Infant education in the twentieth century:  
A few significant didactic models

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6.1 Introductory remarks

This chapter represents an attempt at disclosing the characteristics of and realities with which the family and infants of the twentieth century have been and still are confronted. A few didactic models of this century which are of particular significance for infant education will be discussed briefly.

6.2 Characteristics of the twentieth century

The twentieth century has been referred to as the century of "new education" with its imitation of the natural scientific (naturalistic) philosophy of life. The characteristics of this philosophy may be briefly summarized as follows:

- Everything revolves around man, the natural scientific philosophy of life is thus anthropocentric.
- It is based on knowledge of the child (pedocentric) and for that reason it has rediscovered the meaning of self-activity and play.
- It is socially orientated: education is considered to be the development of the individual's ability to adapt himself to an ever-changing society, which would ensure communal justice and personal happiness.
- Its goal is the equalizing of nations and individuals: the two world wars established the idea that nationalism and individualism lead to conflict and there is thus an insistence on the equality of all people, white, black and coloured, and the inherent differences between people are denied.
- This philosophy is also materialistic: labour and possessions are afforded the highest significance. This leads to the idea of the school
being chiefly concerned with physical activity and self-activity. At the same time it also leads to occupational instruction.

- It is also biologically evolutionistic: evolution depends on change, on the interchange between the individual and the environment. Social education is therefore considered of great importance and there has to be continual experimentation because it is suggested (in particular by existentialism) that man is always progressing towards what he can become.

- It is only interested in facts which can be observed, i.e. it is positivistic. Only that which can be measured is certain – thus placing much emphasis on statistical research and intelligence and other personality tests, and on the research methods of the natural sciences which also have to be applied to the human sciences.

- It absolutizes practical value and usefulness, thus it is pragmatic. Efficiency is the highest criterion which leads to ever more stringent demands being made on man.

- As life is stripped of the eternal, this philosophy culminates in fear, in a futile haste in man. (This element of anxiety in life is also characteristic of the existential philosophy – existentialism.)

An approach which has received particular attention during the past number of decades is phenomenology. The phenomenological approach reflects upon man (including the child) in relation to the world, the reality which surrounds him. Phenomenologists do not study conscious phenomena as such – thus not the memory, thoughts, will, play or gestures but man who through his memory, thoughts and will is aligned to the world. Man is involved with objects, with other people; the child in the same way is involved with his own small world, his background. His small world is comprised of many things; his little bed, his toys, a pet, father, mother, brothers and sisters, his class at school, his games, the teacher – in short, a number of variable situations surround the infant and he relates to all these situations. When a situation changes, the relationship of the child with the previous situation also changes. The child is for instance, in one situation (eg. in the home) wilful and difficult to handle, while in the next situation (eg. in the infant school) he is calm and amenable. Phenomenology attempts a reflective penetration of the situation, because this approach leads to a better understanding of the child.

After having read the following "typification" of the family in the twentieth century, it will be realized that the phenomenological approach can be particularly valuable in teaching, education and the science of education.
6.3 The family in the twentieth century

One of the most salient characteristics of the twentieth century family is its instability. The close-knit, highly unified family organization of the Romans and of the Middle Ages when the father was the undisputed head of the family, is very far removed from the loosely organized modern households where every member is inclined to claim independence as an individual with an own personality which has to be respected or developed. This spirit of individualism, which has taken the place of earlier autocratic authority, has contributed profoundly to greater humanness within the family circle; on the other hand this progress has not occurred without detrimental results. The freer spirit mentioned before and the disruption of religious, legal and economic bonds (which formerly firmly united the monogamous marriage) have been instrumental in completely negative phenomena such as dissension, divorce, desertion, child neglect, infidelity and adultery becoming ever more prevalent in modern, industrialized society and the family.

Although contemporary thought on family education has made great progress, in particular concerning such aspects as placing man at the centre of educative theory and practice (the anthropocentric), the emphasis on knowledge and understanding of the nature of the child as focal point in education (the pedocentric) and the reflection on the education of the child in his total situatedness in social reality (the sociopedagogic), closer investigation would suggest that the educative responsibility of the twentieth century is undoubtedly adversely affected by, among others, the following phenomena within the modern technocratic dispensation:

- **An increasing loss of function within the family**
  A parent, as far as education in the home is concerned, can no longer always manage by himself in the modern technologically stamped cultural age with its numerous social diversions and organizations. Many of the functions of the family have already been usurped (or have of necessity been taken over) by the school, the church and the state. This has resulted in more and more parents coming to look upon the outside world as being solely responsible for the education of their children. This has inevitably brought about a loss of intimacy and homeliness in numerous families where the family members increasingly tend to become alienated from the family circle. The modern family often reflects a clash of wills and emotions, and an assembly of highly individualized people, each with his own rights and privileges which he wants to realize or assert at all costs. The child will seek and find his recreation, pastimes and religious expression (if
any) outside the family situation; this may have a detrimental effect on the child's search for identity and cause insecurity.

• **The emancipation of family members**

Human rights and authority having been democratized in the twentieth century, inevitably resulted in the status of the father, mother and child within the family situation undergoing considerable changes.

After the Second World War despotic authoritarian forms of authority were rejected and the father also had to relinquish his authoritarian authority which probably made him more approachable to his child in the family. It presented more opportunities for healthy affective relationships between family members and thus favoured the child's personal progression. The father's often being away from home owing to socio-economic pressures and the emancipation of women and their entry into the labour force under the pressures of an industrialized society, led to the father's role as norm image and figure of authority within the family, being seriously eroded.

As the mother is often experienced by the child as representing the only figure of authority and trust in this era of "woman's lib", and as a result of the absolutizing of women's rights, the father figure is being dwarfed. In many instances the father has virtually completely abdicated his position of authority. This shift in roles has resulted in such problems as effeminacy in boys, homosexuality, rejection of authority, vandalism and violence, laziness and related deviant behaviour. The lack of a father as identification model arouses feelings of uncertainty and insecurity in the child. "When the father is 'absent' because he is working shifts, has too many personal interests outside the family, comes home too tired after work to associate freely with the children or is not interested in them, they become orphans in a pedagogic sense, without natural and confident access to the unknown" (Pistorius 1976:60 – author's translation). The growing loss of paternal authority in the family also leads to the moral moulding of the child as well as the moulding of his conscience, sense of responsibility and independence being neglected.

As an emancipated member of the family the modern mother is no longer, like the 'subordinate' mother of the past, only responsible for the education and care of her children. The mother's now being in competition with the father in the social (economic, political, etc.) sphere, has resulted in parents in many families today accepting co-responsibility for their children – they both converse with and are confidants of their children who are accepted as persons of equal status in the family. The opposite can, however, also be true: because of the
mother's increasing involvement in industrialized society and her competitive role in the labour market, many children have to constitute their own life-world in a 'motherless' environment (and within an already 'fatherless' world), under the guidance of people who speak a different language and think differently, or even the impersonal mass media or a care institution if they do not wish to be left to their own devices. The mother's responsibility in many instances encompasses hardly more than the material care of her children. This can readily lead to the mother experiencing feelings of guilt for which she will try and compensate by means of all manners of unpedagogic pampering of and attention to the child. In principle this constitutes a non-acceptance of the child and consequently his pedagogic neglect: "a lack of firm intervention, the clear expression of the demands of propriety and norms (an exemplification of a clearly defined life- and world-view), and the necessary help and support" (Du Plessis 1964:22 – author's translation).

The aspects discussed above did not leave the status of the child within the family situation untouched. On the one hand the child was afforded more freedom, openness, spontaneity and human dignity; on the other hand he was often expected to show an independence, responsibility and to exercise a not yet acquired self-discipline, that is, to demonstrate a too early emancipation, with all the likelihood of the wrong choices being made. A lack of safety and security, of intimate bonding with the members of his family, of identification models worthy of emulation, of a healthy balance between authority and freedom, of positive support and an introduction to the normative, can cause irreparable harm to his progression towards adulthood. He may feel unsure, he often acts incorrectly: "He subconsciously and unreasonably feels that he has been left in the lurch, and rebels against the parents who failed him" (Pistorius 1976:61 – author's translation). In fact, the probability exists that he will not in later life become a self-actualizing and acceptable member of the community.

