

Stages of Child Development: From Conception Onward... An Overview

Anne Carpentier¹

July 2010 – February 2011

Foreword: *Basing myself on a two-session training I prepared and conducted in the Philippines (August 2010 & February 2011) to answer to the request of EnFaNCE's team of social workers, implementing a Family Development Programme in the slums of Manila, I wrote this document, so that it could also benefit to other social teams working on Early Childhood and / or Family Development Programmes. (A French adaptation is online since April 11th, 2011²). Please, do feel free to send your comments and questions.*

Stages of Child Development: From Conception Onward... An Overview	1
0. Long long before birth.....	1
1. From conception to birth: 1+1=... 3 billions	2
On the mothers' side:	3
2. Birth.....	5
Newborn parents!	6
Breastfeeding	7
Postpartum depression	8
3. Attachment.....	9
4. Stages of child development.....	12
a. Psychoanalytic theories on child development: historical background.....	12
b. The interpersonal world of the infant: Daniel Stern' theory	15
From 0 to 2 months: Emergent self	15
Core self (2 to 6 months)	15
Subjective self (7 to 15 months)	16
Verbal self (15 months onward).....	16
c. Affective development	16
6. Challenges to development	22
7. Adolescence	24
8. And next?.....	29
∞ Conclusion: programmed to be free.....	30
Sources, Articles & Books to read.....	31
Appendix : Psychomotor development.....	32

0. Long long before birth...

Just about everybody has thought about having a child long before actually deciding to have (or deciding not to have) a child. Children around 4 years old start imagining that one day, they will have a baby, like their parents... This imaginary baby is the "ideal baby". Then much much later on, a "real baby" will be conceived and born, whom both parents will have to welcome, and to whom both parents will have to adjust...

¹ Anne Carpentier, Gestalt-therapist, is in charge of Pratiques Network & technical support to psychosocial programmes.

² http://www.interaide.org/pratiques/pages/urbain/petite_enfance/Etapes_du_developpement_Anne_Carpentier_2011.pdf

1. From conception to birth: 1+1=... 3 billions

Most obstetricians determine the duration of pregnancy from the time elapsed since the mother's last menstrual period. Of course, this is usually about 2 weeks before ovulation and pregnancy actually occurs. The normal duration of pregnancy is 280 days or 42 weeks from the last menstrual period (= 40 weeks since conception). Pregnancy is also divided into thirds, or trimesters, which are each about 13 weeks in length.

It takes 9 months (40 weeks) for a baby to develop inside his/her mother womb, before being born.

At conception, an embryo is formed from the mother ovum and the father spermatozoon; Within just a few hours of fertilisation, the fertilized egg starts dividing into two cells; each one of the cell splits into two cells, and again in two...From the two cells coming from the father and mother, **3 billions** cells will form the newborn baby at the end of the process!

The First Trimester

Fertilization occurs when the male sperm enters the female ovum. Very soon after conception, the embryo and the placenta begin to develop from the fertilized egg. By 4 weeks of gestation (1 month), the embryo is about 3/8ths of an inch long (4 millimetres long, and weighs less than a gram).

At about 5 weeks, urine pregnancy tests can detect HCG, which is secreted by the placenta. This is the basis of a positive pregnancy test.

By 6 weeks the foetal heart is completely formed, and it can be seen on an ultrasound. It beats very fast, twice as fast as the mother's heart. Blood begins to pump at this time. Also, a ridge of tissue, which will become the foetal brain and spinal cord, runs along the embryo's body.

All early foetuses are female. If testes are present, testosterone, the male hormone, is secreted beginning about 8 weeks and those foetuses become male. The others remain female.

Now we call the baby a "foetus" instead of an embryo. It is now 2.5 centimetres long, and weighs 3 grams.

By 10 weeks, all major body organs are present, except for the foetal lungs, which are the last to completely develop. All remaining weeks of gestation are devoted to the growth and maturing of these key body structures. By 12 weeks (3 months), the 2-1/2 inch foetus weighs 1-1/2 ounces (9 centimetres long and approximately 48 grams).

The heartbeat can now be heard by listening to the mother's abdomen with a Doppler. The nails and skin are now present. The foetus begins to move spontaneously. Soon after, the kidneys begin to make urine and blood begins to form in the bone marrow.

The Second Trimester

By 4 months (16 weeks), the growing foetus weighs 7 ounces - just about 1/2 a pound - and 5 inches from head to rump. (13.5 centimetres long, and 180 grams).The foetus can suck, swallow and make early breathing movements. The arms and legs are completely developed.

The brain is capable of passing and receiving messages, but does not yet control the movements made by the now fully formed limbs. Some finer movements are also possible;

July 2010 – March 2011 2/33



PRATIQUES

Sharing experiences to enhance the quality and impact of development programmes

<http://www.interaide.org/pratiques/practices.htm>

his/her hands are now capable of grasping, and facial expressions are beginning to occur. The eyes are beginning to take on more details, the eyebrows and lashes are growing, and the insides of the eyes are sensitive to light.

At 18 weeks, all body and facial features are recognizable. The eyes begin to blink. The foetus moves quite a lot now, though the mother may not feel it. At 5 months, or 20 weeks, the halfway point in gestation is reached. Although the primitive lungs cannot breathe air, early respiratory movements begin. The foetus can be seen sucking its thumb on an ultrasound. Soon the foetus begins to hear the mother's heartbeat and voice. The foetus wakes and sleeps. The foetal sex can be seen with an ultrasound.

The other main development at this stage is the addition of more functioning senses; the baby can now distinguish between bitter and sweet tastes, and can detect things touching his/her skin. His/her hearing is also more defined. The sounds of the uterus are becoming familiar, and s/he will respond to noises from outside the womb, and will often be especially receptive to rhythm and melody. The baby recognizes his/her mother's voice.

As soon as the baby's movements are felt / seen from outside, then the father too (and the older children) can touch the baby and communicate with him/her. (Soon after birth, the baby will also recognize his father's and siblings' voices).

The Third Trimester

By 28 weeks, the beginning of the third trimester, the foetus can survive outside of the uterus if the lungs are developed enough. From 32 weeks onward, the foetus is in a growth phase. The muscles become stronger and the foetus can turn with greater ease. By 36 weeks, 97% of the foetuses have turned down (head first). At 38 weeks, the foetus is finally term and the lungs are usually mature. The foetus can easily survive outside of the womb. Forty weeks is full term and the average foetus is 20 inches long and weighs 7 pounds (50 cm, 3 kg).³

These last 4 weeks of pregnancy, the baby is full term, only the brain continues to develop — and brain growth will continue after birth, throughout childhood, teenage years and up to 20-25 years old!

The 4 states of the baby inside the womb (during the last three months), *cf. Brazelton*:

- Deep sleep (almost no movement)
- Light sleep (few movements, jerky)
- Active, alert (usually at the end of the day when the mother is resting: the baby starts moving and jumping and kicking!)
- Alert & calm: the baby is calm, as if listening; he/she answers to stimulations (such as touch, voice, song...)

The baby can hear and can also see light through the mother's belly.

On the mothers' side:

Pregnancy is a big adventure for parents. For mothers-to-be, it is a very challenging time, both physically and psychologically.

* **A physically challenging span of time**: Mothers actually host another being in their own body for 9 months. They are actually two separate beings, but it feels like having one body

³ More details on http://www.babyguideuk.com/pregnancy/articles/conception_to_birth.asp



for two. Mothers do not need to eat twice as much, but twice as **well**, because they will share all nutrients and vitamins with the baby. If mothers don't get enough nutrients and vitamins from what they eat, what is available will go to the baby first, and the mothers might then have nutrition deficiency. If the mother is underfed, the baby will be too. This might make smaller babies at birth, who will need to be fed more often, which will turn to be even more tiring for the mother, who'll already be tired and weak because of under nutrition. The babies might also be hypersensitive, and harder to calm down, making the mother feel inadequate: this can lead to early relationship trouble.

Native Filipino food, with **rice, fish, green leafy vegetable** — such as malunggay, spinach, & all types of cabbages... — mungo beans, sweet potatoes, nuts (cashew nuts...) and **fruit** (papaya, calamansi, mango, banana...) is perfect... when available, which unfortunately is not always the case for the very poor families of the slums.

Because it is so challenging physically, and emotionally pregnant women also need to sleep more... and to dream more!

* **A psychologically challenging time**: pregnant women dream twice as much! And the foetus dreams at the same time as his/her mother! Experiences (measuring hormones in the amniotic liquid) have shown that babies in the womb have dreams that match the emotional tone of their mothers' dreams.

Dreaming twice as much might be to help mothers to adjust to this challenging task (carrying a baby and becoming a mother) and to prepare to this big change in their life.

Being pregnant brings the mother back to her own arrival in the world. In the womb, the baby feels the same emotions as his/her mother. So during pregnancy, the bodily memory of the woman is awakened and brings her back to the time she was a baby in her own mother's womb. But this bodily memory doesn't have words, it is only physical and emotional — and this is why sometimes pregnant women are overwhelmed by emotions that they cannot explain.

If her own mother is around, and if the relationship with her mother is good enough, then talking with her mother might help the young mother-to-be understand these emotions and help her put these emotions into words; it can also help the pregnant woman understand the conditions in which *she* came into the world.

If there are no mother — or another trusted woman or friend — around, then the husband can provide the support and comfort the mother-to-be needs... But sometimes the husband needs support too at the same time... For a man, it is also difficult to see his wife becoming a mother. It also brings him back to his own arrival in the world. It may also bring him back to a time when his mother was pregnant with another child and he might have felt (or might have been) jealous and neglected. Moreover if his own father wasn't very present or if he didn't have a father — which is frequent with the families we work with in Manila — then it might be difficult for him to become a father, with no model or reference to rely on.

Symbiosis... Two human being sharing dreams and emotions... Recent studies have shown that the amniotic liquid is "tinted" by the mother's emotions. For instance, stress hormones are found in the amniotic liquid which the baby drinks... But surely the hormones of love and joy also pass into it! This is probably why babies have dreams that match the tonality (the emotion) of their mother's dreams.

This "symbiosis" also prepares both mother and baby to adjust to each other after birth...

July 2010 – March 2011 4/33



PRATIQUES

Sharing experiences to enhance the quality and impact of development programmes

<http://www.interaide.org/pratiques/practices.htm>

2. Birth

Birth is a huge event for the baby.

