Patterns in development

A Background to the child development profiles

Introduction

These development profiles contain far more detailed descriptions of each age group and different insights into behaviour than are usually to be found in writings today on children, particularly in the older age groups. Some explanation therefore is in order about how the profiles were developed.

These profiles initially began with the detailed descriptions of children's behaviour by the Gesell Institute of Child Development. 100 years of research led them to identify and confirm a pattern of six repeating stages in children's development, findings published in their many books. My work with parents and teachers over the last 25 years has shown that these Gesell descriptions are still very useful in understanding children today. They have also proved to be a revealing confirmation of the observation by Rudolf Steiner that the growth emphasis in children's bodies moves gradually downwards from head to trunk to limbs in repeated seven year stages through childhood.

In addition, the six repeating stages of Gesell reveal qualities remarkably similar to those that characterise the six planetary types in personality descriptions. These planetary qualities then have provided insight into the motivations behind some of the more puzzling behaviours of children in the different Gesell stages. These developmental profiles therefore,

contain a synthesis of the work of Rudolf Steiner and the Gesell Institute, with the addition of insights gained through an understanding of the qualities of the planets.

The work of both the Gesell Institute and Rudolf Steiner is based on the assumption that children develop in a sequential way, where further development and progress depends on the completion of specific development in certain areas. It is assumed that there is a core development pattern of growth in childhood, an archetype or blueprint, which guides the growth of all children in some way. The environment and specific individual or genetic factors then interact to enhance or restrict this development.

These patterns in development described by Rudolf Steiner and the Gesell Institute of Child Development provide the basis of these profiles. This structure of development has then been filled out with examples from the detailed descriptions in the age profiles of the Gesell Institute, the work of other researchers in child development, and my own research and work with parents. These descriptions have then been enriched by an understanding of planetary qualities.

This article expands on the patterns of development observed by Steiner and Gesell in more detail and in the new observations that have come out of a synthesis of their work.

Rudolf Steiner & the Seven Year Rhythms

Rudolf Steiner (1861-1925) was an Austrian philosopher, social reformist, architect and esotericist whose ideas underlie the work in Biodynamic agriculture, anthroposophical medicine and Steiner Waldorf education amongst other things. He observed that children's growth, and development over our whole life, proceeds in seven-year cycles. In childhood, within each seven-year growth cycle, the emphasis in physical growth moves downwards from the head and 'nerve-sense system', into the chest, heart, lung and 'rhythmic system', and then down into the lower abdomen, the 'limbs and metabolic system'. This pattern of growth then repeats itself two more times to complete the child's physical 'growing up' (or more literally 'growing down') at 21 years.

Since each of these biological systems (i.e. head/nerve sense system, chest/heart/lung/rhythmic system, and limb/metabolic system) penetrates throughout the body, the effects of growth can be seen throughout the body, but the clearest observable changes are seen in the centre of that system. For example one finds enormous growth in the brain and nerve sense system in the baby and toddler, a broadening of the chest in the 3-4 year old, and a lengthening of the limbs and changes in the metabolic system at 5 and 6 years.

These differential growth patterns are noted by physiotherapists because the growth spurts in the bones of the legs occur at slightly different times from growth in the muscles and nerves causing pre-teens to suffer from pains in the feet and legs. The differential growth in the chest and breathing capacity has also been observed in adolescents. However the link between such phenomena with a rhythmical unfolding pattern from head to foot over seven years is not so well known.

Steiner further observed in these seven-year rhythms that the will predominates from 0 to 7, the feelings predominate from 7 to 14 and the thinking predominates from 14 to 21 (further understanding of the concepts of willing, feeling and thinking in this context can be found below). Established change of teeth at seven and established puberty at fourteen tend to be the physiological markers of these seven year changes.

With this as a basis to observe children's development, I examined Gesell's detailed observations of children's behaviour more closely to see if these seemed consistent with Steiner's picture. There were remarkable confirmations of Steiner's bigger picture in Gesell's descriptions.

Arnold Gesell & the Gesell Institute's six stages of development

As early as 1911, Dr Arnold Gesell (1880-1961), psychologist and paediatrician, began research into children's development by conducting detailed normative studies of young children at the Yale Clinic of Child Development which he founded and lead as director until 1948. This

research was continued over the next sixty years by his colleagues in the Gesell Institute of Child Development, which today still advocates strongly in the U.S.A for children's development to be a basis of all decisions affecting young children.