- **Inadequate family relationships**
  The breaking up of the family as a result of crises in the marriage (which may include economic pressures, poor housekeeping, sexual incompatibility, alcohol and drug abuse, spiritual and physical problems, etc.) can be very detrimental to the child in his early formative years. Marriage vows are more and more seen merely as a flexible, easily broken contract between two individuals. The ever more prevalent philosophy of free love, deprives marriage of the metaphysical-religious foundations which make it a holy sacrament.
The disharmonious marriage relationships (which only too often culminate in the family being abandoned or in divorce) create an oppressive socio-pedagogic climate in the family causing the child to feel unsafe, insecure and anxious. The example of the parent as identification model also becomes unacceptable to the child.

The home education of the child from a broken home, or a family where there is no happiness, tranquillity, peace and harmony will without doubt suffer tremendously:

Of all the life situations in which man finds himself, the family situation has the most profound and lasting influence. If this situation is pedagogically sound the child will develop in it an awareness of direction which will in future protect him from losing the way. But if it is inadequate, it will cause him harm for which other institutions can only at great cost and never completely compensate.

(Pistorius 1976:53 – author’s translation)

There need be no argument about the extremely deleterious influence of these tendencies in twentieth century family life on the child and on family education. A fact which cannot be argued away is that it is in the home that the child for the first time learns what is worth having, what is worth admiring and what is important or unimportant, what is valuable or pretentious, what is permanent and immutable or temporary and superficial. The family education of a child from a broken home, or a home where there is no happiness, peace, tranquillity and harmony, will undoubtedly be seriously affected; and as he is deprived of the extremely important feelings of safety and security, there is a strong likelihood that in later life he will not succeed in becoming a well balanced and well adjusted member of society.

The family ills which affect educative events, as described above, resulted in different teaching models being designed in an attempt to correct these ills of the twentieth century.

6.4 A few didactic models of importance to infant education in the twentieth century

Although not all the didactic models to be discussed were designed specifically with infant education in mind, some of the didactic principles which recur in all these models (even if they are in adapted form) are also of vital importance to infant education.
6.4.1 Peter Peterson (1884 - 1952) and the Jena scheme for implementation in the trade or family school

Peter Peterson, a former professor in the Science of Education at the Jena University, expressed his views on education in numerous pedagogical and philosophical publications, eg. *Die Neu-Europäische Erziehungsbewegung* (The New European Education movement) in 1926 and *Der Jena-Plan einer freien allgemeinen Volksschule* (The Jena Scheme for a free, general national school) in 1929.

His own practical experience and many contacts with the numerous innovators in teaching and their ideas, led Peterson in 1929 to design an instruction model, known as the Jena Scheme, for implementation in schools.

Peterson hoped that the implementation of his plan would lead to schools becoming free and generally open national schools. Free in the sense that they would be free from the "compulsive rule" of the state, the church and society in general and come under the control of only the teachers and parents of the school community who would ensure that exclusively pedagogic aims were realized. Generally open is used in the sense that it would be a school open to children of both sexes and all degrees of giftedness or ability, and that it would accommodate all standards, from the lowest to the highest.

By implementing his scheme the school should also be reformed into a living society where knowledge had to take its place modestly with physical instruction, artistic ability, dexterity and sensory development, singing and speech training, and various forms of social intercourse and social virtues. The harmonious progression of the individual towards full humanity was of higher import to him than overemphasis of intellectual moulding.

Petersen's Jena Scheme may thus be described as a comprehensive experiment to establish, in terms of the latest knowledge, a national school which would be able to fulfil the new family and environmental demands. This school would supplement and stimulate family education thus assisting it to become intimately amalgamated and cooperative with the culture of the community to guide youth to become part of national life. Education for a community can only be realized within a community. For this reason the Jena Scheme particularly emphasized the close contact and cooperation between parents and teachers and the school was always open and accessible to the parents. Within the communal space (the school) human relationships were suitably organized and maintained by means of dialogue, recognition of the child's right to be heard and to express his opinions freely. Every child's birthday was celebrated and every child had to assist in the preparations for school festivals, thus ensuring that particular attention was paid to every one of them.
Peterson abandoned the tradition of double school desks arranged in three or four rows. The schoolroom had to be a friendly, and attractive living-room in which children could feel at home. There children could display their valuable possessions and they could decorate the room with flowers and pictures. The furniture in the room was also moved about a few times a day and children formed so-called "table groups" for group instruction and at mealtimes. Pupils were permitted to move around freely and could change their area of work as the need arose. Abuse of this system seldom occurred as not only the teacher, but also the group itself controlled the abuse of freedom in the classroom. Any transgressor was immediately called to account. The group law that only that will occur which everyone wants to do together and which guarantees orderly and decent co-existence in the school, contributed to the rules of proper conduct being conformed to very diligently. The bounds of individual freedom were determined by the equal rights and duties of all pupils, in terms of the use of the limited classroom space and of the learning aids and didactic apparatus. For instance, it was not possible for everybody to write on the blackboard or to make use of the same learning aids or teaching apparatus (books, microscopes, etc.) simultaneously.

The table groups, according to Petersen, were instrumental in the cultivation of true responsibility for others in the child, because the entire group were held co-responsible for the individual. This also contributed to group solidarity. In his work *Eine Grundschule nach den Grundsätzen der Arbeits- und Lebensgemeinschaftschule* (A primary school according to the basic principles of the trade and life community schools, 1925), Petersen indicated that table groups came about spontaneously either by pupils being allowed to choose their own table companions on the grounds of friendship, personal affection, or common interests, or by being grouped together by their group leader (teacher).

These table groups also varied according to their activities. Pupils who had been in the same group when, for instance, receiving instruction in arithmetic, would not necessarily be in the same group when doing cardboard and paperwork or during a reading lesson. These groupings of pupils also changed at various stages during the year owing to pupils being grouped together on the basis of their achievements.

In *Führungslehre des Unterrichts* (Teaching theory, 1936) Petersen claimed that it was not subject instruction that was central to teaching, but "the three profound realities in which and through which man exists, namely religion, human life and nature." (Quoted in: Vreugdenhil 1987:290.) These three realities form the true life sphere within which man has been placed in his total existence. They are the pulsing artery of human existence. From these three realities the teacher has to select "organic units" (i.e. themes) which are related meaningfully to each and to reality. During the "study" of such themes the interrelatedness between the themes and true reality must be emphasized. Thus, themes
which are to be incorporated into the school must help to organize the multitude of impressions and experiences which affect the child daily, so that he can learn to rule nature, live in harmony with his fellow-man and be dependent on his Creator. In other words: The learning content (themes) must be selected in such a way that it will form life units through which the child may discover the connections between God, nature and the human life-world in their mutual interrelatedness.

The activities of the school, according to the Jena Scheme, were founded on four important basic principles or forms of learning, namely:

- **The discussion**: This includes conversations with visitors and discussions after expeditions, between teacher(s) and child(ren) or among the children, as well as discussions, stories and recitations. Petersen considered the discussion (usually conducted within a circular space) to be one of the most important methods of instruction, because he was convinced that children in time feel free to participate and in this way to reveal themselves to others as total human beings. Children interpret what they hear and also contribute to the discussion. This usually occurs while they are sitting in a circle, but could also be combined with movement exercises and activities. In this way the child experiences the learning situation and association with others as being a pleasure; the children become physically and spiritually more "free" and open themselves up to each other. This liberating action of discussions in a circle is particularly favourable in promoting the development of the child’s character and social behaviour.

- **Playing**: This includes playing with all types of material such as clay for experimentation, games of movement to dramatize, for example, arithmetical skills and language phenomena, sport, rhythmic and gymnastic exercises and games associated with singing.

- **Working**: This includes the work done during theme lessons and group work, in the workshops and in the school gardens, as well as arranging and tidying the school living-room.

- **Festivities**: These include school festivities at Christmas and birthdays (of the school and the pupils), important national festivities and anything from the cultural environment which is considered important enough to warrant a festive occasion. These festivities strengthen the bonds of the community and are valuable as means of moulding the cultural awareness of the child.

Petersen emphasized the "correct attitude" of the teacher: to be merely present in a simple, artless way, without pretence. The only pretence which a teacher may and should have is to exemplify for the children through his daily doings that man is dependent on other human beings. According to Petersen people are dependent on each other — not in order
to force each other nor to dominate each other forcibly, but in order to be of service to each other.