Everything changes:

Cosy in the womb	Outside in the wide world!
Continuously fed without efforts through the umbilical cord, the foetus is never hungry. Protective, containing environment Fusion – The baby isn't separated from his mother. Watery environment – Closed, secure environment (*) Movements are limited Symbiotic relationship	The baby feels hunger – discomfort and frustration (waiting to be fed...) Eating requires efforts (sucking is tiring...) Mother and baby are physically separated. Environment is not as protective Air - Gravity A new universe that must be discovered and understood New sensations: hunger, sound, light, changes in temperatures... Free, unlimited movement

(*) it's a secure environment if all goes well enough; but traumas in utero are more frequent than is commonly thought (early and unnoticed death of a twin embryo or foetus are suspected to be more frequent than we supposed; getting tied up in the umbilical cord, etc.).

As soon as birth, the newborn baby recognises his/her mother's voice, smell and then her face. As soon as birth, babies can imitate a human face (they will stick their tongue out to answer to an adult doing the same!).

After birth, the newborn baby has the capacity to both avoid stimulations when they are perceived as negative (to much light, to much noise...) by averting her gaze, closing her eyes, turning her head away. The infant can also react to positive stimulations and will open her eyes, move her head and look intensely around her: newborn babies are particularly interested by human faces (mother's first, but other faces too).

Babies who have suffered from stress during pregnancy (or if their mother have been suffering from stress or depression during pregnancy⁴) might be hypersensitive, and cannot at first avoid and protect themselves from over stimulation. If this is identified (the earlier the better), and if they are carefully taken care of (protected from over-stimulation by the primary caregivers) then they might be able to learn how to regulate and protect themselves from over stimulation. Otherwise, hyperactivity might become the only way for them to react to stimulations. (cf. Brazelton).

The six states of the newborn: cf. Brazelton

- Deep sleep (babies who can avoid negative stimulation — such as harsh light or sound — adjust themselves to light & sound and manage to keep themselves asleep)
- Light sleep (the baby is dreaming during these light sleep spans)
- In-between sleep and wake
- Completely awoken
- Agitated
- Crying

⁴ 10 to 20% of pregnant women suffer from depression.
50% of post-natal depression have actually started during pregnancy



The baby has 6 different types of cries — and the parents have to try to learn and understand their baby's language: the baby is crying differently when s/he is feeling pain, hunger, discomfort, or when s/he is tired, bored, stressed out.

Newborn parents!

- On the mothers' side: Giving birth is painful, sometimes frightful, and tiring. After giving birth, the mother may feel pains for several days. The first two months are very tiring. Breastfeeding the baby will help the body of the mother get back in shape. But feeding is also tiring (the first two-weeks might be difficult, especially for the first baby) and the mother needs to eat well and enough, and get enough rest.

Postpartum blues or baby blues: according to Brazelton (see ref.), from 50% up to 80% of mothers feel "blue" after giving birth. It usually starts 3 days after delivery and usually lasts 3 days. It is provoked by the sudden drop of pregnancy hormones combined to stress, tiredness due to the baby care, lack of sleep and the new huge responsibility that the young mother feels. It is characterized by sudden changes of emotions, from tears to joy to feelings of elation. It only lasts 2 to 3 days (usually from the 3rd to 5th day after delivery) and stops within ten days. If not, it might be the first sign of depression (see below).

It seems that women actually experience baby-blues if they are in a secure environment, where they feel supported (by their husband, their own mother or family and social environment). From this point of view, it would be a "luxury" that a young isolated mother or a mother under stress couldn't afford.

According to Monique Bydlowsky⁵, the baby-blues has a double use: it expresses the grief that can be connected to the end of pregnancy, and constitute a phase of hyper sensitivity that will allow the mother to adjust to her newborn baby's need: the mother's self disorganizes and reorganizes to adapt herself to her new situation.

The "mother-baby dyad":

The symbiotic relationship of pregnancy is transformed and shapes itself in another relationship that lasts a few months, and that is needed for the baby's survival: the mother has to understand her baby and guess his needs. She acts as an external regulating "system" for the baby. Winnicott called this period — which starts during pregnancy — "**primary maternal preoccupation**", during which the mother is centered on her baby: it's a state of heightened sensitivity akin to a kind of primitive somatic identification to the child (as if the mother could sense the infant's needs with her own body — bodily-based empathy). Winnicott regards this as the normal state of the "ordinary devoted mother" during the first weeks of the baby's life. He said it was a kind of "normal illness" or "normal madness" in which the mother lends her own self to the infant. But of course this "normal illness" should not last, otherwise the baby's self will not develop or only partially: The mother's "recovery" from this "normal illness" provides a kind of beneficial weaning, as it fosters child autonomy: it's also the normal process that the mother recovers her own self-interest at the pace that is adapted to her infant.

Some mothers cannot reach this state of "ordinary devotion", because they have other interests, or because of relational trauma that occurred in their own infancy. In this case, both mother and child suffer: their relationship is endangered unless they receive therapeutic support. Some mothers cannot leave this state of "ordinary devotion", also because of a possible childhood trauma.

⁵ A contemporary French psychoanalyst



As we will see below, the baby's brain will grow within the relationship to the primary caregiver: synaptic connections between neurons are experience-dependent. But the mother's brain also reshapes itself and new synaptic connections are created while interacting with her newborn baby.

Breastfeeding

Advantages:

- Free of cost,
- Always the good temperature,
- Always clean and sterile,
- Always ready (well, *if* and when the mother is ready!)
- Exactly made for this particular baby, for the particular time of the day, for the particular stage of development of this baby: best nutrients for the baby; boosts the baby's immune system...: prevents infections — including ear and upper respiratory infections —, prevents allergies to cow-milk
- Will help mothers' body come back to shape;
- Helps attachment bond: oxytocin the "love hormone" (truly, the attachment hormone) is released in large amount during labour, to facilitate delivery, and during breast-feeding.

Difficulties:

- tiring... During the first months, babies need to be fed up to 8 to 10 time a day: it's a full time job, 24 hours out of 24 hours...
- The mother is "stuck" to her baby: she cannot leave the baby for a long time; she cannot work outside the house, etc.
- Not fit if mother is under medication, or if she drinks, smokes, takes drugs...

When the baby is born... it brings both back parents to the time they were infants — and if they have not receive enough or appropriate care, if they have been neglected or abused, then it might be difficult for them to become "good enough" parents without receiving support.

To be a "good enough" parent (not A GOOD parent, just an OK-parent), one must have internalized the quality of a "good-enough parent" (like being a "good mother" for oneself: i.e. having the capacity to regulate one's own emotion, to tolerate stress and frustration, to tolerate one's own negative feelings as well as others', and to be able to go back to inner positive feelings after a negative interaction; to be able to comfort oneself, etc.).

A mother can only be "good enough" if she receives enough support herself: from her husband, her mother / family, from society...

And... as you know, it is not always the case in the slums of Manila where EnFaNCE⁶ works. Mothers usually don't have their own family (their own parents, older siblings...) around; their husbands have a hard time making a living and are not always their to help...

And often couples become parents at a very young age (16, 17, 18...). At this age, the brain growth isn't finished and the capacity to tolerate stress and frustration is still building... So teenage mothers and fathers may have even a harder time adjusting to their new role as parents...

⁶ Encourage Families in Need of Care and Education Foundation, a Filipino NGO created in 2003 with the support of Inter Aide.



Teenage mothers are also at high risk of post-natal depression: ¼ of teenage mothers suffer from depression.

Postpartum depression

Postpartum blues last a few days only whereas postpartum depression, affecting 10% of mothers, lasts for a minimum of two weeks. At greater risks are older women and very young mothers (25% of teenage mother will suffer from postpartum depression) as well as those with unsupportive partners, previous mental illness, physical disease and thyroid problems.

Some mothers keep their feeling hidden but visible symptoms include fatigue, insomnia, loss of appetite, (all easily confused with recovery from labour and delivery and adjustment to the new baby) persistent anxiety, irritability, emotional instability with sudden crying, and most seriously, indifference to the new baby.

These symptoms can be terrifying, for the young mother and those around her. Yet postpartum depression is likely to go unrecognized and untreated. Mothers are bound to be ashamed and feel miserable at time where they are expected to be happy; if untreated though, the depression can linger for months or even years, with consequences for the mother and child. Without healthcare visits (and sometimes even with them!) depression is easily missed! A 10-item questionnaire, EPDS (Edinburg Postnatal Depression Scale⁷) can detect depression with great reliability as soon as the 8th week after delivery.

Depression causes intense suffering to both mother and baby (as well as to the other children). Sometimes, it's even the baby that will carry the symptoms of her mother's depression: sleep problems, feeding disorders, loss of appetite, cries, skin allergies, asthma... (These symptoms can also have other causes — allergies to milk... — and should be investigated). The mother may also use (not consciously) her baby as an anti-depressant, to repair her own childhood unresolved traumas and fight against depression. This might cause development troubles emerging later in childhood or adolescent years.

*For French readers : see also **Depressions throughout life** : maternal depression in **Les dépressions au fil de la vie***
http://www.interaide.org/pratiques/pages/urbain/social/Depressions_au_fil_de_la_vie_Fiche_A_Carpentier.pdf

- And fathers...: It may be a trying time for fathers too: they need support too, so as to be able to be supportive for their wives. They need to be recognized as fathers: they have a part to play; they can take part in taking care of the child. As seen above, if the man's own father wasn't very present or if he didn't have a father, then it might be difficult for him to become a father, with no model or reference to rely on.

⁷ 10-item questionnaire <http://www.fresno.ucsf.edu/pediatrics/downloads/edinburghscale.pdf>

3. Attachment

René Spitz⁸'s observations have proven that if children's physical needs are taken care of, but no social/emotional contact is established with caregivers, the children actually waste away and sometimes might even die. He used the term "**Hospitalism**" to describe infants who wasted away while in hospital, even though they were properly fed, cleaned and kept in appropriate cribs: the symptoms of hospitalism could include retarded physical development, and disruption of perceptual-motor skills and language. **It is now understood that this wasting disease was caused by a lack of social and emotional contact between the infant and caregivers.**

Emotional relation to another human being, establishing a nurturing relationship, **is thus a vital need.** "We are born to form attachments, our brains are physically wired to develop in tandem with another's, through emotional communication, beginning before words are spoken" says Allan Shore, a contemporary American neuropsychologist & neuropsychanalyst⁹.

Nature's help..... is not enough...

On the mothers' side: there is a specific hormone involved in giving birth and breastfeeding: oxytocin is released in the brain in large amounts during labour and during breastfeeding, when the baby is sucking on the nipple. This hormone induces attachment¹⁰. It also provokes feelings of contentment, reductions in anxiety, and feelings of calm and security — which might help mothers adjust to their new role and to the strain of giving birth and caring and feeding the newborn baby.

It helps, but it is not enough, otherwise, there would never be relationship problems between mothers and babies, and we know there are...

