NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30, and subsequent amendments.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30, et ses amendements subséquents.
Searching for a Philosophy: Growing with Children

Katharina Hausen

A Thesis in the
Department
of
Education

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts at
Concordia University
Montréal, Québec, Canada

April, 1993

© Katharina L. Hausen, 1993
The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

ISBN 0-315-84713-1
ABSTRACT

Searching for a Philosophy: Growing with Children
Katharina L. Hausen

My personal search for principles and practices to guide my role as a teacher of young children took me to Munich, Germany to be trained in the Montessori method; to Tumbaco, Ecuador to be a teacher trainee at the Wild's active school and most recently to Bali, Indonesia to experience Jean Liedloff's notion of a continuum concept. This search has brought me skills to set up an environment for children and to better understand my role in it. My work with children has helped me to integrate the principles and practices of individuals who have inspired my own feelings, thoughts and actions, thereby eliminating conflicts which I have previously experienced.
Acknowledgements

I would like to thank my adviser, Dr. Florence Stevens, for her unfailing support, guidance and encouragement. Thanks also to Frau Jürging and Frau Roth, in Munich, Germany; Colleen and Elsabret wherever they may be; Rebeca and Mauricio Wild, in Tumbaco, Ecuador and Jean Liedloff in Sausalito, California, for sharing their experiences. Thank you also Kurt Bierschock for sending me books from Germany.

Special thanks to the mothers who entrusted their children to me, who encouraged me and supported me financially throughout this work. Thanks Brian, Christopher, David, Jennifer, Jessica, John, Pauli, Ryan M., Ryan P., and Samantha. I will miss you all!

Last but not least, I thank my parents; for the meals, the use of the computer and for allowing me to run this small children's group out of their home.
# Table of Contents

List of Figures .................................................................................. vii

INTRODUCTION .............................................................................. 1

CHAPTER I: Maria Montessori's Method of Education .................. 14

- Maria Montessori's Background ................................................. 16
- Principles and Practices in Thought ............................................ 30
  - The child ........................................................................ 30
  - The environment ............................................................... 41
  - The adult ....................................................................... 47
- Principles and Practices in Action ............................................. 53
  - The first Casa dei Bambino in Italy .................................... 53
  - The Munich model Montessori kindergarten .................. 60
  - A private German-English Montessori kindergarten in Munich .................................................................... 63
- Summary .................................................................................. 67

CHAPTER II: The Wild's Active School ........................................ 69

- The Wild's Background .............................................................. 70
- Principles and Practices in Thought ......................................... 74
  - The child ........................................................................ 74
  - The environment ............................................................... 79
  - The adult ....................................................................... 84
- Principles and Practices in Action ............................................. 93
  - The Pestalozzi I kindergarten in Tumbaco, Ecuador .......... 93
  - The Pestalozzi II kindergarten in Santa Rosa, Ecuador .... 102
- Summary .................................................................................. 104

CHAPTER III: Jean Liedloff's Continuum Concept ..................... 105

- Jean Liedloff's Background ...................................................... 106
- Principles and Practices in Thought ......................................... 112
  - The child ........................................................................ 112
  - The environment ............................................................... 116
  - The adult ....................................................................... 118
- Principles and Practices in Action ............................................. 120
  - The Yequana, the Balinese and us .................................... 120
- Summary .................................................................................. 131

CHAPTER IV: Transitions in my Thoughts and Actions .............. 133

- Paradigm Shifts in my Thoughts and Actions ......................... 134
  - Pre-paradigm stage ........................................................... 134
  - Adoption of the Montessori paradigm ............................ 135
  - Paradigm shift ................................................................. 143
Adoption of the Pestalozzi paradigm.............146
Paradigm shift.....................................154
Emergence of my teaching-learning paradigm.....160
Paradigm shift.....................................174
Summary.............................................180

CONCLUSION........................................184

References.........................................192
| Figure 1 | Floor plan of my children's room ...................... 165 |
| Figure 2 | Chart of paradigms of my thoughts and actions ......... 182 |
| Figure 3 | Model showing my feelings as central in guiding my role as a teacher of young children at the pre-paradigm stage ......................... 185 |
| Figure 4 | Model showing principles and practices central in guiding my role as a teacher of young children in the Montessori paradigm ......................... 186 |
| Figure 5 | Model showing my feelings, thoughts and actions becoming an integral part in guiding my role as a teacher of young children in the Pestalozzi paradigm ......................... 187 |
| Figure 6 | Model showing my feelings, thoughts and actions manifesting themselves through the interaction and integration of the principles and practices of my mentors in my teaching and learning paradigm ......................... 188 |
INTRODUCTION

If you wish to strive for peace of soul and pleasure, then believe; if you wish to be a devotee of truth, then enquire. Heinrich Heine.