The teacher has to supply the child with the proper guidance and this he can do by being a person who lives, thinks and works from and through the three life realities (God, nature and human life-world); someone who serves and is able to set an example of service.

To Petersen the pedagogic guidance given to children implies trusting them and being optimistic about their potential. The teacher should get to know the unique nature and abilities of children without prejudice, and make ample provision for moments of progression.

The value of the Jena Scheme can be found, among others, in its emphasis on:

- the free development of the child's inherent potential through playing and continual mutual interaction with other children;
- giving expression to a new community based on service and the development of a deep family and national awareness;
- the cooperation between the home and the school as well as parent involvement in the teaching of their children; and
- developing an inquiring mind in the child and promoting his emotional life through games, discussions, working and festivities.

6.4.2 John Dewey (1859 - 1952) and the laboratory school (school of life)

The American philosopher, John Dewey, was one of the leading figures in the sphere of new educational thought. He set out his philosophy concerning education in the work My pedagogic creed which appeared in 1897. Other works in which his pedagogical views are expressed are: The School and Society (1899), How we think (1910), Interest and Effort in Education (1913), School of to-morrow (1915) and Democracy and Education (1916).

As an evolutionist and pragmatist (pragmatism being the doctrine which evaluates matters exclusively on practical worth, with its only norm being "does it work"), he does not want any metaphysical or religious opinions in philosophy. He believes only in the application of empirical, experimental methods in searching for solutions to social and educative problems. He looks upon life and education as an ever continuing process towards perfection; man's inherent nature, instincts, inclinations and emotions must therefore be guided and altered continually to ensure that they follow the right direction.

Guidance and alteration (education and teaching) are the task of the school, which Dewey deemed to be the most important redeeming
medium against the evils of society. He viewed the school not as a preparation for life, but life itself: "... the school must represent life—life as real and vital to the child as that which he carries on in the home, in the neighborhood, or on the playground" (Dewey, 1897:Art. II). The school should thus be a "school of active participation" and not a "school of listening". The most important functions of the school are to teach children to be responsible, to cultivate in them a social awareness and initiative, and to give them an opportunity to gain practice in social participation. Education is therefore not merely learning, but also playing, construction, the use of tools, being in touch with nature, expression through activity. The school must also be a place where children are actively working and participating instead of passively listening, where they get to know the reality of life through living, and where they become acquainted with social institutions and industrial processes which supply the true motivation for learning by means of simple experiences, free play activities and objects from the real, everyday life-world. In other words, the laboratory school promotes, among others, the child's unimpeded initiative, his independent investigation, his association with others, his will-power, his clarity of judgement and his sensitivity.

He maintains that it is not the presentation and application of learning content that forms the basis of all education, but the instinctive, impulsive attitudes and activities of the child. The nature, interests and experiences of the child (within the context of the knowledge and expectations of society) form the point of departure of Dewey's curriculum. In order for education and teaching to take into account the natural interests of the child, Dewey considers it necessary to be acquainted with the child's inherent tendencies (instincts). Dewey distinguished four groups of childlike tendencies, namely: the social instinct (which is clearly shown in the child's association with others, in his conversations and actions); the instinct of shaping or constructing (initially the child's activities consist of movement, gestures and playing which gradually take specific shape), the impulse to investigate or the instinct to discover which develops from the previous two tendencies (i.e. the child does something and with great interest observes the result of his actions) and the artistic instinct or the impulse to be creative and express himself (i.e. the child wants to create something, to express himself by uttering words, by writing or drawing). This instinct once again develops from the preceding tendencies. These views of Dewey make it possible to discern his realization of the value of insight into the nature of the child for successful education and teaching, as well as his respect for the individuality and increasing freedom of the child. For this reason he believed the child should be allowed to give free rein to his imagination thereby facilitating creative expression.

Education, according to Dewey, consisted of a continual reconstruction of experiences and for this reason the child was in need of...
appropriate stimuli for instincts and impulses, which it is desired to employ in the gaining of new experiences" (Dewey 1956:18-19).

The school should strive for the following virtues: learning by doing, the use of all the child's senses, his energy, originality, artistic expression and initiative (instead of obedience, tractability and passive submission). There should therefore be a close relationship between the school and the child's home and environment, the school should be a true representation of typical social conditions, a miniature society, a large family which is directed at the future and progression of the child as an organic whole, in other words, in his total humanness.

Dewey divides the primary school years into three phases:

- **The play phase or pre-primary phase from four to eight years of age**
  The play phase is characterized by direct social and personal relationships during which the play experiences of the little one should be directed towards effective social behaviour. The child's home life and activities form the core of his free thoughts and deeds during play; thereafter he progresses to activities of a more social nature based on the home. In this phase Dewey emphasized numbers, music, drawing, woodwork, cooking, needlework and gardening. Reading, writing and systematic instruction in geography were only initiated during the last year of this phase. Dewey postponed intellectual moulding to a later stage of the school career.

- **The phase of spontaneous interest – from eight to twelve years of age**
  During these "technical" years demands are made on the child to discover things for himself by making use of self-activity and independent thought. History as such, with his own province or country as point of departure, now replaces the earlier general way of dealing with activities and their development, and its human and social aspects are emphasized in particular. The same principle is also followed in the presentation of geography and the natural sciences.

- **The phase of reflective (meditative) attention – twelve years of age and older**
  At this stage the child is far enough advanced intellectually to specialize in certain studies and arts with technical and intellectual goals and to discover and solve problems by himself.

It would thus appear that the active child (who wants to know, do and think) was the focal point of Dewey's educational opinions. It is unfortunate that Dewey paid so little attention to the child as listening and answering, (responding, responsible) being.

Dewey's particular contribution to the theory and practice of infant education could be summed up as follows:
• His new methods provided ample opportunity for the development of the child's individuality. The principle of self-activity which he so strongly emphasized is pedagogically highly desirable.

• Dewey demanded, quite rightly so, that teaching should start with the interests of the child as its point of departure. He rejected the intellectualism and excessive memorizing of the ordinary school and in their place advocated cooperation between pupils and the development of the versatility of the child.

• He expects the child to be led into the adult world by life itself, and this is also proof of the psychological foundations of his ideas.

• Dewey's ideas were responsible for a reorganization in teaching and an extension of teaching facilities to all children, without consideration for their physical and intellectual abilities.

• Dewey gave direction to the implementation of a comprehensive curriculum, to work and self-regulated activities in teaching, to the emphasis on scientific accountability in educative thought and practice, and to a changed conception of the child. These changes in their turn were instrumental in providing reorganizing and extending teaching facilities for the pre-school child.

• It is largely owing to Dewey's contribution that the child is today looked upon as someone who can only become a proper adult through his interrelatedness with other human beings.

6.4.3 Maria Montessori (1870 - 1952) and the Casa dei Bambini (infant home)

• Introduction

Maria Montessori was a remarkable person in every respect. Intellectually she was exceptionally gifted, fired with inspiration and blessed with the ability to sum up a situation correctly and in the minutest detail. She also never hesitated to act in accordance with her honest convictions. As will be shown later, these characteristics were contributing factors in assisting Montessori at arriving at often independent, at times even radical — yet always responsible and well-considered — decisions which also profoundly influenced her personal life.

After she had had a medical degree conferred upon her by the University of Rome in 1896, Montessori became an assistant in a clinic for backward and mentally retarded children. Her duties here led to her making an intensive study of the subject literature on the teaching of the less privileged child. In this way she came into contact with the works of two French authors, Itard (1775 - 1838), and Séquin (1812 - 1880), who were to have a profound influence on her life. Itard's works dealt
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with the teaching of deaf-mute children; he strongly emphasized the importance of the teacher's getting to know his pupils by means of careful observation in order to be able to render the correct educative guidance. Séquin, a physician, extended Itard's ideas; over and above this he also designed all types of learning aids which could be utilized in the instruction of handicapped children.

Montessori was instrumental in the founding of a school for mentally retarded children in Rome in 1898. This was a very important event in her life. For two years, while she was principal of the school, she not only trained teachers for the education of these special pupils, but also taught the children herself. This enabled her to test Itard's theories and the learning aids designed by Séquin in practice, and at the same time she could design and test her own aids for learning to read and write.