Following on from Gesell's initial work on young children, detailed profiles were developed from the normative studies of thousands of children in the 1940s and 1950s in the U.S.A. Gesell researchers interviewed the children, their parents and their teachers, and from the descriptions of behaviours, developed some very comprehensive conglomerate pictures, rich with examples of the sorts of behaviours observed in each age group.

Over time the Gesell researchers observed two patterns in the studies. They observed a 6 stage developmental pattern, which repeated itself throughout childhood in gradually lengthening cycles. Within this, they also observed a pattern of alternation of periods of equilibrium and disequilibrium in development. The times when parents appear consistently to have most concerns about their children are often the times of 'disequilibrium'. The ages in the six

stages identified can be seen in the chart opposite.

Gesell's Sequence of 6 Stages

Stage **1**. Equilibrium. Smooth, consolidated (4 wks, 40 wks, 2 yrs, 5 yrs, 10 yrs, 16 yrs).

Stage 2. Disequilibrium. Breaking Up (6-12 wks, 44-48 wks, 2 ½, 5 ½-6+ yrs, 11 yrs).

Stage **3**. Equilibrium. Rounded, well-balanced (16 wks, 52-56 wks, 3 years, 6 ½ yrs 12 yrs).

Stage 4. Disequilibrium. Inwardized (20 wks, 15 mths, 3 ½ yrs, 7 yrs, 13 yrs).

Stage 5. Equilibrium. Vigorous, expansive (2-28 wks, 18 mths, 4 yrs, 8 yrs, 14 yrs).

Stage 6. Disequilibrium. Neurotic, inwardized Troubled (Birth, 32 wks, 21 mths, 4 ½, 9, 15 yrs).

More detailed information on the work of the Gesell Institute of Child Development and how they came to identify these stages can be found in the essay: The Gesell Institute for Child Development and the Six Gesell Stages in Child Development.

New observations from the synthesis of Steiner & Gesell's work.

Correlating the behaviours the Gesell researchers had observed with Steiner's seven year stages and adding to this the observations of the parents and teachers I was working with, a new phenomena emerged: that there appears to be a *psychological* development which occurs parallel to the *physical* development. There is an increased awareness of, and interest in, the areas of the body where the emphasis in growth is occurring. Associated with this there appears to also be an associated emphasis in the development of thinking, feeling and willing.

Thus in combining Steiner's and Gesell's observations we can observe further distinct

growth patterns in development. In each of the seven-year cycles we see that:

Growth in the head, nerve-sense system (beginning at birth, then 7 and 14 years, each phase being for 2 1/3 years) is associated with sense and brain maturation and hypersensitivity in the senses initially, new developments in thinking, individuation, new awareness and consciousness (and later criticism) of the world .

Growth in the chest, rhythmic system of heart/lungs (from the middle of 2, 9, 16 years for 2 1/3 years) is associated with a broadening of the chest and awareness of and interest in

breasts/the chest area. Later, maturation of heart and lung rhythms and capacities, new developments in feeling, social relationships, imagination, creativity, and a new awareness of the self also arise. We can see this new development in the sense of self, at the beginning of this chest growth time. At 2 ½ years the children become more aware of their physical separateness. At 9 ½ their awareness of having different feelings, thoughts and intentions from others becomes more strongly established. At 16 ½ they become more aware of a search for a new sense of self, of who they are as an individual.

Growth in the limbs, lower trunk and metabolic system (from towards the end of 4, 11, 18 years for 2 1/3 years) is associated with lengthening of the limbs, including the jaw (the

limb of the head). Stress related symptoms and tension releases manifest in the abdomen (stomach ache at 5-6) and limbs (swinging legs, grinding of teeth, and biting at 5-6). Other new developments in the will, will power, initiative, motivation, perseverance are visible, as well as an awareness of, and interest in, genitals and excretory functions.

Awareness of this more defined growth pattern helps us to understand better many of the behaviours we see occurring at each specific age— for example the somewhat obsessive interest in all things excretory and genital in Older Fives and Six, or the noticeable sensory sensitivity in Sevens. The Developmental Profiles include descriptions of such behaviour and other signs related to the emphasis in physical growth at that time.

