienced by its parents, and not can it achieve their ambitions. The child is a free agent, with his own life. So what must be laid down in him are the foundations of qualities of a general kind, of which he will become aware and which he will be able to develop more easily in the course of his own existence.

Even **when time is short**, all parents can make sure that they lovingly interact with their child, preferably at a set time, for example in the evening before going to sleep, when they can tell him how much he is loved and expected, what good health he is in, and how handsome, noble, generous and strong he will be. Allow your enthusiasm free rein: you cannot go too far in this respect.

The expectant mother can also communicate with her child while she goes about her daily tasks, by giving him caresses, talking to him, living in his presence, as if he has already been born.

This loving ambience will provide joy for the mother and for her child.

This knowledge has been in circulation for several years and some couples who already had children wanted to have another one, when fully aware of all this creative consciousness. They then told us that they had experienced something extraordinary which had not happened before, that this child was different from the others and that they had a different relationship with him, at once deeper yet simpler. They added that they had learnt a lot, that they had been transformed, and that their life as a couple had been considerably enriched.

These are the essential points about gestation. Now we can return to the real origins of the human being, conception.

THOUGHTS ON CONCEPTION

What we are about to say has not been confirmed by laboratory studies: and you will see why. However the facts we have observed, and what we know about fields of energy and cellular registration, would seem to suggest it.

When parents join together they produce, through the sensations and emotions they experience, a very intense forcefield which makes all their cells vibrate, including the two gametes which fuse together to form the initial egg. This original vibration is of paramount importance.

Imagine two extreme cases:

That of a couple who, on Saturday night, after having had a tot to drink, start to quarrel, or even fight, then make up frenetically in bed. This couple is running a high risk (avoiding any rigid affirmations) of producing a person predisposed towards sensuality and violence, since he has received these impressions right from the outset.

On the other hand, a couple who join together in deep love, fully aware of the importance of the moment they are experiencing, after having raised their consciousness by reading something inspiring, looking at works of art, or listening to music of their choice, this couple will have every opportunity (again we need to exercise caution) of bringing a fine person into the world.

Popular wisdom has been saying this for centuries: love children are beautiful children.

When a gardener sees that the fertile season has come round he selects his seeds and prepares his ground. When wishing to conceive a child a human being who is aware of the situation will watch over the quality of "his seeds", and make his ground healthy and strong in order to produce a healthy and psychologically well-prepared life.

He can also, according to homeopaths, follow treatment to drain his land and thus greatly hinder the transmission of hereditary disease.

At the time of conception both father and mother have a role of equal importance: they each supply half of the genetic material for the new person. However during the nine months of pregnancy, it is the mother's experiences which predominate. If the words mother, mater and matter have the same root, this is because the Ancients already knew that the wife and mother alone had direct power over the child's living matter. This power is so strong that it can diminish the negative aspects and amplify the positive elements of the child's genetic make-up.

BY WAY OF CONCLUSION

We all share responsibility for this huge amount of work nature gives the mother and the parental couple. **Up to a point we are all jointly responsible** for the children of the future. We need to help them by arousing **collective consciousness** and those who make decisions on welfare matters must respond to this with the appropriate measures.

If, instead of building more and more hospitals and prisons which try to reduce the consequences of lives which have gone wrong because they were not properly constructed at the outset, governments in every country went back to

Marie-Andrée BERTIN – DOES THE PRENATAL PERIOD INFLUENCE OUR LIVES ?

the initial causes and took more and better care of pregnant women, instructing them in their role and giving them the conditions needed for fulfilling this to the best of their ability, the results would be incomparably better and infinitely less costly.

Natural antenatal education, regarded in a positive way by the parents, is the most fundamental form of prevention, since it participates favourably in the genesis of the physical and psychological health of the person.

Currently, at a time when we are quite rightly concerned about the rights of men, women and children, do we not need to acknowledge, as a matter of urgency, that the most important of the rights of a human being is the right to conception and gestation – as well as to his subsequent birth and education – which give him, right from the start, the best background, the best structures, in short, the best opportunities for living a successful life.

So, we can then hope that these stronger, more stable and more self-confident men and women, who are more open to others and to life, will be able to create, on a global scale, a more friendly world in which everyone can find their place and live a happy life.

A dream that could quickly become a reality if every woman, every man and every professional devoted themselves to making it come true.

- « Les influences sonores dans le développement prénatal »
(*Sound influences within antenatal development*)
Symposium 1988 and 1990
- « La période prénatale influence-t-elle notre vie? »
(*Does the antenatal period influence our lives?*)
Lecture (25FF), text or cassette (9OFF)
- "L'éducation prénatale: un espoir pour l'avenir."
(*Antenatal education: hope for the future*)
Premier Congrès Mondial (First World Congress)
June 1993 in Grenada Publ. L'Alpha l'Omega
- "L'éducation prénatale, de la Grèce Antique au XXIème siècle"
(*Antenatal education, from Ancient Greece to the XXIst century*)
2nd World Congress - May 1994 - Athens
- De l'enfant imaginaire à l'enfant réel
(*From the imaginary child to the real one*)
Lecture
- "Aider les jeunes à devenir parents"
(*Help young people to become parents*)
3 lectures -
- "Les fondements biologiques et psychologiques de l'Education Prénatale"
(*The biological and psychological foundations of Antenatal*
Education) 3rd World Congress - ROME - March 98 (At press)