In spite of the fact that Darwin's theory of evolution—which was at that stage enjoying great acclaim in the Western world—was based on the presupposition that each person's intelligence was fixed and invariable (a view which even today remains a basic premise which many of the proponents of the movement for measuring intelligence either cannot or do not wish to relinquish), Maria Montessori was not daunted by this popular doctrine nor by its influential adherents and proponents.

Like Itard and Séquin she believed that retardation was a deficiency which could be rectified by the correct educative assistance. The logic of her reasoning was born out by the success she had in her instruction: her backward pupils were eventually able to read and write just as well as the ordinary normal child!

While her own achievements and those of her school delighted everyone, she, ever the untiring seeker and champion of the child's happiness and progress, wrote the following:

While everyone was admiring the progress of my idiots, I was searching for the reasons which could keep the happy, healthy children of the common schools on so low a plane that they could be equalled... by my unfortunate pupils. (Cole 1950:564.)

She came to the conclusion that children in ordinary schools were not so much helped as hindered in their progression towards adulthood. Her desire to rectify this deficiency led to her resigning her post in 1900 to attend university courses in psychology and anthropology. (Education was in those days not yet recognized as an autonomous field of study at universities, but was presented as a sub-section of one or more of the following fields: psychology, ethics, anthropology and philosophy.) She was searching for a scientific basis for the system of education which she wished to design.
• View of man and child

It is of particular interest that Montessori decided specifically on a study of psychology and anthropology. It appears to indicate her desire to know more about the being of the person (child) which was to be educated and instructed. Once again Montessori's judgement proved to be correct: before a grounded system of education can be designed it is essential to know exactly what characterizes both the child and the adult because in education these characteristics must always be kept in mind. Therefore: to gain a proper understanding of the system of education which Montessori eventually designed, it is essential to know what insights she had eventually arrived at concerning man (i.e. the child and the adult as human beings).

Without entering into a detailed and unnecessary discussion of the correctness and validity of Montessori's views it may be preferable to allow her to speak for herself. Concerning the human being as adult she contended:

Man is that superior being who is endowed with intelligence and is destined to do a great task on earth. He must transform it, conquer it, utilize it, and construct a new world of marvels that surpasses and overrules the wonders of nature. It is man who creates civilization. This work is unlimited, and it is the aim of his physical limbs. From his first appearance on earth, man has been a worker.

(Montessori 1974:97-98)

Concerning the human being as child it was Montessori's view that:

... the child should begin by absorbing the environment and accomplish his development by means of work, of gradual experiences in his surroundings. He nourishes and develops his human qualities first by this unconscious absorption and then by his activities directed to outward things. He constructs himself; he forms his characteristics by nourishing his spirit.

(Ibid.)

Another interesting opinion of hers actually also belongs in this typification:

Now, child life is not an abstraction, it is the life of individual children. There exists only one real biological manifestation: the living individual; and toward single individuals, one by one observed, education must direct itself.

(Montessori 1967:104)

Montessori then continues by pointing out that the mental deficiency which may be observed even in normal children (and in ordinary schools)
and which hampers their progression, is caused by "mental malnutrition" and the absence of spontaneous, intelligent occupation and activity.

Montessori was convinced that a child had his own life, different from that of adults, and that it should be respected as such. She believed that the responsibility for hampering the education of the small child could to a large extent be attributed to adults who forced their ideas, wishes and dreams onto children thus failing to draw a distinction between the child's life and their own lives. The unique development of the child's personality is hampered in this way.

It is already possible at this stage to make the assumption that the child would be respected in Montessori's system of education, that he would be confronted with mental challenges and that there would be opportunities for creative activities.

• The Casa dei Bambini

In 1906 Montessori received an offer to organize a school in a labour district in Rome according to her views. Normal children between the ages of 3 and 7 years were to spend the full day there. Such an institution would today be called a crèche or infant school, yet she preferred the name infant home (Casa dei Bambini). In an inaugural address at the opening of such an infant school she described the infant home as "not simply a place where the children are kept, not just an asylum, but a true school for their education, and its methods are inspired by the rational principles of scientific pedagogy. The physical development of the children is followed, each child being studied from the anthropological standpoint." (Inaugural Address quoted in: Montessori 1912.)

The infant home was (apart from the name given to it) not a completely new institution. The idea of providing the pre-school child with more formal instruction was already expressed by Plato and Aristotle. Comenius, however, was the first scholar who, during the seventeenth century, in his *The school of infancy* gave concise guidance and a clear description of the instruction for infants up to and including their sixth year of life. Robert Owen was also a pioneer and initiated the establishment of the first crèche and infant school in England in 1816. It is, however, Fröbel who deserves the honour of establishing a sound psychological-philosophical basis in connection with infant education. Montessori no doubt learnt much from the above-mentioned scholars (and others), but she also differed from them in many respects. In fact, a study of the principles upon which she based her infant education, as well as the implementation of her ideas in practice, will clearly show that hers was a new, and for her time, a highly individual and original approach.
The principles upon which Montessori based her infant teaching and education

Proceeding from her view of man Montessori founded her system of education on three main principles:

(1) In the first place she believed that every child was capable of self-education and that it was therefore his duty, in terms of this ability, to bring his potential to full realization himself. The educative environment should be prepared in such a way that the child educates himself by means of participation. Montessori stated that the child has "an absorbent mind" which allows him to absorb knowledge directly into his psychic life by means of his senses. This occurs sub-consciously up to the age of three years and thereafter consciously. It is thus essential that the educative space in which the child lives and works should stimulate this "absorption occurrence" systematically (by means of didactic material). This material is designed to allow the child to improve himself gradually and thereby to educate himself.

Self-education and the absorption occurrence are, however, closely related to the different sensitive periods (which are currently known as phases of development or progression modes) which Montessori distinguished in the life of the child. According to Montessori a sensitive period referred to "a special sensibility which a creature acquires in its infantile state, while it is still in a process of evolution. It is a transient disposition and limited to the acquisition of a particular trait. Once this trait or characteristic has been acquired, the special sensibility disappears ... this (childhood) passes from conquest to conquest in a constant rhythm that constitutes its joy and happiness." (Montessori 1966:49).

During these periods certain inherent powers and abilities are ready to be realized (i.e. when the child is more susceptible to certain patterns of behaviour). Each period also represents the most favourable period for the acquiring of certain knowledge or the practising of certain skills. When the child is ready to learn something, when he exhibits a spontaneous desire (sensitive period) to conquer a particular field of knowledge, he should be provided with suitable learning aids (graded educative apparatus), in order that he may be occupied according to his expectations without any interference or direct guidance of an adult. The responsibility thus rests with the educator to study every child thoroughly so that at the right time the correct material may be provided for the development of the child's particular powers and abilities. Montessori also tried to create an environment in the Casa dei Bambini where suitable material was always at hand when such a sensitive period manifested itself. Because it is impossible to predict when a sensitive period for the practising of some or other function will become a
reality in a specific individual, the child should have a completely free choice of learning material:

She therefore encouraged pupils to work at their own rate, to concentrate upon what interested them, and to use school materials in whatever way would serve to develop their latent abilities and to solve their current problems. (Cole 1950:566)

As may be gathered from the above discussion, Montessori’s opinion that education and teaching were always of an individual nature and should be coupled to freedom, is inextricably related to her principle of self-education.

No child can progress to responsible adulthood (educate himself) and thus fulfil his duty of self-realization, when the school work presents no challenge (or when it is too difficult). On the contrary, school work which does not take the child’s abilities into account can lead to incalculable damage. (Although the principle that school work should be commensurate with the abilities of the child was not a new notion in Montessori’s time, no teacher had ever before expressed this principle so emphatically.

(2) A second principle, which was really an extension of the first, was Montessori’s emphasis on freedom as an essential precondition for (self-) tuition. She advocated freedom for both the directrice (teacher) as well as the child. She confirmed that:

(a) only in freedom can a directrice –

(i) observe the child scientifically;
(ii) help a child (by, for instance, providing suitable didactic material) to achieve what he has tackled;
and
(iii) hold the concepts of good and evil up to the child.