The purpose of this thesis is to describe my personal search for educational principles and practices to guide my role as a teacher of young children. This search has taken me from working at day cares in the Montreal area; to Munich, Germany to be trained in the Montessori method, specializing in the integration of handicapped children; to Tumbaco, Ecuador to learn more about the Wild's active school, the Pestalozzi, which I had read about in Rebeca Wild's book: Education for Being: The experiences of an active school (1986/1990); and later, while writing this thesis, to Bali, Indonesia to meet Jean Liedloff and to experience a culture in which she claims children are still raised in harmony with nature, as described in her book: The Continuum Concept. Allowing human nature to work successfully (1985).

This search began when I was working in day cares without well-defined principles and practices of my own. It led to learning, observing, experiencing and implementing the educational principles and practices of the individuals who have inspired me; to integrating/synthesizing their principles and practices with my own feelings, thoughts and actions through a continuous process of learning and unlearning.
The reading required to write this thesis allowed me to learn more about the individuals, books, and places that have influenced me. Through its writing, I have also learned more about how my principles and practices both in thought and in action are evolving. The thesis has been a tool through which I learned more about Maria Montessori and her method of education; the Wild’s and their active school; and Jean Liedloff and her notion of a continuum concept. My own work with children has helped me to integrate what I have learned, observed, experienced and implemented, thereby beginning to resolve conflicts and to consolidate my thoughts, feelings and actions.

My work with children began when I started to babysit and later when I worked at outdoor pools as a lifeguard and swimming instructor, and at day cares as an educator during summer vacations. During these times, certain children intrigued me more than other children. I wondered why they seemed so much more self-confident and interested in everyone and everything around them. Two children whom I babysat interested me particularly. When I learned that their mother had been Montessori trained in Toronto, I started to read some of the books Maria Montessori had written and I became fascinated.

My own education was very traditional. I went from kindergarten to grade thirteen in a small city in Ontario. I have good memories of nursery school and sporadic good recollections of my primary and elementary school years.
One year before I started high school, my family moved to another part of the city and this involved changing schools. The following years were stressful and unpleasant. I felt very alienated, shy and unable to succeed. I tried to study, I participated in extracurricular activities, but everything seemed difficult and brought no sense of pleasure and accomplishment. I was very self-conscious and felt like a failure at everything, even if I won or got a good grade. I was my own worst enemy. I always passed somehow. I think the teachers pushed me through so I would not have to go through another year of drudgery.

Having completed grade thirteen with mediocre grades, I had little hope of getting into university and therefore did not apply. I did get accepted in the national youth program, Katimavik. For nine months, ten young people from across Canada and myself lived together, did community volunteer work, and learned more about ourselves and our country. This was an introduction to a different way of learning, interacting and being. I was still struggling with my shyness and relatively privileged background, but I came to feel more comfortable here than I had in previous learning situations. My confidence and self-esteem were enhanced.

While I was a Katimavik participant, my family moved from Ontario to a suburb of Montreal, Quebec. After completing Katimavik my desire to attain higher education was great. Quebec’s different education system allowed me to
register in a C.E.G.E.P. two-year pre-university program. These two years of learning were very satisfying and I did well. I was able to choose my courses and I had the confidence and relaxed state of mind that allowed learning to occur. I graduated with an eighty average and was accepted by McGill University to their undergraduate program in linguistics. At the time I wanted to become a speech therapist.

During my undergraduate years I became very ambitious. I did almost nothing but study and attend lectures. I completed the requirements for both an honours degree in linguistics and a major in psychology. I got involved with a foreign student who was doing graduate work in physics. Grades were very important to us and we worked very hard. Studying became part of our identity. When university was over, I continued to work for my honours thesis adviser as a full-time research assistant. I did not apply to graduate school because I had decided that this kind of work was not for me. Instead I pursued a Montessori training program at the primary level. I had applied to and was accepted by several Montessori training institutes. I chose to go to Munich, Germany because their training included special education.

In mid-July I arrived in Munich with my aunt from East Germany who had come to visit us in Canada for the first time in her life. My boyfriend, whom I had met at university the previous year, met us at the airport. We saw
my aunt off and then started to look for an apartment for me. After finding one, we went on a short vacation and then parted. I took a one-month intensive language program in Erlangen and then returned to Munich to get ready for the Montessori training course. I met the Montessori teacher trainer and was given a tour of the Children's Clinic. I attended a conference on computers and language and learned of a graduate student who had done his undergraduate work in the psychology department at McGill, and was now at the Max Planck Institute. I looked him up and through his suggestion landed another research job. This was good because not only did it bring me some money, but it gave me access to a pool and a library.