On the babies' side:

Bowlby¹¹'s attachment theory is rooted in the ethological notion that a newborn child is biologically programmed to seek proximity with caregivers, and this proximity-seeking behaviour is naturally selected (a human baby cannot survive without a caregiver): attachment in infants is primarily a process of *proximity seeking* to an identified *attachment figure* in situations of perceived distress or alarm for the purpose of survival

From birth to 2 months, infants have 4 (or 5 if sucking is included) ways of inducing an attachment response from the adult / primary caregiver:

- Crying
- Grasping
- Smiling
- Babbling

⁸ René Árpád Spitz (1887 – 1974) was an American psychoanalyst of Hungarian origin.

⁹ <http://www.allanschore.com/articles.php>

¹⁰ Oxytocin is also released in close relationships such as between two friends sharing intimate thoughts; and between two persons in love, through sharing, cuddling, lovemaking.

¹¹ John Bowlby (26 February 1907–2 September 1990) was a British psychologist, psychiatrist and psychoanalyst, notable for his interest in child development and for his pioneering work in attachment theory, exposed in the famous trilogy ***Attachment and Loss***.



From 2 months onward clinging and following are added. By the end of the first year, the infant is able to display a range of attachment behaviours designed to maintain proximity.

... And Nurture...

The most important tenet of attachment theory is that a baby needs to develop a close relationship with at least one primary caregiver for the child development to occur normally (social, emotional, but also physical and cognitive development).

According to Bolwby's attachment theory, infants become attached to adults who are sensitive and responsive in social interactions with the infant, and who remain as consistent caregivers for some months during the period from birth to two years of age.

Through repeated attempts to seek physical and emotional closeness with a caregiver and the responses the child gets, the child develops an internal working model (IWM) of the self and others that reflects the response of the caregiver to the child.

An infant may have different patterns of attachment with different care-givers. By around age five, this "crystallizes" into one pattern of attachment that is generally exhibited within most relationships and throughout life.

The attachment process is not gender specific as infants will form attachments to any consistent caregiver who is sensitive and responsive in social interactions with the infant. The quality of the social engagement appears to be more influential than amount of time spent per day.

As the toddler grows, it uses its attachment figure or figures as a "secure base" from which to explore, and to which the child can return when he/she is afraid or fearful or if the environment becomes stressful. Mary Ainsworth¹² has experimented and observed children's reactions when undergoing separation and reunion with their mother following a process called the "Strange Situation Procedure": based upon these observations, she developed and classified different styles of attachment, that we tend to keep throughout our life and pass on to our children.

All types of attachment are "OK" — an insecure attachment will of course be less... secure and comfortable, and anxiety about relationships might reach higher levels, but one can have a good life and experience love, success, joy, even though his/her main pattern of attachment is insecure. Love is a cure, and good, nurturing relationships — friendships, love, family relationships, psychotherapeutic relationship and also professional relationships... — can help repair our early pains. And through these relationships, our pattern of attachment can transform into a more secure one.

Secure attachment:

In the "strange situation procedure", a child who is securely attached to its mother will explore freely while the mother is present, will engage with strangers, will be visibly upset when the mother departs, and happy to see the mother return. The child will not engage with strangers if mother is not around.

Securely attached children are best able to explore when they have the knowledge of a secure base to return to in times of need. When assistance is given, this bolsters the sense

¹² Mary Ainsworth (1913 – 1999) was an American developmental psychologist known for her work in early emotional attachment with "The Strange Situation" as well as her work in the development of Attachment Theory. See http://en.wikipedia.org/wiki/Mary_Ainsworth

of security and also, assuming the mother's assistance is helpful, it help the child to learn how to cope with the same problem in the future. Therefore, **secure attachment can be seen as the most adaptative attachment style**. According to some psychological researchers, a child becomes securely attached when the mother is available and able to meet the needs of the child in a responsive and appropriate manner. Others have pointed out that other things determine the child's attachment, and that parents' behaviour is also in turn influenced by the child's behaviour.

Insecure attachment:

- **Anxious-resistant insecure attachment**

In the "strange situation procedure", a child with an anxious-resistant attachment style is anxious of exploration and of strangers, even when the mother is present. When the mother departs, the child is extremely distressed. The child will be ambivalent when she returns - seeking to remain close to the mother but resentful, and also resistant when the mother initiates attention. When reunited with the mother, the baby may also hit or push his mother when she approaches and fail to cling to her when she picks him up.

According to some psychological researchers, this style develops from a mothering style which is engaged but on the mother's own terms. That is, sometimes the child's needs are ignored until some other activity is completed and that attention is sometimes given to the child more through the needs of the parent than from the child's initiation.

- **Anxious-avoidant insecure attachment**

In the "strange situation procedure", a child with an anxious-avoidant attachment style will avoid or ignore the caregiver - showing little emotion when the caregiver departs or returns. The child may run away from his/her caregiver when s/he approaches and fail to cling to her when s/he picks him up. The child will not explore very much regardless of who is there. Strangers will not be treated much differently from the caregiver. There is not much emotional range displayed regardless of who is in the room or if it is empty.

This style of attachment develops from a care-giving style which is more disengaged. The child's needs are frequently not met and the child comes to believe that communication of needs has no influence on the caregiver.

A fourth category was added by Ainsworth's colleague Mary Main

- **Disorganised/disoriented attachment**

A child may cry during separation but avoid the mother when she returns or may approach the mother, then freeze or fall to the floor. Some show stereotyped behaviour, rocking to and fro or repeatedly hitting themselves, or unpredictable, incoherent behaviour. Mary Main and one of her colleague Hesse found that most of the **mothers** of these children had suffered major losses or other trauma shortly before or after the birth of the infant and had reacted by becoming severely depressed. 56% of **mothers** who had lost a parent by death before they completed high school subsequently had children with disorganised attachments.

80% of children victims of violence and/or abuse show disorganised attachment patterns.



Many studies conducted around the world¹³ show that the majority of children (65 to 70%) show a secure attachment. In some traditional societies, children have many attachment figures. Secure attachment remains linked to the quality and constancy of the relation with the mother. It seems that this special relationship between the baby and her mother is fostered by the care the mother provides to her baby during the night.

A study conducted in Kenya shows a **correlation between children's nutritional status and the type of attachment relation to their mother** (and not to other attachment figure) : **children with a good nutritional status are more securely attached to their mother.**

This confirms the importance that must be given to the mother-child relation in cases of malnutrition. EnFaNCe's team in Manila now invites all families with underweight children to the parents-child creative workshops so as to foster the mother-child relationship. This also shows that a long separation, such as is still the case in some nutrition rehabilitation centres, can only endanger the mother-child relation and weaken the attachment bond. Unfortunately, in some part of the world these are the only available nutrition centres.

A study in Mali where malnutrition rates are high, and attachment figures many, attachment was assessed with the « strange situation » procedure and during weighing, as it represents a stressful situation for the babies. Results show the same proportion of secure attachment (69%) that is found in other studies around the world (China, Japan, Europe, USA, Latin America...¹⁴). This shows that even in adverse conditions (poverty, food insecurity...) the type of attachment between the baby and her mother can be secure.

4. Stages of child development

a. Psychoanalytic theories on child development: historical background

Below is a very short overview of psychoanalytic theories of child development as an historical background. Indeed, more recent researches have shown that infants and babies have **many more capacities** that there were thought to have at the beginning of the XXth century. Moreover, Freud's psychoanalytic theories on child development were built "retrospectively", mainly from psychoanalysis practice of adults reconstructing their childhood (even though Anna Freud and Melanie Klein actually worked with children), whereas since the 1980's, research is based on direct observation of infants and children.

Contrarily to first-generation psychoanalysts, Daniel Stern¹⁵ stipulates the existence of an emergent sense of self starting since birth. I've added his input in this table — and detailed it a little further below the table — to illustrate the historical gap between early XXth century psychoanalysis and more recent discoveries about babies since the 1980s.

¹³ *L'attachement, concepts et application*, Nicole & Antoine Guedeney, Masson, Les âges de la vie 2002.

¹⁴ Gueney 2002, p.48

¹⁵ Daniel N. Stern (born on August 16, 1934 in New York City) is a prominent psychiatrist and psychoanalytic theorist, specializing in infant development. He is the author of a number of books on the subject, notably *The Interpersonal World of the Infant* (1985).



	Psychoanalytic theories on child development.	Corresponding to physical & cognitive development
0 to 3 months	<p>Sigmund Freud: Oral phase – Primary narcissism Anna Freud: Oral phase – total dependency to mother’s care René Spitz: objectless stage characterized by "non-differentiation" between baby and its mother; Donald W. Winnicott: primary non-integration – total dependency to primary caregiver Daniel Stern: From 0 to 2 months: Emergent self</p>	<p>The infant is totally dependant; breastfed (or bottle-fed) by mother / primary caregiver. The infant s/he uses his/her mouth to eat as well as one of the main organ to discover his environment (hence "oral" phase — <u>but</u> Spitz & attachment theory showed that loving care is the primary need, before being fed). Moreover, since birth, the infant uses his eyes, his body, as well as all other senses, to discover and interact with his environment and to establish contact and relationships.</p>
3 to 6 months	<p>Sigmund Freud: Oral phase Anna Freud: Oral phase – partial “object relation”¹⁶ René Spitz: the stage of "the precursor of the object" (from three to eight months) in which the smiling response indicates the beginning of object relations Donald W. Winnicott: relative dependence Margaret Malher: Normal Symbiotic Phase (0-6 months) Daniel Stern: Core self (2 to 6 months) Object permanency at 4 months¹⁷</p>	<p>The baby is still fed by caregivers. The baby smiles and babbles with adults in sorts of "sing-song conversations". Around 6 months, the baby can sit. "Object permanency" means that the baby knows objects continue to exist even when hidden away (and mother continue to exist when she’s away)</p>
6 to 12 months	<p>Sigmund Freud: Oral phase Anna Freud: object constancy (6-9 months) – sadic-anal ambivalence stage (9-12 months and over) René Spitz: the stage of the libidinal object (from eighth to fifteenth month), by which time the mother is recognized as a real partner (2nd organizer : 8-month anxiety from 6 to 9 months) Margaret Malher : Separation-Individuation (1st Phase: 6 to 9 months: differentiation between the infant and the mother – second Phase : 9 to 12 months: practicing) J-M. Lacan¹⁸: Mirror stage Daniel Stern: Subjective self (7 to 15 months)</p>	<p>Still fed by adults. 1st teeth are coming out from 6 m. onwards. Baby is usually weaned around 9 months and/or starts eating solid food — wants to feed on his/her own. Around 8: the baby starts crawling and can crawl away from primary caregiver to discover the world => hence 8-month anxiety (if s/he can leave his/her mother s/he could also loose her) Around 1 y.o. starts walking (10 to 18 months) The baby realize that it’s his/her own reflection he/she sees in the mirror (and not another child or just an image)</p>

¹⁶ **Object relations theory** describes the process of the developing mind as one grows in relation to others in the environment. The "objects" of the theory are both real persons in one’s world, and one’s internalized images of these persons.