(b) only in freedom can a child –

(i) choose his own activities;
(ii) move about in the classroom; and
(iii) sort out his social relationships.

(A child usually resents adult interference in this connection.)

Montessori emphasized that, if the educative occurrence hopes to be effective in respect of the total progression of the child’s nature, it is of utmost importance that the principle of freedom should be present in the
educative situation. "Education in freedom towards freedom" was a well-known motto of the Montessori school, yet at the same time she warned that "(t)he liberty of the child . . . should have as its limit the collective interest; as its form, what we universally consider good breeding. We must therefore check in the child whatever offends or annoys others, or whatever tends towards rough or ill-bred acts. But all the rest, every manifestation having a useful scope, whatever it be, and under whatever form it expresses itself, must not only be permitted, but must be observed by the teacher" (Montessori 1967:87 and 93).

Discipline in the classroom is also essential in the education of the child. Montessori maintains that the external order of the school environment will gradually be internalized by the child. As soon as this phase is reached, it is assumed that the child’s behaviour will be orderly at all times. This was in fact a contribution to social behaviour of which Montessori was particularly proud. In this respect she openly criticized the normal school system when she pointed out that social interaction was only possible in these schools during the break, while her schools functioned on a social basis both in and outside the classrooms.

To strengthen the element of community life and of reality, Montessori recommended that a garden, or as she was wont to refer to it, an open-air space, was to be attached to the classroom. Although this was not an original idea, its implementation was unique. The rationale for this connection between classroom and garden was that the children had to be able to feel free to come and go as they pleased during school hours.

(3) Sharpening, practising and refining the senses may be seen as the third principle of Montessori’s system of infant teaching. Montessori was of the opinion that sensory distinguishing was not only the foundation for the general intellectual moulding of the child, but that it was also an essential precondition for the eventual mastering of reading, writing and arithmetic. With this in mind she designed twenty-six different learning aids (or graded educative apparatus) which were intended to afford equal practice to all the child’s senses (namely touch, taste, smell, hearing and sight). One sense was never over emphasized or neglected to the detriment or advancement of another.

• Implementation of the Montessori system in practice

Montessori’s system was designed, in terms of the above three principles, with the child’s physical, moral and intellectual progression towards adulthood in mind. To achieve her aim (physical, moral and intellectual progression towards adulthood) she designed three different series of exercises:
(1) exercises for the development of the musculature;
(2) exercises for the development of the senses; and
(3) exercises for the development of language.

When children were admitted to the "infant home" at three years of age, much attention was initially given to their becoming physically independent (musculature). The infants were, for instance, required to sweep, polish and perform other small household tasks, and dress and undress themselves.

It has already been mentioned that Montessori designed a number of different learning aids or educative apparatus to exercise sensory distinction, which were implemented one after the other and which helped the little ones to distinguish between colours, sizes, sounds, tastes, etc. Proceeding from the three principles on which her system was based, every pupil was permitted to choose from the available learning material in the classroom that with which he wanted to and was able to work at a specific stage, and to occupy himself with these in any suitable place. Although there was no group instruction, children did at times partake in group play and also worked together spontaneously. There was always a leader (or directrice) present. Her function was to supervise, observe and assist where necessary. Every child who needed help was assisted and provided with a better alternative when he experienced a problem. Failures were regarded merely as an indication that the child was not yet ready to occupy himself with a particular learning aid and the leader therefore suggested something different which he could manage. Although the child was, in terms of the freedom principle, permitted to choose what he wanted to do, the principle that self-education could only be realized successfully if his activity ("school work") accorded with his abilities (sensitive period) at a specific stage, was always kept in mind and never made subordinate to the child's freedom of choice. In this regard Frost made the following very important statement:

Montessori's materials were designed so that when used in the proper sequence they gradually lead children, over a period of several years, into an understanding of abstract ideas with a minimum of adult explanation and interference. After the teacher had introduced them to the child one by one, she can retire into the background while he teaches himself. (Frost 1968:73)

The third series of exercises which was aimed at the acquisition of language, was never separated from the child's other activities. While he was, for instance, busy with material for exercising the senses, the leader merely said: "It is red", or "This is a circle", thus enabling the child to get to know the correct word in conjunction with the concepts.
Although it was not initially Montessori’s idea to instruct infants in reading, writing and arithmetic, she in time changed her views. This occurred because she found that many children spontaneously tried to teach themselves these skills. She therefore constructed another exercise which made the gradual transition from purely sensory instruction to "school subjects" possible. Children learnt to write by first touching the letters and then copying them. In this way they got to know the letters more or less subconsciously and then suddenly realized that they could write. Reading followed after this with at first only single sound images being combined and eventually words being formed. The skill of counting was mastered by means of repeated handling of numbered sticks of different lengths and colours. At approximately five or six years of age these children were then able to read, write and count.

Montessori’s success with her children was so overwhelming that she started on the instruction of older normal children in 1911. She designed new apparatus for these primary school children which enabled them to learn arithmetic, geometry, grammar and also other subjects by themselves.

• The function of the teacher

The implementation of Montessori’s principle of child centred education placed a profound responsibility upon the teacher. To Montessori the teacher should be "as one inspired by a deep worship of life, and must, through his reverence, respect while he observes with human interest, the development of the child life." (Montessori 1969:68).

The teacher, apparently only a passive observer of the child’s behaviour and psychic expressions in the pedagogic situation, was in fact the one who, as "eager scientific" directrice, gave direction to the spontaneous activities of the child with a view to the natural development of all his dimensions: "It is necessary for the teacher to guide the child without letting him feel her presence too much, so that she may be always ready to supply the desired help, but may never be the obstacle between the child and his experience" (Montessori 1965:131).

• Montessori’s classroom

Montessori was convinced that a child learns at his best in an environment that has been prepared. This prepared environment may be any space – the classroom, a room in the home, a nursery or the playground. The purpose of such a prepared environment is to make the child independent of the adult. It is a place where the child can do things for himself, in other words, a place where he can educate himself.

Montessori was the forerunner of the ‘open classroom’ movement.
This school and classroom set-up differed radically from the traditional situation of that time and made healthy, free movement of the children possible. The furnishings (small chairs and tables) were light and could be moved about at will. Every child was weighed, measured and medically examined on a regular basis and the data was recorded on a graph.

Montessori considered order in the classroom as essential as it was in itself an externalization of order which, once it had inseparably become part of the child’s environment, would help him to internalize discipline. She had hoped to create a child-environment relationship which was founded on trust and the ability to become interactive.

**The socializing of the child**

Montessori rejected competition which was artificially created by, for instance, reward and punishment. By means of this approach she attempted to reduce to a minimum the usual social problems which arose among children as a result of their spirit of competition. She was convinced that this would contribute to the healthy socialization of children. She criticized the ordinary schools where children only established social relationships during breaks or excursions, while in her schools, as she put it, "ours (the children) live always in an active community".

**In summary**

Montessori’s system for infant education was certainly not without its faults and shortcomings. Maria Montessori adhered to a view of education and teaching which was far too limited. She limited the children practically exclusively to the development of the senses and the intellect. The weakest points of her proposed education were:

1. that it is too intellectually orientated;
2. that the child’s imagination is not sufficiently stimulated;
3. that no provision is made for imagination and free, unstructured play.

The danger of her system also lies in the fact that many uncritical parents and teachers are so impressed by these facts they want to follow her ideas without any further motive than to achieve the same results. Frost said about this: "Of additional concern is the apparent tendency of ‘pushy’ parents to impose learning on children" (Frost 1968:70).

In spite of the deficiencies mentioned above, it would be very shortsighted to condemn and reject Montessori’s system in its entirety. Her contribution was in fact very significant, valuable and influential in the sphere of infant education. Of profound value is her emphasis on the
fact that the child wants to learn, can learn and must learn by doing things on his own; he should tackle a problem which he experiences as a challenge on his own in order to solve it, even if the adult does at times have to give some assistance. It was for this reason that she was so insistent that an opportunity should be created for every individual child to be actively involved in trying to meet a challenge, whether it be purely physical activity or more formal (intellectual) subject matter, in accordance with his own desires and abilities in a particular phase of his life (sensitive period). She therefore saw to it that the children in the working-class suburbs of Rome were given a safe space where they could occupy themselves without hindrance with creative activities — even though these activities were strictly controlled.