Planetary qualities in Gesell's six stages in child development

However, even with incremental development and Steiner's sevenfold/threefold unfolding to explain some otherwise odd differences in behaviour, there are other psychological traits of particular ages and odd shifts in character in childhood that are still hard to explain. Why should some stages be more expansive and courageous, others more inward and careful, some stages where children seem keen to please and others where children are adversarial and demanding. Certainly the Gesell Institute hypothesised that growth has its own rhythms and that periods of equilibrium and disequilibrium, perhaps expansive and then consolidating make sense. But why would this also have a repeating sixfold pattern?

Contemplation of these six Gesell stages over many years revealed something remarkable that one can find a relation between the gesture of each Gesell stage and the gestures and qualities commonly associated with the planets. Because the basic gestures of these stages are ones commonly associated with planetary qualities, it is useful to use the names of the planets to help to describe these stages. An explanation of how we came to this hypothesis is offered in *Introduction to planetary qualities in child development*. My deeper study of the planetary qualities and the detailed Gesell observations of the children in the associated stages revealed a remarkable congruence between the two and can be found in *Planetary qualities in child development*. The stages are most clearly seen in comparison to the behaviour in the stages before and after. This can only be illustrated very simply here.

• Gesell Stage 1 (includes 2, 5, 10 and 16 years) is described as a point where children are in equilibrium and have relatively little difficulty with themselves and the world. This, on closer examination, has a relationship with the planetary qualities and the planetary

personality associated traditionally with the **Moon**: for example they are sociable, loving and often good, more interested in breadth than depth.

- **Gesell Stage 2** (includes 2 ½, 5 ½ and 11 years) is quite different, marked by disequilibrium, and appears to be broken up, disturbed and troubled. An age where they describe the children as at odds with their environment. The children demand freedom to move and be independent; they are sociable, lively, interested, sanguine, all qualities associated with **Mercury**.
- **Gesell Stage 3** (includes 3, 6 ½ and 12 years) is a period of relative equilibrium again when life's forces seem to be in good balance. The children are happy both within themselves and in their environment. They love people, artistic activities and nature, live very much through their feelings and are amenable, all qualities associated with **Venus**.
- Gesell Stage 4 (includes 3 ½, 7 and 13 years) is characterised by disequilibrium and a very pronounced inwardising or drawing in, digesting, thinking about or mulling over outer impressions and experiences. At the younger ages they show an emotional and physical instability, and the older ages a certain moroseness and more pessimistic attitude towards life in general. The children also show vigorous outer movement as well as the assimilative inward qualities. Mars shows inner digestive qualities as well as the outer action for which it is better known.
- **Gesell Stage 5** (includes 4, 8 and 14 years) is a stage of extreme expansiveness, expressed in their interests, big thinking, adventurousness and in their bravado, dramatics and independence. They are versatile and have a certain inner equilibrium, thoughtfulness and

moral striving. All of this is consistent with **Jupiter** qualities.

• Gesell Stage 6 (includes 4 ½, 9 and 15 years) is a stage in disequilibrium which Gesell researchers felt they did not entirely understand. Nevertheless, they describe a more sensitive, thoughtful child, of deeper thinking, more ordered, inward tendencies consistent with Saturn, who in defence of freedom, is more reclusive and consequently more difficult to know.

So we found that the behaviour observed in the Gesell Stages reflects the qualities associated in tradition with the six planets in the series. The deeper one understands the planetary qualities the more connection with the detailed descriptions of the Gesell stages one finds. It may be that the Six Gesell Stages merely show the characteristics associated with the traditional planetary influences but it is also possible that there are active principles involved, such that archetypal influences, traditionally described as "planetary", could be influencing the way children develop over time. This is a challenging hypothesis because these archetypal forces are not visible or easily identifiable in terms of materialistic science.

Further exploration of this idea is to be found in the research in the group of essays: *Planetary qualities in child development*. These essays describe the planetary qualities and influences in more detail, including from this esoteric perspective, and compare them with the Gesell descriptions of children in the associated stages. The intensive study involved in this comparison has strongly reinforced my initial belief in the validity of the relationships.