¹⁷ Olivier Houdé, *La Psychologie de l’enfant*, 2e éd., Puf, « Que sais-je ? », 2005: O.Houdé’s book “Child Psychology” gives a condensed presentation of most recent research showing that the development of child’s psychology is a non-linear process. Published in French in 2005, it has replaced the previous edition written by Piaget’s in 1966. His book shows that the baby’ abilites (including cognitive capacities, such as counting...) are much more developed that they were thought to be, basing himself on a large body of studies that have outdated previous theories such as Piaget’s theory on children intelligence developing as a linear process. See in French http://www.scienceshumaines.com/index.php?lg=fr&id_article=14714

¹⁸ Jacques-Marie Lacan (1901-1981) was a French psychoanalyst



	Psychoanalytic theories on child development.	Corresponding to physical & cognitive development
1 to 2 years	<p>Sigmund Freud: Anal phase Anna Freud: sadic-anal ambivalent pre-oedipal stage</p> <p>René Spitz: From the fifteenth month, the child enters into semantic communication with gesture and the use of "no," indicating the emergence of the autonomous ego.</p> <p>Margaret Malher: Separation-Individuation (3rd phase: "rapprochement")</p> <p>J-M. Lacan: Mirror stage – Oedipal complex Daniel Stern: Verbal self (15 months onward)</p>	<p>The baby starts walking (1 y.o) and talking (15 months) Baby takes pleasure in evacuating his/her faeces (hence "anal phase") Saying "no" also helps him/her assert his identity as a separate being (separated from his/her primary caregiver) – but starting from birth, the infant has had many other ways of saying not (averting his gaze, turning his head away, screaming...) "Terrible twos" (vary according to the culture): the baby's aggressiveness is due to contradictory needs between dependence and autonomy.</p>
2 to 7 y.o.	<p>Sigmund Freud: Urethral/ "Phallic" (2 to 4)– Oedipus complex (3 to 6) Anna Freud: Phallic-Oedipal phase Margaret Malher: Separation-Individuation (4th phase: consolidation)</p>	<p>Toddler becomes capable of controlling his/her sphincter (complete control during the day by 3 y.o.) Talks, plays, runs, jumps, learns to separate from parents...</p>
7 to 12 y.o.	<p>S. Freud: Latency period Anna Freud: Latency period and pre-adolescence (11-12)</p>	<p>School age: energy is invested in learning (reading, writing, counting...) and socializing - interacting with friends. Research show a striking brain growth spurts from 6 to 13 in areas connecting brain regions specialized for language and understanding spatial relations, the temporal and parietal lobes.</p>
12 and above	<p>S. Freud : genital stage - adolescence 12-14 y.o. Adolescence 14 to 18 y.o.: Adolescence crisis Françoise Dolto¹⁹ : "lobster complex" 18-22 y.o. Late adolescence; entry in adulthood</p>	<p>Puberty Sexual maturity The lobster sheds its shell that has become too small, and remains shell-less before a new shell grows. As if he had no shell, the teenager feels hypersensitive and vulnerable Brain growth is completed between 20 and 25 years of age.</p>

¹⁹ French psychoanalyst (1908-1988)

b. The interpersonal world of the infant: Daniel Stern' theory

Contrarily to first-generation psychoanalysts, Daniel Stern²⁰ stipulates the existence of an emergent sense of self starting since birth. In his book, *The Interpersonal World of the Infant*, he describes the development of four **interrelated** senses of self. These senses of self develop over the lifespan, but make significant developmental strides during sensitive periods during the first two years of life. The mother or other primary attachment figures play a critical role in helping the infant with this developmental process.

These are not separated stages of development: the organizing self arises in **overlapping waves**. The organizing self is a **relational event** occurring throughout the course of a lifetime...

From 0 to 2 months: Emergent self

At birth, the infant experiences the world as full of unrelated sensory stimuli, which s/he gradually learns to integrate together. Stern calls this process of integrating and organizing experience the **emergent sense of self**.

This sense of self will serve throughout childhood (and throughout life) as "the basis for the child's ability to learn and create".

Core self (2 to 6 months)

Around two months, the child's organization of sensory experience reaches a point where s/he is able to sufficiently organize experience to have integrated episodic memories. This enables the child to start organizing future experiences, as he/she is able to discern patterns of events (*when I cry, Mummy comes and feeds me / cleans me...*) which he/she will use to arrive at generalizations about what s/he can expect in the future from his/her environment. In this process, the infant also becomes aware of its own features ("self-invariants"), which gives the child its sense of core self as an entity distinct from other objects/persons in its environment.

The child also develops generalized representations of its interactions with its primary caregiver during this time (*When I smile, Mummy smiles and looks happy and cuddles me, so I smile again...*), a concept related to and grounded in attachment theory. The child learns whether it can depend on its caregiver to provide for its needs and the types of affective and behavioural responses it can expect in specific situations, which serve as the basis for its future attachment style. **An important role of the caregiver during this time is to assist the child in regulating its affect / emotions.** The mother (or primary caregiver) acts as the baby's external affect regulating system: when the baby cries the mother comes and say "ooh my poor baby you're sad / angry / afraid; it's OK now Mummy is here, is OK now, don't worry"... which will help the child calm down. Eventually, if all goes well, throughout early childhood, the baby-child will internalize these experiences with the primary attachment figure and be able to invoke these "memories" (internalized experiences) to help him/herself self-regulate his/her emotions.

²⁰ Daniel N. Stern (born on August 16, 1934 in New York City) is a prominent psychiatrist and psychoanalytic theorist, specializing in infant development. He is the author of a number of books on the subject, notably *The Interpersonal World of the Infant* (1985).



Subjective self (7 to 15 months)

Around seven months, the child begins to be aware that his/her thoughts and experiences are distinct from those of other people, that there is a gap between his/her **subjective reality** and that of other people. However, with proper **attunement** by the primary attachment figure, the child also becomes aware that this gap can be bridged through **intersubjective experiences**, such as **sharing affect and focus of attention**. A lack of such attunement, as could happen, for example, if the mother suffers from depression, can deprive the child of sufficient intersubjective experiences, leaving the child unable to connect to other people in any meaningful way, which Stern believes may underlie Narcissistic Personality Disorder and Antisocial Personality Disorder.

Verbal self (15 months onward)

Around 15 months, the child develops the capacity for symbolic representation and language, and becomes capable of creating complex abstract mental representations of experiences, facilitating intersubjectivity but shifting the child's focus towards those things that can be represented and communicated in language.

The clinical implications of Stern's theory are quite interesting.

Regarding therapy, Stern highlights the importance of "now moments" as a potential for change and growth in the client as well as the therapist, but also in the therapeutic relationship. These can be described as moments of **intersubjective emotional relatedness** and are, in Stern's opinion, necessary for positive therapeutic outcome.

If a trauma has occurred during the core self development period, the child / adult might have difficulties in regulating his/her emotions. Intersubjective emotional relatedness within the therapeutic relationship will help the person regulating his/her affects just as mothers help regulate their babies' emotions.

The child's brain actually develops (connections between neurons are created), since birth onward, through **intersubjective experiences**, such as **sharing affect and focus of attention**. **Throughout life, intersubjective emotional relatedness will allow to repair past relational traumas and broken attachment bonds and new neural connections will be created in the process.** This is confirmed by recent research in neurobiology (see Allan Shore's work²¹, etc).

c. Affective development

From birth onward, the primary need is attachment.

The essential task of the first year (period during which the brain doubles in size) **is the creation of a secure attachment bond of emotional communication and interactive regulation between the infant and primary caregiver.**

As mentioned above, **as soon as birth, the newborn baby** recognises his/her mother's voice, smell and face. As soon as birth, babies can imitate a human face (they will stick their tongue out to answer to an adult doing the same!).

²¹ *Relational Trauma and the Developing Right Brain, The neurobiology of broken attachment bonds*
Allan N. Schore <http://www.allanschore.com/pdf/SchoreRelationalTraumaBaradon10.pdf>

The baby takes pleasure in being fed, touched, and cuddled by the primary caregivers. Through nonverbal, visual-facial, tactil-gestural, and auditory-prosodic communication, the caregiver and the infant learn the rhythmic structure of the other and modify their behaviour to fit that structure, thereby cocreating a specifically fitted interaction (which will differ when the infant is with her mother or with her father. Similarly, a mother will adjust differently according to the rhythmic structure of each of her other children).

After birth, the newborn baby has the capacity to both avoid stimulations when they are perceived as negative (to much light, to much noise...) by averting her gaze, closing her eyes, turning her head away. The infant can also react to positive stimulations and will open her eyes, move her head and look intensely around her: they are particularly interested by human faces (mother's first, but other faces too).

Between 3 and 12 weeks of age, most babies will develop a "fussy period" toward the end of the day. According to T.B. Brazelton, when a specific behaviour is so predictable and widespread — such as the baby blues for mothers — it's certainly adaptative and serves a purpose. According to him, an immature nervous system can take in and utilize a certain amount of stimuli during the day, but will then become overloaded. The "fussy period" would serve to "blow off steam". After that, the baby will sleep for a long stretch of hours, and the nervous system can reorganize for another 24 hours.

At 3-4 months, the baby starts playing alone with her fingers; cries less and can sleep full nights.

At 6-7 months: coordination between eye-hand-mouth: the baby puts everything in her mouth. At 6 months, the baby plays with her feet. S/he can sit and discovers the world looking around her. Teeth are coming out.

The baby has a **transmodal capacity** to discover her environment with all her senses (vision, touch, hearing...): she can recognize through vision the shape of an object that she has previously felt with her mouth without seeing it.

To relate to the environment, to discover, understand, think, the baby needs both her body and the relation to an adult. With her body she will feel, smell, touch, hear the other, and in the process, become aware the other is a separate being. At the same time, she will realize this gap between the other and her can be bridged by communication and **emotional relatedness**.

During the first year, non-verbal communication is the primary means of communication: Eye to eye communication is active and intense since birth. Babbling will come a little later. Body movements are a way to communicate for the baby *and* her mother. The baby is born with his/her own predisposition for a certain style of movement: tense (bound) or relaxed (free), high or low in intensity, abrupt or progressive, constant or fluctuating...²² This style of movement will evolve during the first year, within the mother-child relationship and will constitute the base of our movement style throughout life. Recent research in neurosciences shows that movement and action, throughout life, are an integral part of how we understand the world, relate to others and make sense of our experience.