6.4.4 Ovide Decroly (1871 - 1932) and the learn-by-living model

The Decroly model, designed by the Flemish physician (neurologist) and pedagogue, Professor Ovide Decroly, is another example of the learning-by-living point of departure. The principle upon which this model is based is that of life in a natural, homely living environment with suitable challenges to allow the child to progress by means of independent activities, investigation and experimentation. In 1901 Decroly implemented this model in a school for sub-normal children, and in 1907 also in the newly established private school, École l'Ermitage, for normal children. In 1926 this school was moved to Ukkel and up to this day Decroly's theories are still being put into practice there.

Decroly's point of departure once again centres in the interest of the child, the concept of the totality of education and life reality. This results in the curriculum's being very flexible. The first few hours of the day are usually devoted to the technical aspects of language instruction and arithmetic. This is followed by various activities in connection with observation, comparison and association, with art, handicrafts, music, etc. During the afternoons time is usually devoted to individual work, manual labour and foreign languages. This model is based on two important teaching principles:

- **Globalism or the Gestalt or totality principle:**

  Experiments, investigations and observations convinced Decroly that a child observes a thing in its totality (global) and not in its segments. The total impression was of primary and the separate components of secondary importance. This led him to design his ideo-visual reading and writing method (the global method), according to which the meaning (ideo) and the image (visual) of the whole was recorded simultaneously.
The so-called "centres d'intérêt" or centres of interest:

The centres of interest (spheres of interest) are very closely related to the environment in which the child lives and works, as well as his living habits and phases of development. It depends on the following childlike desires (instincts and inclinations): the instinct of self-preservation, the craving for food and belongings, the inclination towards self-protection, playing together and working together, and towards imitation.

The curriculum (subject matter), which consisted of whole objects from real life, was to be grouped around the following four dimensions of child life: nourishment, clothing, protection and activity. These four focal points of interest are not learnt as subjects but by means of the following four types of activities in which the self-activity of the child is highlighted:

1. **Observing and experiencing things**, that is observing by looking at, listening to, examining, touching and arranging real objects from the child's life and environment. This implies recognition of form, for example by weighing, feeling, reckoning and determining other qualitative characteristics. This is a logical preparation for instruction in arithmetic.

2. **The implementation and elaboration of these experiences by means of association** with that which was observed elsewhere and/or at an earlier stage. This for instance presents the opportunity for reconnoitring in time (history) and in space (geography). This appeals to the child's inherent inquisitiveness and imagination.

3. **The expression of these experiences in language, writing, drawing, reciting, play, etc.** In this way the child learns to express his emotions and rational experiences freely by means of creative activity.

These activities are handled with a view to the child's relationship with his own body, with animals, plants, minerals, the community and the universe in mind. The whole school makes a study of one subject during the entire year which promotes a strong sense of solidarity and unity among teachers and pupils. What the children experience through their own observations and examination they note down in so-called "observation books" or "books of life". Memorizing and book-learning is completely eliminated as the children are actually brought into contact with everything they learn. They are given the opportunity to observe, to do, to discover and to think for themselves. Only in the higher standards are separate subjects substituted for the subject matter as a whole.

The programme of instruction is based on five important pedagogic principles, namely:
(1) There is a connection between the subject matter and the specific natural life drives of the child. This results in the child's spontaneous and natural interest being stimulated which enhances self-activity.

(2) The teaching situation presents the child with sufficient opportunity for independent knowledge acquisition which once again stimulates his inclination for self-activity.

(3) The child's natural love of play serves as a basis for his intellectual, emotional and moral moulding. The child's spontaneous craving for activity (through play) is set in motion, leading towards the cultivation of sound social and life habits as well as the acquisition of valuable knowledge.

(4) The subject matter provides situations and activities for the child to think and generalize independently and constructively.

(5) The child's natural wealth of imagination serves as foundation for the progression of his individual powers of expression and the moulding of his unique personality.

The active interest of the children ensures that there are few disciplinary problems. A type of pupil's council was instituted and this saw to it that discipline was maintained, while it also executed various other tasks. The school thus formed a small community and its duties and activities developed a need for activity, initiative and independence in the children. A system of parent representation for every class also helped to establish the necessary interest, co-ordination and co-operation between school and home.

The advantages of this system are obvious.

6.4.5 William H. Kilpatrick (1871 - 1966) and the project scheme

Kilpatrick, formerly a professor in the Science of Education at Columbia University in New York, designed the project method in conjunction with other educationists. This method was based on Dewey's views of education by means of real experience, discovery and investigation. It is the model of the proponents of purposive activity (i.e. the result of a problem which must be solved) and the aim of education is actually experiencing life in a natural environment and under the competent guidance of a teacher (instead of preparation for the adult world). The proponents of this model view the educative occurrence as an event of interest, investigation and discovery, which gives it meaning and direction (instead of as merely the assimilation of pre-arranged knowledge). They demand that a problem which is tackled in this way must be a natural problem and that it must link up with the real requirements of life, and that the
different school subjects be co-ordinated, correlated and organically combined into one event instead of being subdivided as is usually the case.

This system takes on a variety of forms: work units, assignments, problems, group activities, etc. There are, therefore, on the one hand, individual projects (large or small) of a more individual nature, such as the building of small radio sets, making a dress, writing a drama, etcetera, and, on the other hand, projects (large or small) of a more social or group nature, such as laying out the school garden, publishing a school year book, etc. Some projects concentrate more on the practical aspect, others more on the intellectual, and yet others on the emotional development of the child.

The most important characteristics of a project are whole-hearted dedication, goal-directedness and unity. Kilpatrick distinguished between four types of projects, namely: projects concerned with production, projects aimed at acquiring knowledge or enjoying the aesthetic, problem projects in conjunction with problem solving and drill projects, that is, practising or imprinting knowledge. Projects are usually combined with implementation, evaluation, realization, appreciation and expression.

The merits of the project method are, amongst others that:

- they are applicable to all the activities of the school;
- the purposive activities promote a natural, independent approach to the problems of life, develop a sense of responsibility, initiative, reflective thought, farsightedness, independence in thought and actions founded on spontaneous interest;
- in this manner schoolwork is brought into a more direct relationship with life and acquires actual social value and significance;
- by correlating the work the principle of unity in the school and in life is enhanced; and
- through this method the educative process is approached from a psychological point of view (i.e. with the pupil as focal point) and not from the logical point of view (i.e. with the subject matter as the point of departure).

One danger is that through these different problems the logical unity of each separate subject is disrupted, which makes systematized subject knowledge all the more difficult. This demands that the teacher should have a thorough knowledge of the child, a healthy imagination, good leadership potential and mature experience.
6.4.6 Susan Isaacs (1885 - 1948) and the nursery school

- The origin of nursery schools in Britain

A parliamentary commission was appointed during 1907 to investigate the desirability, or otherwise, of supplying teaching facilities for children under five years of age. This may be accepted as the start of the nursery school in Britain. The report brought out by them in 1908 emphasized the following:

1. It would be totally incorrect to exclude children under five from education, but the correct type of institution had to be made available to them.
2. What children from unsatisfactory home circumstances needed were nursery schools.
3. The teachers to whom this type of instruction was to be entrusted had to receive a thorough general training and in particular they had to be very well acquainted with the principles of the Froebelian system.
4. Teachers were to have the support of nurses and other auxiliary staff.
5. A certain number of the independent crèches were to be converted to nursery schools which would be attached to public elementary schools.

These views of the parliamentary commission concerning infant education were shared by two prominent English ladies in education, namely the two sisters, Rachel (1895-1919) and Margaret Macmillan (1860-1931). As a first step towards the implementation of the recommendations of the commission and stemming from their anxiety about the neglected poor children in the slums of London, they founded a school clinic for the treatment of infants in London in 1908. Within a couple of years this system of clinics had spread across the length and breadth of England. In 1911 the Macmillan sisters started, on a completely voluntary basis, a small infant school attached to a clinic and three years later, after its official recognition and the donation of more suitable premises, the first open-air nursery school in England was established (an open-air school as one side of the school was open to allow the sunlight in.) This nursery school would provide the under-privileged child with the same educative opportunities that the Kindergarten provided for the privileged children.