It also becomes clear in contemplating the qualities revealed in the six Gesell Stages that they offer children six different archetypal ways of being in the world, based on very different

motivations: love and relationship; power in service to the world; and freedom (both inner freedom and freedom to move in the world). So repeatedly through childhood children are given opportunities where they feel more social and compassionate, or more self-centred and adventurous, or more sensitive and inward; times where they work deep and into detail, and times when they prefer to go broad and general,

times where they want to assimilate experiences, or consolidate by practice, or times when they show great enthusiasm for anything new. The six stages the Gesell researchers observed reflect the many aspects of being human. The Development profiles hope to reveal more clearly these gifts experienced by the child of each age, as well as to bring more understanding to what each age needs.

Factors effecting Core development

One also needs to consider what can affect this core development pattern which Steiner and Gesell observed. It is clear that some aspects of development can be delayed or disturbed, for example, where there is delayed neurological development, deprivation, extreme stress or abuse. We also need to consider how gender differences fit into this core development. For example, boys develop more slowly in terms of school readiness and sexual development.

The question arises: do the profiles hold at a basic level, across genders and cross culturally? Our belief is that they do hold generally because there is a basic archetypal pattern, but that there may be variations on this basic pattern because of other factors.

Cultural factors can also affect how strongly these basic patterns manifest, by whether a culture values: intellectual knowledge versus 'intuitive' wisdom or street knowledge, individualism versus an emphasis on the group's needs, assertiveness versus meekness, adventurousness or conservatism, the need for a protected childhood versus the need to grow up fast to survive the rat race. All such attitudes are going to affect how a particular quality is allowed to manifest, and whether it is developed only crudely or in a quite refined way, whether a developmental opportunity is maximised or compromised.

There is also the question of whether core development can be hurried and this involves the idea of 'developmental readiness'. That is, whether certain tasks require that certain development has already taken place before children can do the task successfully. Some research suggests that some development cannot be hurried without a cost, if at all, and that often 'adaptive mechanisms' in development have been mistaken for core development patterns. It may be possible for a child to deal with a challenge that comes earlier than has been normal. Human beings are very adaptable. However if there is not developmental readiness, the 'success' of the 'adaptability' may well be at a cost.

For example, although very young children can sometimes be taught to read, this does not mean they are 'ready' for reading. In fact there is some evidence that the brain may be forced to adapt and to find unusual ways to cope with the premature demand to read by using more 'primitive' brain mechanisms for what usually demands more sophisticated brain functions. The danger here is that the normal child will find it difficult to switch to more sophisticated flexible ways of thinking later because of the establishment of more primitive early learning pathways. Thus this early learning may interfere with later learning.

On the other hand sometimes children show very different development from the norm in just one aspect of their development. New neurological research is revealing that occasionally some children have very different brain development which may allow very different capacities to manifest naturally from what is normally possible. We see this with some very gifted children and the savant capacities in some children with intellectual disabilities. Clearly we need to remain flexible in our thinking about this.

It is also clear that both of the original accepted markers of the completion of the seven year rhythms, the established change of teeth and established puberty, can differ markedly between children, and these are both areas where development can be hurried (or delayed). There are marked differences in the eruption of the second teeth of children from different ethnic backgrounds or in different climatic conditions. It is also likely that genetic and environmental factors play a significant role in

some cases. (Napoleon was said to have been born with teeth!) Despite these variations, there is a seven year pattern which involves the orderly eruption of the teeth, with the 'nerve sense' teeth (the incisors) erupting first, then the 'feeling' teeth (the canines) and finally the 'will' teeth (the molars).

Sexual maturity is stimulated by hormonal activity. However, this can, in turn, be stimulated or blocked by chemicals taken in by the body. Sexual maturity can be effected by nutrition, by stress and emotional factors (including early sexual activity/abuse), by ethnic background and climatic factors, as well as by naturally maturing hormonal cycles. Even the presence of a non biologically related male adult in the household can effect a girl's sexual development.

Clearly, change of teeth and established puberty cannot to be considered as fixed markers for the seven year stages, though they may give clues as to whether a child is an early or late maturer.

Problems with identifying core development factors

Developmental traits can be masked, modified or intensified by many factors, e.g. gender related behaviours, temperament, high stress levels, over stimulation (or one sided stimulation of the nerve-sense system), organic problems or different parenting styles.

Anecdotal evidence would suggest that when all these factors are more clearly understood, developmental behaviours can be more easily recognised in children by parents and professionals working with children.