Through the primary caregiver-baby relationship, the range of movement might get wider and adaptative or become narrower and fixed. The mother may have a totally different style of movement and sometimes communication is hindered: a mother whose style of movement is low in intensity and progressive, might have a difficult time adjusting to a child whose movement is bound and abrupt and high in intensity. If this mismatch becomes

²² *The First Year and the Rest of Your Life, Movement, Development and Psychotherapeutic Change*, Ruella Franck, Frances La Barre, Routledge 2011



chronic, it might hamper the relation durably. Observing each member of the dyad carefully might help understand the type of interaction that is happening between mother and child and smoothe down possible miscommunication.

Through the bodily based affective communication between the baby and primary caregiver, a secure attachment bond can be built; the sense of self develops in this body-to-body communication, as well as trust in the other and self-confidence.

Language: since the 5th month in the mother's womb the baby can hear, recognizes her mother's voice. At birth, the baby will recognize her mother's voice though it sounds different, because she recognizes the rhythm and intonation. The baby can discriminate her mother native language from other languages. In a bilingual environment, the baby will adapt its cries and babbles to match the rhythm and prosody of the different languages. The baby will also adapt its tone of voice to his father and mother, with a higher pitch with her mother and a lower with her father.

A one-month baby will also move differently whether s/he is with the mother or father: more delicately with her mother, more energetically with the father, to match the bodily movement and physical style and type of interaction of each caregiver.

At two months, the baby babbles in sorts of conversation, waiting for an answer and babbling back in return²³.

From 1 to 8 months, when the baby loses someone or something, and doesn't receive what he needs to recover, then he may feel overwhelmed. When h/her needs and need for love are fulfilled, then the baby is filled with joy. This joy will help the baby child grow up, open up and progress, physically, cognitively and affectively.

If not, then the baby will feel rage and despair. If this rage and despair cannot be addressed to someone, if there are no "good enough" caregivers who can accept to receive this rage and despair and who can tolerate and relieve it, then the baby will be filled and overwhelmed with inner rage.

Mothers might have problems coming from their own childhood that will prevent them from giving adequate care to their babies, and/or other problems such as depression, violence, marital conflict, grief... Consequently a mother may feel guilty, anxious, and/or angry, overwhelmed... which make it even harder for her to relate to their baby and to tolerate her baby's negative feelings of rage and despair — because she is struggling, unable to tolerate her own negative feelings of sadness and/or anger and depression...

Weaning: The lifelong process of separation-individuation starting with birth will be particularly activated with weaning. With teeth coming out, the baby wants to bite with joy, to discover the world and to reach out and meet others.

In some societies, weaning is done abruptly, when the mother is expecting another child. If pregnancies are too close, weaning will then be done very early, which makes it even harder for the baby. Weaning a baby abruptly is always difficult for him (and can be difficult for the mother too), and might entail relational and nutritional troubles. This is why in a large majority of malnutrition cases, it's not the youngest but the child just before who is malnourished: with weaning, s/he has lost the body-to-body contact, the vital, nourishing

²³ For French readers, see [L'intelligence avant la parole](http://www.interaide.org/pratiques/pages/forum/cyruunik_intelligence_avant_la_parole.pdf) Boris Cyrulnik, Michel Soulé, ESF, Collection La vie de l'Enfant http://www.interaide.org/pratiques/pages/forum/cyruunik_intelligence_avant_la_parole.pdf restricted access - or on GoogleBooks



dose of **love** that s/he needs to live and grow. Thus malnutrition is not only a nutritional problem, but above all a relational trouble (even in countries where food insecurity prevails, even during drought and famine).

Around 8 months, the baby starts anticipating the pleasure of being with his mother / parents and of playing with them. The baby also feels sad when she is not around: he becomes aware that she's not always around and available. The baby can start crawling away from her mother to discover the world. In the process of crawling away, the baby also realizes and anticipates that her mother can go away too: this can generate what is called "8-month anxiety".

From 1 to 2 years old: the baby both craves **dependence** and **autonomy**. These contradictory needs can bring a lot of frustration and irritation for babies... and for parents! With the ability to walk, the world opens up: the world of independence. But does the baby really want that? Do I want to walk away or don't I? Must I do my parents' way or my own? The conflict between these two drive — dependence and independence — is so strong that the baby will throw himself into tantrums of frustration and anxiety... These tantrums reveal the intensity of the inner struggle between these two contradictory forces.

At this age, the baby can understand every thing happening around him — even though s/he cannot speak yet. Understanding so many things makes him want to do many new things. Crawling, and then walking, also makes him want to do many more things and explore his environment. Parents have to give the baby **coherent limits** and **enough freedom** for him to explore without putting himself in danger. **Limits** will induce frustration, as well as security. **It is very confusing and frightening** for a child to have no limits. **Frustration** will allow the baby to internalize limits, and this process of internalizing limits is crucial, as it will help him/her grow and learn to take care of him/herself throughout childhood and teenage years and adulthood, without putting his life in danger. **Freedom** is just as important, and it will foster creativity and the joy to learn, to discover, to master new abilities. This also is crucial as it nurtures self-esteem, intelligence, desire to learn, understand, progress... The baby still strongly needs his/her parents' presence and attention: s/he becomes aware of his own value and worth in his/her parents' gaze. Through his parents' attention and love, s/he learns that s/he is worthy of love and respect. If his/her parents are happy and proud, he will want to keep on doing better and better. Then, self-confidence and self-esteem can develop.

The baby feels happy when experiencing new things with his caregivers, and when sharing activities with them. When seeing an adult doing something, the same neurons get activated in the baby's brain (this is what is called mirror neurons). Feeling happy and seeing his parents rejoice too makes him understand that even though people are separate, they can communicate and share the same emotions. The baby's brain develops in such interactions: new synaptic connections are created when sharing emotions and focus of attention with an adult. S/he also learns that he can understand others, and that others can understand him. This is the base of **empathy, altruism and generosity**.

The baby needs his parents love and attention to **regulate his own emotions**. Since birth, babies cannot regulate their emotions by themselves: when they feel anger, rage, fear, despair, frustration, but also joy, excitement, they are quickly overwhelmed if left by themselves. **The primary caregiver(s) acts as an external affect regulation system**. Through the repeated interactions with the mother who comes to calm the baby down, and put words on what he feels ("*oooh my poor baby, baby's afraid, it's OK now, Mom is here, don't worry*" as most mothers will spontaneously do with a sing-song intonation), the baby

July 2010 – March 2011 19/33



PRATIQUES

Sharing experiences to enhance the quality and impact of development programmes

<http://www.interaide.org/pratiques/practices.htm>

will calm down, and little by little, throughout early childhood, childhood, teenage years, will internalize this capacity to regulate his own emotions. People who were not given the chance to internalize this capacity to regulate their emotions in childhood, through “good enough” interactions and relationships, will try to compensate and resort to other ways to cope with their affects: hyperactivity, withdrawal, addictions...

Playing: At this age, babies love to play hide and seek, give/take, build and unbuild, imitate, put things in and pick things out of boxes, shelves, cupboards, plates, bowls and cups!...

Feeding: Around 12-15 months, the baby is more interested in playing with food than in eating!

The second year is often a time where parent-child relation problems start, because parents have a hard time dealing with this apparent contradiction between limits and freedom. If the parents have difficulties regulating their own emotions (especially anger...) it will be difficult for them to help their child regulate his own...

A 2-year old can do many things: walk, talk, climb, run... and many things become forbidden. This will generate a lot of frustration, and opposition tendencies. They feel rage when frustrated and are frightened and overwhelmed by their own rage and anger — and even more so if their parents reacts with anger to their rage. Hence the nightmares which are very frequent at that age. Limits set by parents will help them internalize a sense of security — and they will learn to adapt to society rules. The parents must try to help them soothe down so that they will slowly internalize this capacity to calm down.

The 2 to 3-year old needs to feel that parents keep on love him even when he feels bad, angry and overwhelmed by his rage and aggressiveness. It helps him contain his emotions; if not, it could lead to violent and/or self-destructive behaviour.

If parents can give coherent limits, the baby will integrate self-respect and security, and the capacity to tolerate frustration. If they can give enough freedom to explore and experiment, the baby will develop self-confidence, independence, will-power, cooperation, generosity. If parents give both coherent limits and freedom adjusted to his capacities, he will learn to tolerate his ambivalent feelings, reconcile his contradictory tendencies and he'll be able to develop his full potential.

Toilet training: the child wants to have power and control over his own body, and this has to be encouraged. It will allow him to learn that no one else can have control over his body and abuse him. (Sensing and knowing that one's own body belongs to oneself contributes to the prevention of sexual abuse). But if the mother / parents want to control the child's body, then s/he might learn that his body is not really his own.

Toilet training should not be started before 2 years of age. The child should really choose its own time. Throughout the world, all children are “toilet-trained” by 3, even if they have not actually been trained.

Toilet training increase interest in genitals, in both sexes. Sex exploration and masturbation are entirely normal at this age. Excessive masturbation (in public, once the child has been told that it's OK in private and not in public; masturbation when there are other exciting things to do such as playing...) may show that the child is under too much pressure in his life.

From 18 months onward, children investigate sex differences. By two, children identify with same sex parent and imitate their behaviour (gender identification).

Play will reflect the child's imagination, and his/her ability to use symbolic play: using dolls to imitate the people in his/her life. Imitation play, as well as daydreaming (inventing stories in

July 2010 – March 2011 20/33



PRATIQUES

Sharing experiences to enhance the quality and impact of development programmes

<http://www.interaide.org/pratiques/practices.htm>

which s/he's the hero/heroine) help children take in information from their life, digesting it and organizing it for future action. It helps children make sense with their lives and process and adjust to challenging situations. A child's prolonged attention, his ability to choose a toy to fit its symbolic play, is evidence of good control over incoming stimulations.

If the second year may seem like a dry-run for adolescence...**by 3 usually**, the child becomes calm and cooperative — even though they will still need to learn how to handle anger and aggressiveness. Fantasy and imagination continue to grow. Sexual exploration (playing doctor with same age children...) is frequent.

According to psychoanalysis, from 2-3 to 5-7 years old, children go through the “oedipal complex”: rivalry with same-sex parent and exclusive love for the opposite sex parent. This phase comes to an end by identifying with the same sex parent, as rivalry is transformed into admiration and renewed tenderness. Relationships with other children also contribute to overcoming this possible rivalry.

Experiences with other children of same age become more and more important too. It's a good time for kindergarten... **Play is the best way to learn at that age**: reading or telling stories to one's children allow them to experience that they can share emotions with their parents; imitation games as well as **free play** help children be alone and become independent. Daydreaming and free play stimulates children imagination and creativity. Cooperation game and competitive games also become enjoyable for children aged 3 and above. Through play, children experience socialization, learn about aggression, learn to identify with peer, learn to relate and to share. Children at that age also start sharing without pressure: toys, food... It's the beginning of a very important human capacity: altruism.