The methods of, in particular, Froebel and Montessori were implemented in this nursery school. In the Macmillan nursery school the chil-
Children were exposed to a child-sized world where the little ones could perform everyday household chores, where there was the opportunity for imaginative play and experimentation and where their motor control and the development of their senses could take place under competent guidance and in a physically healthy environment. The "learning" environment was, however, less systematically structured than that of Montessori, it was more homely and therefore presented more opportunity for informal learning, such as that in an ordinary household. The children spent most of their time "outside" playing in the herb, vegetable and flower gardens, in sandboxes or on the scrap-heap. This little school centred around these extramural activities, combined with adequate nourishment and sleep (i.e. the so-called educative care aspects) which led to its being called a nursery school (derived from nurture—educative care).

The founding of the nursery school in Britain and the pioneering work of the Macmillan sisters paved the way for the particularly valuable contribution of Susan Isaacs to infant education.

Susan Isaacs was born in Lancashire on 24 May 1885. She was the ninth child of William and Miriam Fairhurst. Shortly after the death of her mother, when Susan was six years old, her father remarried and this sensitive little girl entered a fairly unhappy period of her childhood.

Although Susan's stepmother took good care of the family, her attitude towards the Fairhurst children could not really be described as affectionate and sympathetic. The father, a busy journalist, could also not spare much time for his children with the result that they had to grow up without the protective, interested and understanding parental love which is so essential to every child. How little understanding these parents really had is clearly illustrated by the fact that Susan, who was eager to learn and artistic, was taken out of school against her wishes at the age of fourteen to help with the running of the household. Only eight years later (at the age of 22) did she manage to convince her father to permit her to enroll for a course in nursery school work (for non-graduates) at the University of Manchester.

Susan did so well in this course that her lecturers suggested at the end of her first year that she should register for the degree course. She therefore interrupted her studies and managed to learn Greek and Latin (two foreign languages which were prerequisites for university entrance) within three months, after which she registered for a degree course at the University of Manchester. She was awarded her degree in 1912 and continued her studies for the master's degree in Psychology at Cambridge University.
She was appointed lecturer in nursery school work at the training college in Darlington in 1914. In this way she entered the field of infant education, a field where her influence would be profound, especially so because of her work at the Malting House School (1924 - 1927) as well as her publications concerning infant education.

• Susan Isaacs as principal of the Malting House School

Although Susan Isaacs had already reflected seriously on all facets of infant education while in Darlington, and had arrived at valuable insights, she only captured the attention of the teaching world and became renowned as a result of her work at the Malting House School.

The founding of the school in 1924 and the appointment of Susan Isaacs as principal and first staff member are historically interesting events.

Although infant education was becoming generally accepted in England by the 1920s, Geoffrey Pyke (a pedagogician with particular interest in infant teaching) was not totally satisfied with the principles upon which it was based. He determined to change the whole set-up. Even though Pyke had a reasonably sound understanding of what the practical organization of infant education had to entail, as well as having the financial means to implement his ideas, he did not feel qualified for the task. In his search for a capable teacher to assist him in the practical implementation of his insights, he decided to place an interesting, albeit unorthodox, advertisement – which was a clear exposition of his eccentric opinions – in various magazines. In part the advertisement read as follows:

WANTED – an Educated Young Woman with honours degree – preferably first class – or the equivalent, to conduct education of a small group of children aged 2 1/2 - 7, as a piece of scientific work and research.

Previous educational experience is not considered a bar, but the advertisers hope to get in touch with a university graduate – or someone of equivalent intellectual standing – who has hitherto considered themselves too good for teaching and who has probably already engaged in another occupation.

A LIBERAL SALARY – liberal as compared with research work or teaching – will be paid to a suitable applicant who will live out, have fixed hours and opportunities for a pleasant, independent existence. An assistant will be provided if the work increases.

(quoted in: Gardner 1969:54-55)
Largely out of curiosity as to exactly what this new occupation would entail, Susan Isaacs applied for it and was accepted! Her new work meant that she had to accept responsibility for a nursery school (with an entirely new approach) which Pyke wished to establish for the pre-school children of the university lecturers at Cambridge. Evelyn Lawrence, a teacher at Malting House School since 1927 and later the directrice of the National Frebel Foundation, remarked as follows about this matter:

In many discussions before the school began they tried to put aside the accustomed (sic) ways of envisaging education and to think the thing through again from the start, though naturally their thinking was greatly influenced by that of earlier pioneers, particularly Dewey.

(Quoted in: Gardner 1969:57)

That Susan Isaacs and Geoffrey Pyke were attempting something original concerning infant education for that time, can be clearly established by taking a closer look at the principles according to which their school functioned.

* Aim of the school

The new school hoped to achieve two objectives. In the first place it wanted to satisfy the educative demands of a particular group of pre-school children (three to seven years of age) and this was to be achieved in terms of particular psychological and pedagogical principles and insights which were not yet generally applied in existing schools. An attempt would thus be made to mould the educative practice in the Malting House School according to the latest theories on education. In the second place the school actually had to serve as a centre, a laboratory for the collection of data concerning the nature of the child, which could in turn be implemented to assist the further renewal of teaching. How the school was eventually to be arranged to realize this second objective is clearly reflected in the following quotation:

The second main function of the school, that of providing source material in the field of child psychology, entails the keeping of detailed notes. The children are under trained observation and... practically all that they do, and much of what they say, is recorded. The children are discussed individually and the meaning of their actions, as well as how to deal with them, considered.

(Gardner 1969:66)

This system of empirical observation undoubtedly led to a better understanding and knowledge of the child.
• Functioning of the school

There was no set curriculum in the school. The children were allowed to occupy themselves with anything which interested them at a particular moment.

Although there was no fixed time-table, the older children voluntarily devoted part of every morning to reading and writing. This instruction was defended as follows by Evelyn Lawrence on the grounds of her observation of these children:

They have reached the stage where they feel the need of reading and writing, and are learning rapidly with no urging. They find the number material interesting and like to use it, though the most valuable part of their number training is probably incidental.

(quoted in: Gardner 1969:63-64)

A large portion of the day was also devoted to "self-discovery". Susan Isaacs emphasized in this respect that "the educator cannot teach the child, nor can he learn for him. All that he can do is to create such situations as will give the child opportunities to learn for himself . . . the child can . . . learn only by his own real experience, whether social or physical, and the educator must not stand between the child and his experience" (Isaacs 1937:453). Simple experiments with gas and water and studying animals, both live and dead, were encouraged. Rabbits, crabs, mice and worms were dissected and the observations jotted down. The teacher refrained as far as possible from formal instruction and rather tried to encourage the children to observe and form conclusions on their own.

The sequence in which the daily tasks were done was decided upon by the children with the cooperation of the teacher. No child was, however, forced to confine himself to this work programme if he really wanted to do something else.

The younger children's time was mostly taken up by play, talking and simple handicrafts. When the weather was fine they spent the best part of the day outside in the garden. They were encouraged to swing, climb and participate in games - which in the traditional schools went under the name of gymnastics.

No punishment was allowed and the children were seldom admonished. The school was, nevertheless, not completely without rules. All play materials had to be put away after they had finished playing (although the children were allowed to tidy up when they felt inclined to do so) and it was not permissible to use any article as a "weapon". Susan Isaacs believed - and not completely without grounds! - that there were three advantages to the child's freedom to act and freedom to express his feelings (emotional expression). Firstly, this helped the teacher to get to know the children better. When a system of authoritarian discipline is
adhered to the teacher gets to know her pupils only in part and then often incorrectly. The child is forced to hide behind a mask of decency and his inner life remains hidden in the presence of adults. When he is allowed to express his emotions, the necessary corrective actions can be taken. Secondly, the danger of the damaging effect of forcing strong emotions to the subconscious, is avoided. If a child in the Malting House School hated someone, he said so, and it was thus possible to investigate and possibly remove the causes for these feelings of hate. Thirdly, when discipline is too strict the child is smothered under the dead weight of censure and prohibition of certain things by adults.

This view about "relaxed" discipline makes particular demands on the teacher. She has to be patient, self-controlled and wide awake. She must be able to understand the implications of the children’s remarks, questions and actions and to act accordingly without showing any signs of uncertainty or hesitation.

At the end of 1927 Susan Isaacs severed her connection with the Malting House School in order to make known her observations, experiences and findings concerning nursery school work to a wider field.