Conclusion

We can see children's development is complex, but if we can separate out the factors, and see what is developmental (and will pass!), what is individual (which we need to recognize and accept), and what is environmental (which we may have the power to change), it makes it easier to find appropriate ways to support children at any particular time. The work of

Rudolf Steiner and the Gesell Institute of Child Development both help to see what is developmental and will change. The planetary qualities provide more information to identify, not only particular stage needs, but also the basic temperamental tendencies in the individual child which we need to accept and work with.

Knowing the developmental and the individual nature of the child can then help to identify when environmental factors (like unmet basic needs for sleep, food, love, attention, respect or stress, trauma, abuse etc.) are interfering with what could be expected from the descriptions of normal patterns of development. For example, when a child whose temperament normally makes them easy going, and is also in a stage of equilibrium and cooperation developmentally (a Venus stage for example) is consistently grumpy or irritable, it may be a sign that something else is wrong, perhaps in health, perhaps in the environment. Help for working with factors which are environmental is provided in the *Avoiding trouble* articles.

On the other hand when a child, who is normally easy going, is now consistently rebellious, and is developmentally in a stage of disequilibrium (a Mercury stage, for example) it is a sign to look at what that planetary stage and age needs to bring behaviour back to a happier balance.

The profiles aim to bring understanding to each age and stage so that adults can find helpful ways to meet the children's developmental needs as appropriately and helpfully as possible. More work needs to be done to understand babies and toddlers better in terms of the Gesell stages and planetary qualities. The profiles from Seven to Sixteen contain a lot more information than those for the earlier years because there is so much less information available on the older age groups elsewhere. There is also considerably more information provided in the profiles on dealing with challenges for parents with pre-teens and teens (technology, sexuality, pornography, drug use and working with the need for independence) for the same reason.

References

On Rudolf Steiner's understanding of patterns in development:

Lievegoed, Bernard, Phases of Childhood. (Floris Books, Edinburgh, 1987)

Schoorel, Edmond, The First Seven Years (Rudolf Steiner College Press, Fair Oaks, California, 2004)

Gesell Institute of Child Development's descriptions of behaviour in the six stages:

Gesell, Arnold How a Baby Grows: A story in pictures (Hamish Hamilton, London, pre 1954)

Arnold, G, Ilg, FL, and Ames, L B The Child from Five to Ten (Harper & Row, New York 1977)

Gesell, A, Halverson, H M, & Amatruda, C S, *The first five years of life: a guide to the study of the preschool child.* (Methuen, London, 1940)

Bates Ames, Louise & Chase Haber, Carol Your-One-Year Old 12 to 24 months: Fun-Loving and Fussy (A Dell Trade Paperback, New York 1979)

Ames, L B, & Ilg, F L in Your Two Year Old. Terrible or Tender (Dell Trade Paperback, New York 1976)

Bates Ames, Louise and Ilg, Frances L. Your Three Year Old. Friend or Enemy (A Dell Paperback, New York, 1985)

Bates Ames, L, and Ilg, Frances L. Your Four Year Old. Wild and Wonderful ((A Dell Paperback, New York, 1976)

Bates Ames, Louise, and Ilg, Frances L. Your Five Year Old. Sunny and Serene (A Dell Paperback, New York, 1979)

Bates Ames, Louise, & Ilg, Frances L. Your Six Year Old. Loving and Defiant (A Dell Paperback, New York, 1979)

Bates Ames, Louise, & Chase Haber, Carol Your Seven Year Old Life in a Minor Key (A Dell Trade Paperback New York 1985)

Bates Ames, Louise, Chase Haber, Carol Your Eight-Year Old. Lively and Outgoing (A Dell Trade Paperback New York 1989)

Bates Ames, L, & Chase Haber, Carol Your Nine Year Old. Thoughtful and Mysterious (A Dell Paperback, New York, 1990)

Ames, L B, Ilg, F L, & Baker, S M Your Ten-to-Fourteen-Year Old (A Dell Trade Paperback, New York, 1988)

Gesell, Arnold, Ilg, Frances L. & Bates Ames, Louise, Youth The Years from Ten to Sixteen (Hamish Hamilton, London 1956)

Ilg, F, & Ames, L B Child Behaviour (Hamish Hamilton, London, 1970)

Information on the planetary qualities can be found in the series of essays on the website in *Planetary qualities in child development: an independent research project.*