All this is **emotional learning, which is gained through the relationships with others**. If there is too much pressure put on *cognitive* learning (learning to read, to count...) — as is often the case in india preschools for instance — there may be too little time for children to learn about themselves and how to relate to other: the kindergarten should be chosen accordingly, if possible.... **Learning about oneself and about others is the best thing children can learn in preschool**. Cognitive learning requires **previous emotional learning, and inner emotional security (gained through a “good enough” relationship with caregivers) is a prerequisite for learning**.

Children aged 6 and above will start enjoying games with rules, which will help them adapt to school. At this age, the contradictory needs are to satisfy one's desires *and* adapt to reality.

With a sound base of inner security and emotional learning (which will continue throughout life in the relationships with other), children aged 6 and above are ready for school and to learn to read, write and count. If they feel secure enough, children will enjoy learning as they love learning about themselves, others, and the world. Whenever the child faces an emotional challenge, his/her brain energy will be spent on dealing with it, and will not be available for cognitive learning.

At this age, children integrate most of the security rules and social rules, respect and self-respect. They consolidate gender identification during this period (usually, girls and boys play separately at this age). Their energy is devoted to learning²⁴ and interacting with same-

²⁴ Research on brain growth show a striking growth spurts from ages 6 to 13 in areas connecting brain regions specialized for language and understanding spatial relations, the temporal and parietal lobes. This growth drops off sharply after age 12, coinciding with the end of a critical period for learning

age friends. If home can provide a secure emotional base to which they can return whenever they need reassurance, rest, cuddles, they will be able to develop their cognitive, physical (at this age children become very agile and precise in their movements) social and emotional potentials at school and when playing with friends and siblings. From 6 to 10-11, children learn to master their skills and to adjust smoothly and relate to their environment... before everything is disrupted with puberty and adolescence...

6. Challenges to development

Different signs can show that a child is not well. Below is only a short²⁵ list of some signs that are just given as *indications* that there *might* be a problem. These signs should make you alert and prompt you to refer the child and his family to specialised organisations where trained specialists can investigate further. If developmental delay is suspected, referral should be done as soon as possible, to see what is happening and to prevent or reduce or compensate possible developmental delays. The earlier, the better.

There are several testing tools that may be used to screen developmental delays (cognitive, motor, sensory and relational).²⁶ Again, such tools do not provide final diagnosis, but are methods to process large numbers of children and identify those that should be further evaluated. And in any case, different screening will give different results. These types of screening should be conducted by **trained specialists**.

Some signs *might* indicate developmental delay, such as:

- If the baby's cries sound strange
- If a baby sleep a lot (according to age)
- If a one-month baby does not follow with his eyes an object or a person moving
- If a child/baby does not react to noises, sounds
- If a 4-months child has never smiled (90% of three-month-olds smile spontaneously)
- If a 5-months baby doesn't hold his/her head at all
- If a child does not use his/her hands, or clumsily, or on one side only
- If a baby keeps on looking intensely at his/her own hands after 6-months
- If a baby over 7 months doesn't chew
- If a 8-months baby doesn't turn on itself when lying down
- If a one-year old child cannot sit
- If a 18-month old child still takes all objects to his/her mouth

languages. Sources: <http://www.nimh.nih.gov/health/publications/teenage-brain-a-work-in-progress-fact-sheet/index.shtml>

²⁵ More complete list of developmental milestones, and signs of possible delays can be found at <http://www.cdc.gov/ncbddd/actearly/milestones/index.html>

²⁶ such as the Brazelton Neonatal Behavioral Assessment Scale (which tests an infant's neurological development, interactive behavior, and responsiveness to the examiner, and need for stimulation. This test is administered during the newborn period only), the Gesell Developmental Schedules (these schedules test for fine and gross motor skills, language behavior, adaptive behavior including eye-hand coordination, imitation, object recovery, personal-social behavior such as reaction to persons, initiative, independence, and play response); the Denver Developmental Assessment (revised in 1992 to include emotional development) This test is used to identify problems or delays that should be more carefully evaluated. It measures four types of development (personal/social, fine-motor/adaptive, language, and gross motor skills) for children aged 0 to 6, or the Bayley Scales of Infant and Toddler Development (measuring physical cognitive, motor, sensory development for children aged 1 to 42 months — 3 ½ year-old)...

July 2010 – March 2011 22/33



PRATIQUES

Sharing experiences to enhance the quality and impact of development programmes

<http://www.interaide.org/pratiques/practices.htm>

- If a 2-year old keeps on drawing
- If a 2-year old doesn't talk at all
- If he/she has physical malformations
- If you observe that he/she doesn't react like a child of same age
- Bedwetting especially after 5 years old for girls & 6 for boys
- Gaze averting
- ...

Some of the signs below might indicate is undergoing to much stress, pressure, distress, that can entail psychological troubles (if they last less than 2 weeks in duration — these can be temporary signs and understood as reactions to a stressful or depressing event in the child life; if they continue during more than two weeks, they indicate something is happening — something really bad, such as violence, neglect, abuse, but sometimes something which seems so ordinary that it won't be noticed, (overstimulation, such as over-exposure to TV... Which we know is often the case in one-room houses in the slums: TV is exhausting for children and even dangerous for infant and babies. For children aged 3 years old, a ½ hour of children programme twice a day is a maximum, especially considering that even children programmes are violent!). Troubles at school (being beaten up by other children, terrorized by teachers) can also be found behind such signs...

- Bedwetting (especially if it happens after the child was not urinating at night)
- Constipation
- Eating disorders (anorexia...)
- Skin problems (eczema, psoriasis...)
- Asthma (a chronic disease which is 100% somatic and 100% psychological disease: a real "body-mind" disease)
- Compulsive masturbation
- Lasting night terrors
- Hypo / Hyperactivity
- Withdrawal, depression...²⁷
- Gaze averting
- If a child seems to be afraid when his mother/caregiver moves toward him/her, if he avoids his mother by turning his head away and averting his gaze
- If a child has bruises on his/her body or face, or other signs of violence,
- If a mother tells you that she is exhausted, that she cannot deal with her tasks anymore, that she cries a lot...
- If a mother tells you she cannot handle her child anymore, that she cannot stand her child anymore,
- If a parent is hurting, hitting the child... The child needs help and the parent too.

...

Remember that relational troubles and traumas, such as abuse and neglect can entail developmental delays, psychological, as well as cognitive (intellectual), behavioural and physical delays.

²⁷ For French readers : see also **Depressions throughout life** : depression during infancy, childhood & adolescence in **Les dépressions au fil de la vie**
http://www.interaide.org/pratiques/pages/urbain/social/Depressions_au_fil_de_la_vie_Fiche_A_Carpentier.pdf



7. Adolescence

The word “adolescent” comes from the Latin verbe *adolescere* which means growing (whereas in Latin, “adult” means “one who has stopped growing”).

Adolescence is a transition between childhood and adulthood. It’s a psychosocial stage corresponding to a physical event: puberty. Sexual (& reproductive) capacities become mature by 13-14 for girls and 14-15 for boys... This will affect all social and affective relationships: the relationship with parents is modified as well as with peers. It’s also a transition between living with the family and leaving the family.

Adolescence is also an historical and social stage of development: it varies according to historical periods, times and places, cultures and societies.

Intellectual capacities (abstract thinking) grow by 30% during adolescence: this new and sudden capacity for abstract thinking make teenagers feel they know and understand everything, which is why they can sound quite arrogant!

Mankind is the only specie for which sexual maturity precedes brain maturity: brain growth is completed between 20 and 25 years of age, time where the capacities for anticipation are fully acquired. This is the reason why adolescents tend to have risky behaviour: their hormonal system is full-blown, their growing brain is bathed in sexual hormones, pushing them into action, but the capacity to plan, anticipate, control impulse and delay action is not yet fully operational²⁸.

Adolescence can be compared to a **new birth**: as the baby has to leave the mother’s womb to enter the world, the adolescent has to prepare him/herself to leave his family and enter society on his/her own.

Similar to early childhood, (around 2 years of age), troubles during adolescence are often expressed through physical ailments (headaches, stomach aches, eating disorders...). There is the same rage, the same intolerance to frustration, the same eagerness to live and to discover the world.

There are many similarity and links between early childhood and adolescence. With the growing and changing body, sexual maturation, brain growth, everything seems to be new, every thing has to be questioned and discovered. This eagerness to learn and to understand should be encouraged — but it’s often taken as arrogance or insolence by adults who have stopped questioning their own habits, beliefs, attitudes and values, who have stopped

²⁸ Brain growth during adolescence: MRI (magnetic resonance imaging) studies have shown that “the gray matter growth spurt just prior to puberty predominates in the frontal lobe, the seat of “executive functions”—planning, impulse control and reasoning. Unlike gray matter, the brain’s white matter—wire-like fibers that establish neurons’ long-distance connections between brain regions—thickens progressively from birth in humans. A layer of insulation called myelin progressively envelops these nerve fibers, making them more efficient, just like insulation on electric wires improves their conductivity”. The myelination in the adult frontal cortex likely related to the maturation of cognitive processing and other “executive” functions, is only completed in the early 20s. The observed late maturation of the frontal lobe conspicuously coincides with the typical age-of-onset of schizophrenia—late teens, early twenties—which, as noted earlier, is characterized by impaired “executive” functioning. Sources: <http://www.nimh.nih.gov/health/publications/teenage-brain-a-work-in-progress-fact-sheet/index.shtml>



thinking for themselves... Relating with teenagers is a great opportunity to remember one's own teenage dreams, to question one's way of life, and act for a better world...

What was planted (and might have been left unseen — or forgotten) in early childhood will stem during teenage years. The capacity to regulate one's own emotions, to tolerate frustration, inner security that started to be built during infancy and early childhood will be consolidated during teenage years. But if these capacities and inner security are fragile or inexistent, the teenager will feel even more vulnerable and might resort to dangerous behaviour (eating disorders, addictions, violence...) or relationships, to try and compensate for this lack of inner security — unless s/he receives support from adults and peers.

Troubles during adolescence (addictions, eating disorders, violence, anti-social behaviours...), seldom appear "out of the blue": they are rooted in infancy & early childhood relational traumas that can be reactivated by an *après-coup* painful or distressful experience. Thus, unresolved conflicts or traumas of early childhood years will be reactivated during adolescence. Teenagers "best friends", as well as their first love stories are often replicas of our first love story: the relationship with the mother or primary caregiver.

This is why teenage years also offer a great opportunity to repair early childhood unresolved traumas — provided the teen receives support, consideration and respect.