- Publications by Susan Isaacs which were of particular significance for infant education

Although many articles and books, which were (and possibly still are) of importance to infant education were written by Susan Isaacs, the following publications in particular helped to bring about a better understanding of the infant.

From 1929 to 1936, using the pseudonym Ursula Wise, she was responsible for a weekly column in the magazine The Nursery World. In this column she answered the questions of parents, people who took care of infants, and nursery school teachers, with profound insight and understanding. In 1929 one of her better known short works, The nursery years, was published and received much favourable acclaim. Two years later Intellectual growth in young children saw the light and in 1933 the well-known Social development of children appeared. The latter two publications in particular contain a treasury of information on the development of the infant, a matter about which there was a fair amount of ignorance at that time. In connection with the contents of these two works Gardner remarked:

The publication of Intellectual growth . . . had an immediate impact on the educational world . . . . The book gives a wealth of data on the ways in which young children learn, think, reason, and imagine and how far their quest for discovery can take them.
Social development of young children... also contributes a very comprehensive picture of the variety of ways in which young children develop relations with each other, the causes for quarrels and aggression, and the growth of friendly feelings and co-operation. She (i.e. Isaacs) points out that though the hostilities produce the greatest number of dramatic episodes in the lives of young children, a larger proportion of their time is spent in harmonious and friendly play. This knowledge is reassuring to nursery school teachers who often get the opposite impression because they are required by the situation to attend more often to the dramatic episodes.

(Gardner 1969:72-73)

To summarize it may be said that the important value of the publications and articles by Susan Isaacs on infant education is to be found in the fact that it helped both mothers and teachers to gain a better understanding of infants.

They were able to understand exactly in what situations the child could be left to his own devices to discover things for himself and in which situations he had to be helped and guided to prevent him from lapsing into a state of despair.

• The general contribution made by Susan Isaacs to the improvement of infant education

There can be no doubt that Susan Isaacs made a profound contribution to new opinions concerning infant education during her time. Her influence was particularly far-reaching in respect of the following four aspects:

In the first place she was an ardent supporter of nursery schools because she was convinced that attending a nursery school was beneficial for the child. She maintained that the nursery school presented a safe, secure space for both poor and less gifted children as well as wealthy and highly intelligent children. She held the opinion that children from all layers of society could here be given the ideal opportunity for physical, intellectual, emotional, ethical, aesthetic and social moulding, progression and preparation for citizenship. For this reason she was saddened by the subordinate position infant education had to occupy in the system of education of that time. Over and above this she was also convinced that nursery school experience was an excellent preparation for any prospective teacher. Although her pleas for the founding of nursery schools often met with no success, they nevertheless resulted in an awareness of the value of this type of institution. Gardner concisely expresses the essence of the above thoughts when he states:
She did... believe very strongly that good nursery school education was the right foundation both for national education and for the studies of her students, whatever age they were teaching or going to teach... . If (she) failed to get nursery schools provided on the scale she would have wished, at least she got them respected. (Gardner 1969:168)

In the second place her diligent observation of infants contributed to a better understanding of and knowledge about the child. She realized that children "revealed" themselves to adults by means of their actions, and for this reason she carefully observed, noted and analysed everything the child said and did. By these means she could prove beyond all doubt that "(i)t is always the whole child who plays and laughs, who quarrels and loves, who thinks and asks questions, through all the hours of his day and all the years of his childhood". (Isaacs 1963:80). It is therefore a false assumption to believe that the task of the nursery school is limited to attending to the intellectual moulding of the child while his emotional, ethical, aesthetic, social and physical progression is neglected or left in the care of the home.

In the third place she was also capable of interpreting the theories of other scholars (and in particular the theories of Fröbel and Dewey) and implementing them in practice. She was one of the first people to demonstrate decisively the practical implications of Fröbel's pronouncement that play is a highly significant activity. According to Isaacs play "is the child's means of living, and of understanding life... it helps him to achieve inner balance and harmony through the active expression of his inner world of feelings and impulses, and of the people that dwell in his inner world" (Isaacs 1948:66 and 69). She pertinently pointed out that the child should never be sacrificed for the sake of an examination and that excessive formal instruction at an early age can be very harmful. In a letter written in 1936 she expressed this as follows:

My own experience in recent years in contact with infant and junior schools suggests that all educational values are distorted through the need to prepare children for exams. Even with children at four and five years of age, people are already beginning to think about the scholarship exam, and it is extremely hard to humanize the education of even the very young because of this. Specifically, we teach reading and writing and the formal arts far too early, substituting sterile attempts to compose with the pen for living communication by word of mouth. The time that is spent in formal work on the three R's would be far better employed in allowing the children to pursue the activities they so much seek connected with
the business of living - washing, cooking, cleaning . . . . These ac­tivities are the natural starting point for his education, and today the school deliberately deadens his interest in these things and idolatrizes the formal tools of learning.

(Quoted in: Gardner 1969; 165-166)

Whereas periods of play had previously only been permitted when the infants had to "rest" from their "school work", the insights of Susan Isaacs resulted in play gradually becoming the focal point of the ac­tivities in all nursery schools.

In the fourth place the opinions of Susan Isaacs were instrumental in the rejuvenation of teacher training. Before her insights became widely known and accepted, students learnt very little about the essential na­ture of the child in their courses at training colleges. Much time was, however, spent on a study of the nervous system, instincts, sentiments and the course of the act of learning. Susan Isaacs' emphasis on the im­portance of knowing who and what the child is, however, led to profound changes in this respect.

From the above discussion of the didactic models which had possi­bilities for implementation and were of use in infant education and teaching in the twentieth century, it can be clearly seen that it is impos­sible to contend that there can (and should) be only one model for pre­school education and teaching. On the contrary, the planning of education ought to be of such a nature that it would provide for the ex­pectations of the individual child in a specific temporal-spatial situated­ness.

6.5 Infant education: Quo vadis?

In any pedagogically accountable reflection concerning guidelines for fu­ture education and teaching of the infant, the point of departure will ob­viously have to be the uniqueness of the nature of the child. By implication this presupposes that the child-being will be respected with regard to his expectations and concomitant rights. In other words, the expectations of the child and his right to support in respect of his health and care, the development of his abilities, his being a child, his human dignity and right to be himself, creative self-expression, co-existence and co-activity, happiness and safety (security), should be respected. It also means that the adult must open his world, his environment and his heart to the child; it also demands of the adult that he should arrange the world so that the child will feel welcome in it and that he will ex­perience his security to the extent that he can "call out": I belong here: I feel at home here!
All this is based on the supposition that the care, education and instruction of the child in the family and in the infant school should recognize the following criteria (amongst others):

- Recognition of the childhood as being unique and different and of each child’s uniqueness and being different.
- Recognition of the child’s need for security, affection (love) and socialization.
- Recognition of the child’s creative and intellectual abilities and his potential for self-expression.
- Recognition of the independence, initiative and play of the child.
- Recognition of the household as primary, informal educative environment to ensure the child’s physical and mental health.
- Recognition of setting an example of a norm image of adulthood by the educator concerning moral, religious, political, economic, aesthetic and intellectual aspects.
- Recognition of the education of the child as being an all encompassing and comprehensive moulding event and of the child’s need of a rich educative content.

Not only will the care, education and teaching of the pre-school child have to satisfy these criteria, but it means the family, the school, the church and the state will have to cooperate, work together and plan together for the sake of the future of the infants. The following are some of the matters which will need attention:

- The organization of the care, education and teaching of the infant in close co-operation with the parents as a means by which family education can be supplemented and as the first step in life-long "education". This can be achieved by, for instance, the provision of adequate finances, by the improvement of family, community and labour legislation and by designing systems of education which are dedicated to the care, education and instruction of every child in all his phases of development.
- The preparation of parents and prospective parents for the responsibilities and demands of educating infants.
- The acceptance of responsibility for supporting organizations and institutions which undertake the care of small children, and in particular the needy child who stands most in need of such care.
- The promotion and encouragement of research and the training of teachers in order to provide care, education and training to the child in the most suitable circumstances.
Ensuring that different national, regional and local administrations will co-ordinate family and child-care services to guarantee that the child will be provided with a continuous educative event.

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