The difference between early childhood and teenage years, is that the teen can build on 11 to 12 years of experiences, beliefs, knowledge, that s/he will scan, appraise, sort and choose to keep or discard: in this process, the teenager builds his/her own values, his/her own identity.

Friends and peers are extremely important during adolescence and feeling or being rejected will cause utter pain and despair and can lead to depression. Suicide is one of the first causes of death among teens in some western countries²⁹. Yet, some surveys also show that 80% of teenagers feel well.

In his/her group of peers, the teenager seeks the same kind of security and reassurance that the baby needed from his mother. Belonging to a group of peers also helps the adolescent separate from his family and gain autonomy (which the family may resent... yet, this is what teens have to do to grow up: separate). Adolescence can also be compared to **a loss, a form of death**: it's the end of childhood and this time is over for good, and teens will have to go through a grieving process. Peer support and friendships bring consolation.

Adolescence is another big step in the separation-individuation process. Traditional initiation rituals (which are often violent) have this function: separate the child from his family by giving him/her a place in the community of adults.

Adolescence will lead to separation, as the teen has to grow-up and become an autonomous adult³⁰. It's difficult for the teenager to leave, and give up security, it's also difficult to stay and give up freedom. It's difficult to leave when the parent-child relationship is good because the teen will leave security and family love. It's even more difficult to leave if the parent-child

²⁹ In the US the leading causes of death among teens are car accidents, murder (leading cause of death among black youth... But is it because there is more violence among them, or because less of them have cars?) and suicide. In France, the first cause of death is also car accidents, suicide comes second.

³⁰ It's even in the Bible !: « Therefore a man shall leave his father and mother and be joined to his wife, and they shall become one flesh » (Genesis 2:24).



relationship was not good enough because the child often hopes he'll finally get the love he's been craving for: in this situation, leaving means giving up this hope for ever.

Sometimes it is harder for parents to let a child leave — especially if they have a fusalional relationship with their child, if they consider that their child belongs to them (and should stay with them and submit to their will and desires — family duty or any other reason might be evoked to legitimate this fusalional link): they might truly think they love their child, but they are not treating him/her with love and respect, as a different (separate, independent) human being, but as an extension of themselves, as their thing.

The teenagers' needs: the teenager needs to feel that his/her parents continue to **love** him/her and care for him/her even if they disagree on some things, even if there are conflicts between them, even if they don't have the same ideas, values, desires and projects for him/her.

The teenager needs to be considered as **worthy of love and respect**, and to **feel** he is worthy of love and respect: respect includes considering him/her as a separate human being. This will consolidate **respect and self-respect**. Respect and self-respect will help the teenagers avoid or quit behaviours and get out of bad influences that can be dangerous for his/herself. The teen also need to feel s/he belongs, to a family, to a group of peers (a band, a *barkada*) — and then later to a community, a society.

At the same time, teens need limits that are coherent, legitimate and evolutive (the rules and limits should not be the same for a 12 year old teen and a 17 year old). They need limits and authority that provide for security. Parents don't have to be (and in any case *cannot* be) perfect. So it's better to admit one's mistakes... We can be sure that the teen will see and point them anyway! Parents are responsible for their teenagers' security and respectful authority is legitimate when it aims at providing security. If the authority is legitimate, appropriate and explained, even though the teen may resent and oppose it, deep down he will understand that it's for his/her own good, and that it is the expression of his parents' care and love. Moreover, respectful authority providing for his security will allow him/her to internalize security rules, limits, and help him/her consolidate his/her inner security that, luckily, has been rooted since infancy and early childhood.

A famous French psychoanalyst, Françoise Dolto, talked about the teenage "**lobster complex**": the lobster sheds its shell that has become too small, and remains shell-less before a new shell grows. Similarly, the teen has shed his/her childhood "shell" (self), and feels "naked", vulnerable and hypersensitive before his/her adult "shell" grows. Often, a small frightened child is hidden in this full-grown body! Feeling s/he belongs to a group of peers will help the teen feel s/he's not alone, s/he's not the only one feeling vulnerable and different.

Types of relationships and parental attitudes and behaviours which are damaging to their (adolescent) children³¹:

- If parents are neglecting, and/or violent and abusive (physical violence, sexual violence such as incest, but also psychological violence and abuse). The teenager may identify to the victim and may have self-destructive behaviour or relationships (abusive relationship, relationship with violent mate...); otherwise, the teen could identify to the aggressor and become violent.
- If parents are rejecting: the teen will feel unworthy of love.

³¹ *Bien communiquer avec son ado*, Elizabeth Leblanc-Coret et Pierre Coret, Jouvence 2010

- If parents are indifferent: the teen will either have a provocative attitude, desperately trying to attract attention; or develop behaviour to escape their painful reality; depression.
- If parents are too close, in a fusional relationship with their teen: in this case the teenager is not considered as another human being, but as an “extension” of his/her parents, as an extension of their parents’ desires. The parents believe they know what and how their child feels, thinks and wants — as if they were inside their child’s mind and body (this attitude is normal only during the first weeks of life, with a newborn baby; after that it becomes toxic and intrusive as it prevents the child’s self to develop). Then it’s difficult for the teenager to grow as an autonomous being, and become a self-reliant adult because he has learned not to trust his/her own feelings and sensation. S/He will not feel trusted, and s/he will not feel self-confident. This might even be the worst parental attitude, because it is seldom identified as toxic: it looks like love, but it’s not a loving relation but an abusive attitude and relationship. As it is not easily identified, it will be even harder for the teen to get away from it. Paradoxically, it’ll be easier to rebel against a violent or neglecting parent.

These parental attitudes don’t appear “out of the blue” during adolescence either: they have begun much much earlier, during the child’s infancy and early childhood; these parental attitudes can intensify when the child becomes adolescent, when the separation-individuation issue is reactivated so strongly.

Teenagers’ identity builds on:

- Opposition to parents’ / adults’ desires
- Bonding with peers, belonging to a group of peers.

Thus the surge for autonomy is counterbalanced by dependence to a new group of friends.

Most behaviour should be understood in relation to this identity crisis: they is a temporary feeling of loss of identity (the “lobster complex”) before a new solid identity can be built: this is why teens are often easily influenced by others. It’s a time of life filled with anxiety, with predominant feelings of vulnerability and feelings of emptiness. It’s a time of identity crisis, of existential crisis where the meaning of life is questioned. It’s also a time where contradictory emotions can emerge almost simultaneaouly: it feels like an “emotional roller-coaster”.

The beginning of an addictive behaviour can often (but not always) be traced back to adolescence (even though the actual roots of addictions are to be found in early childhood). Teens use drugs, alcohol or tobacco to fill in this feeling of emptiness, to calm down anxiety, and regulate changing emotions — eating disorders serve the same purpose³². But this relieving effect is not long-lasting and has to be repeated: this repetitive use might lead to addiction and dependency. According to Pierre Coret, a French Gestalt-analyst, addictions also serve as a tentative answer to the existential anxiety — as if they were inappropriate answers to a highly relevant questioning on the meaning of life. Adolescence is a time of existential questioning.

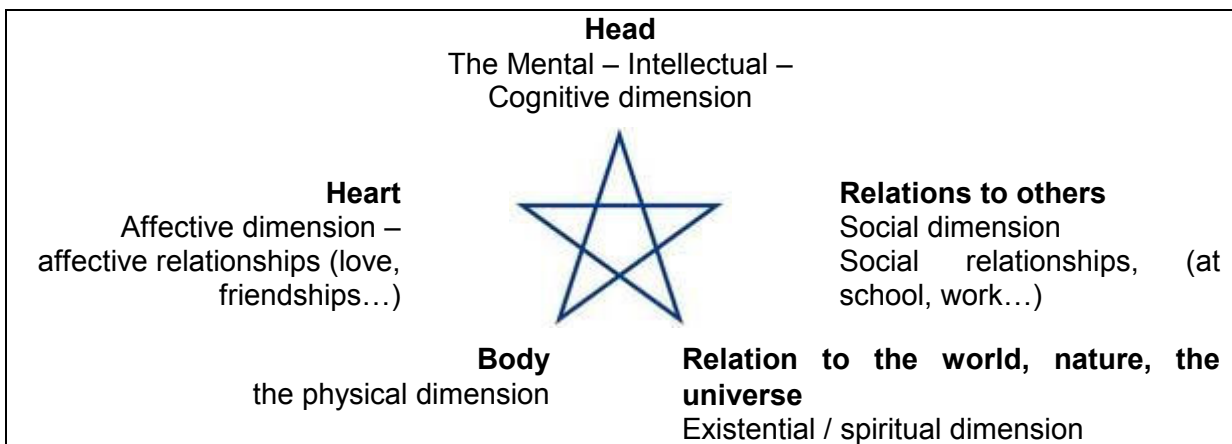
Confronting their dreams to their capacities and reality might be too painful if the teens don’t receive support from their family, other reliable adults, or peers. This might lead to dangerous behaviour, improvised initiation rituals (such as binge drinking, fighting, “gang

³² Also see Addictions, Alexandra David, Coopé Sud 2000 - Updated Anne Carpentier Inter Aide 2009 http://www.interaide.org/pratiques/pages/urbain/petite_enfance/Addictions_revised_A_Carpentier_July_10.pdf

war” or illegal actions, such as stealing...) to test their value, courage and strength and find their own limits...

Love, respect, legitimate authority and limits providing for their security, support, belonging to a group of peers, to a community, reflecting on values, on the meaning of life, will help the teenagers go through this period of life, and become an adult, capable of being “a good mother” for him/herself (taking care of him/herself, of his/her body, of his/her physical and emotional well-being and health, affect regulation...) as well as a “good father” for him/herself (self-discipline, respect of others and self-respect, authority, will, leadership, tolerance to frustration, constructive behaviour and activities).

If we look at the human being with five dimensions as in a pentagramme³³ or five-pointed star, (see below) then we can see that during teenage years all dimensions are involved and moving in the transformative process of adolescence.



The qualities of adolescents:

- Creativity,
- Questioning old rules and ways; desire to understand everything
- Questioning the world,
- Questioning the meaning of life
- Energy
- Enthusiasm
- Passion, dedication,
- Honesty, faithfulness,
- Commitment
- Dreams, vision and will to create a better world...
-

³³ Serge Ginger, in Gestalt Therapy, the Art of Contact, Karnac Books, UK



8. And next?...

According to family therapists, there is a succession of “normal” crises in life, “autoreferential crises” that most people go through “Crisis” should be understood as an opportunity for change, for growth, that is not necessarily negative: very positive and happy events in life (such as getting married, having children...) entail a complete modification of lifestyle, values, change in one’s priorities and in the meaning we give to life.

Of course many other crises can also occur in life, caused by illness, premature loss or death, divorce, separation, unemployment, migration, etc. — including positive “crises” here again, such as job promotion, remarriage, etc.

Below are listed the “ordinary” stages of family life:

- ❖ After adolescence and entry in adulthood (with the first job, financial and affective autonomy...), the next “crisis” will be getting married (or becoming live-in partners).
- ❖ The birth of the first baby (the birth of the first baby make the young couple become parents): *see above* § 2 & 3. The first baby can also make our parents become grand-parents (unless they already have other grand-children).
- ❖ The second baby makes a family.
- ❖ The next “crisis” will be when the first child enters school (then when the youngest child enters school)
- ❖ Then the eldest child’s adolescence (when the first child leaves the family house)
- ❖ Then, when the last child leaves the family house
- ❖ The first child who gets married,
- ❖ The birth of the first grand-child makes us become grand-parents
- ❖ Midlife crisis: Confronting one’s teenage dreams and desires to one’s actual capacities, reality and way of life... (if there are many links between early childhood and adolescence, there are also many similarity and links between adolescence and midlife crisis which may provide the occasion to complete or repair unresolved adolescence conflicts or traumas...). It can also be a time of life when our children are teenagers or young adults, and our parents are growing old. So all places and roles are moving and changing, in us and around us...
- ❖ Our parents growing old, our parents’ illness
- ❖ Our parents’ death: when our parents die, we found ourselves on the frontline, facing our own death...
- ❖ Growing old confronts us to 6 mains fears³⁴: fear of physical decay; fear of solitude and exclusion (and we should fight exclusion and learn to enjoy solitude); fear of becoming dependent; fear of illness; fear of living our last and vulnerable years in an unfriendly place (old people’s home: may be this is more of a Western fear...); fear of death and of dying...

Ω And the final separation, the last occasion for transformation: our own death... **If the essential task of our first years was the formation of an attachment bond with our primary caregiver(s), I could say that the essential task of our last years is to achieve a “secure detachment”...**

³⁴ *La Chaleur du coeur empêche nos corps de rouiller*, Marie de Hennezel Pocket 2010

∞ Conclusion: programmed to be free

If brain *growth* actually stops between 20 and 25, our brain continues to transform itself throughout life. Synapses connect and pathways form in the interaction with the external environment, from birth onward. This is called brain plasticity: new neural connections can be created, when learning new tasks, activities, languages, etc. New neural connections are also created within relationships, such as in love, friendships, as well as in the therapeutic relationship. In our brain, experience becomes hard-wired and can be transformed: it has an actual literal effect on the structure of the brain. Studies using MRI (magnetic resonance imaging) have shown that psychotherapy induces new synaptic connections and neurotransmitters production (whereas anti-depressant medicines only act on neurotransmitters production). This explains why the painful long-lasting impact of traumas, including early relational traumas may actually be repaired, within the therapeutic relation. Emotional communication between patient and therapist impacts brain circuitry, similarly as the mother-baby relationship does.

The brain is a living, changing organism shaping itself and developing abilities in the contact with the environment.

So we could say that even if there are many predictable stages in our development — and in the human experience of life — we are programmed to be free...

Anne Carpentier, Gestalt-therapist - 31.3.2011



Sources, Articles & Books to read

Sources:

L'enfant de 2 à 6 ans Myriam David, Collection: **Enfances**, Dunod 2005 - 6^e édition

L'enfant de 0 à 2 ans, Vie affective et problèmes familiaux, Myriam David, Collection: **Enfances**, Dunod 1998 - 6^e édition

L'attachement, concepts et application, Nicole & Antoine Guedeney, Masson, Les âges de la vie 2002

La Psychologie de l'enfant, O. Houdé, 2^e éd., Puf, « Que sais-je ? », 2005

The Interpersonal World of the Infant Daniel N. Stern (1985).

Touchpoints-Birth to Three T.B.Brazelton – Da Capo Lifelong Books

Touchpoints 3 to 6 T.B.Brazelton – Da Capo Lifelong Books

The First Year and the Rest of Your Life, Movement, Development and Psychotherapeutic Change, Ruella Franck, Frances La Barre, Routledge 2011

Allan Shore's articles online: <http://www.allanschore.com/articles.php>

Articles & Books to read

Books by D.W. Winnicott (1896–1971) English paediatrician, psychiatrist and psychoanalyst:

Playing and Reality

Through Paediatrics to Psychoanalysis

Babies and Their Mothers

Written for parents (Based on talks broadcast by the English Radio, BBC):

The Child, the Family and the Outside World

Talking To Parents

John Bowlby (1907–1990) British psychologist, psychiatrist and psychoanalyst, notable for his interest in child development and for his pioneering work in attachment theory, exposed in the famous trilogy "**Attachment and Loss**":

Books by T. B. Brazelton (American paediatrician) Simpler readings for parents (written for American parents, to be read & adapted to one's own culture):

Touchpoints-Birth to Three

Touchpoints 3 to 6

To Listen to a Child & Understanding the Normal Problems of Growing Up

The Irreducible Needs of Children: What Every Child Must Have to Grow, Learn and Flourish T.

Video: ["All by themselves" - "More than mere play" - "Me too" - "Freedom to move one's own"](#) / 90m EMMI PIKLER - LOCZY. (Produced by Pikler-Loczy Association for Infancy, Emmi Pikler Institute, Budapest, Hungary).

IMPORTANT NOTICE

These technical notes are distributed through the "Pratiques" network between the NGOs who have signed the "Inter Aide Charter" The aim of this network is to facilitate the exchange of ideas and methods between field teams working on development programmes.

We would like to stress here that these technical notes are not prescriptive. Their purpose is not to "say what should be done" but to present experiences that have given positive results in the context in which they were carried out.

"Pratiques" authors allow the reproduction of these technical notes, provided that the information they contain is reproduced entirely including this notice.

July 2010 – March 2011 31/33



PRATIQUES

Sharing experiences to enhance the quality and impact of development programmes

<http://www.interaide.org/pratiques/practices.htm>

Appendix : Psychomotor development

Sources : *Coopé Sud 2000*³⁵

From birth to 5 months	6 months - 1 year	1 year	2 years
<ul style="list-style-type: none"> - I sleep 18 hours per day. - I can stay awake after being fed (4). - I grasp fingers with my hand (1-2). - I play with my feet and toes and put them in my mouth (5). - I babble (3). - I'm very interested in my environment and I look everywhere (3). - I smile to my Mom when she talks to me (3). - I laugh (4). - I put all objects in my mouth (5). - I react to noises & sounds (1). 	<ul style="list-style-type: none"> - I sleep 14 hours per day. - When I'm on my back I can lift my head (6). - When I lie down I can turn over (6-7). - I can chew (7).- If I push on my hands I can sit (7). - I understand what "no" means (8). - I'm very sensitive to separation (8). - I imitate sounds (8; 9; 10). - I can sand up if I hold myself (8-9). - I play « peek-a-boo"(8) - I crawl (9). - When I'm seated, I push to stand up (9). - I catch small objects between my thumb & index (9). - I offer an object to adults but I hold onto it (10). - I can put small objects in a box and take them out (11). - I let things fall down on the floor / I throw things down (11; 12). 	<ul style="list-style-type: none"> - I can throw a ball. - I start to walk alone (12-15). - I can build a tower with 2, 3 or 4 building blocks. - I can point with my finger on a book when I'm asked "where is...?" (18). - I'm interested in books. - I can answer to simple orders (18). - I understand the meaning of many words. - I start to oppose myself (15-18). - I cry when I don't get what I want, I want to do things on my own (15). - I talk a lot but people don't understand what I say (15). - I say "mummy" & "daddy" (15). - I imitate Mom when she does household chores (15-18). - I can discriminate Big/ small - Up / Down. - I can point to 2 or 3 parts of my body. - I stop putting everything in my mouth (15). - I can show where it hurts. 	<ul style="list-style-type: none"> - I can unscrew a cork. - I can put 4 big pearls on a string. - I jump on my two feet. - I don't draw anymore. - I run. - I climb the stairs up and down. - I can build a tower with 5 to 8 building blocks - I know 1 colour. - I can count to 2. - I show 5 or 6 images on a book when I'm asked "Where is...?" (24 - 30). - I say "no" (the "Terrible Twos") - I like my toys, & I don't like when they're taken away from me. - I can leave Mom more easily. - I ask to go to the loo. - I eat and drink on my own. - I can draw a horizontal /vertical / line and a circle - If I'm asked, I can place an object: on, / under/next to - I can point to 4 parts of my body & name them

³⁵ Language & social skills Neuromotor Cognitive Sensory Sleep / Wake Autonomy – Sources: Coopé Sud 2000



PRATIQUES

Sharing experiences to enhance the quality and impact of development programmes

<http://www.interaide.org/pratiques/pratiques.htm>

3 year old	4 years old	5 years old
<ul style="list-style-type: none"> - I have nightmares. - When I talk about myself I say “I” and “Me” and when I talk about you I say “you”. - « Oedipal stage » (rivalry & identification with same-sex parent; sexual identity (I’m a boy/girl) ; Where do babies come from? - I can leave Mom easily. - I play with other children - I can jump on one foot. - I constantly ask questions. - I play with imaginary friends - I count up to 3. - I can see / say where there are more things (candies, toys...) and less - I’m beginning to understand now/before/after. - I name 2 or 3 colours. - I know: in front / behind / On / Below / In / Out / Big / Small / Up / Down. - I can say if an object is light / heavy / Long / Short - I name and point to 11 parts of my body. - I am toilet-trained day & night 	<ul style="list-style-type: none"> - I can tell my name and age; I can tell the names of my friends and of the people who live with me. - I know the difference between boys & girls / men & women. - I comfort people when they’re sad - I show off - I tell imaginary or exaggerated stories - I copy X O ◇ (4,5). - I can put several pearls on a string in a define order. - I know yesterday / tomorrow / when. - I can name three colours or more. - With my eyes opened, I can stand up without moving. - With my eyes closed, I can stand up (10 seconds). - I can touch my nose several times with my index fingers. - I can dress and undress on my own 	<ul style="list-style-type: none"> - I take part in competitive games. - I can walk putting my toes against my heel - I can finger play (and make puppets) with one hand and both hands. - I can touch my thumb with each finger (right hand & left hand) - I can stand still with eyes closed (30 seconds). - I show my teeth / wrinkle my forehead / raise eyebrows when asked. - I know/ discriminate: morning / afternoon / day & night / Before / after. - I can name 4 colors. - I can classify 3 pictures in right order (corresponding to the 3 sequences of a short story). - I discriminante : near / far. - I can draw a man: trunk, head, with 8 details (details of the face and of limbs).

Language & social skills Neuro-motor Cognitive Sensory Sleep / Wake Autonomy – Sources: Coopé Sud 2000