The following ten months were spent learning the theory behind the Montessori method, learning how to demonstrate the materials, having specialists (therapists, medical doctors, psychologists, speech therapists, physiotherapists, occupational therapists and social workers) from the Children's Clinic come in to tell us about their work and going into Montessori kindergartens to observe and practice-teach. We were also trained in Montessori individual and small group therapy for handicapped children being integrated into Montessori classrooms.

For three months after the completion of my training, I continued to observe, two mornings a week, in the private German-English Montessori kindergarten where I had done observations as part of my training. I also started to work
three mornings a week as an assistant in a small Montessori-oriented, parent-initiated children's group, run by a former graduate of the same training course I had just completed. This gave me a chance to observe both in an A.M.I. certified kindergarten, run by a very experienced and knowledgeable Montessori directress and her well-qualified American assistants, and to participate in a small children's group run by a directress with only one or two years more experience than myself.

I was very impressed by the German-English Montessori kindergarten but I did not feel skilled or confident enough to work as they did. I did not have the conviction that everything Maria Montessori wrote was an unquestionable truth. I felt restricted by the adherence to one "method", even though I found there to be much value and wisdom both in the philosophy learned and in the practice observed. I felt more at ease in the small Montessori-oriented children's group, because it did not appear to be quite so perfect: it was more personal and there was a lot of parent involvement. There, I felt competent, capable and needed.

This experience provided me with an opportunity to reflect upon the Montessori principles and practices in theory and in the praxis under these two different conditions. I felt our training and the method were lacking in the area of socio-emotional development and did not include the family of the child enough.
Around this time, I came across Jean Liedloff's book: "Suche nach dem verlorenen Glück [The Continuum Concept. Allowing human nature to work successfully]" (1985) and I loved it. The author was born in the United States and raised by her grandmother. After her grandmother’s death, Jean Liedloff, now a young woman, left for Europe. There she met some Italians who invited her on a diamond expedition into the Venezuelan jungle. After five expeditions into the jungle, Jean Liedloff wrote about her discovery of a tribe that was living in harmony with human nature and their surroundings. She conceptualized a theory that we in the West have not evolved along a continuum, but rather have deviated from it and are continuously changing because we are in an unstable state, whereas the tribe she had observed in the jungle was living as it had for centuries in a stable state.

A week before departing from Germany to return to Montreal, I discovered the other book which was to be instrumental in my search for a philosophy to guide my role as a teacher of young children. In the bookstore which was located on the ground floor of the Montessori-oriented children’s group, I found Rebeca Wild’s "Erziehung zum Sein: Ein Erfahrungs Bericht einer aktiven Schule [Education for Being: Experiences of an active school]" (1986/1990a). This author was born in Germany. She had studied Germanistik (German studies) in Munich and then followed her future husband to Ecuador. Later they studied social issues at
Columbia University in the United States, and after the birth of their first son, Rebeca Wild completed a Montessori training course in London, England. In 1977, for their second son, Rebeca Wild along with her husband, founded an experimental school in Tumbaco, Ecuador. They called it the Pestalozzi (Pesta for short), in memory of the Swiss pedagogue.

Reading this book was a revelation for me. I felt very comfortable with what Rebeca Wild had written, because it illustrated a creative, dynamic implementation of the Montessori method which was growing or evolving from its foundation up, rather than being handed down from its founder. I felt compelled to write Rebeca Wild to ask her if I could visit their school in Tumbaco. To my great surprise, I received an answer which indicated that such a visit was possible. In September 1988, I left for Ecuador.

I lived in Tumbaco for ten months, first with three Germans who were there in the same capacity as I, and then later with an Ecuadorian family, whose three children went to the Pesta. When I arrived, the school year had not yet started. A teacher-training program was in progress and I was invited to join it. Mauricio Wild talked about the development of the brain, the interaction of the child and the environment and the importance of these for development. He drew diagrams, used both Montessori and Piagetian terminology, and referred to more contemporary research findings which supported his beliefs. The course was given
in Spanish and was attended by future Pestalozzi teachers, a few parents, and interested individuals like myself. When the Pesta began, the Germans and I were invited to attend the kindergarten and primaria. The only request was that we observe unobtrusively and that we not cluster together and talk or disrupt in any other way. It took several weeks before we felt comfortable, even though the children and especially the staff greeted us warmly. It was hard not to be given a function and to have to create one without upsetting the harmony which existed.

The school was not like any I had ever seen. The children moved freely in and out of doors. Parts of the environment were quite structured, others were highly unstructured and open ended. The teachers, at times, were hardly to be seen. There were about a hundred children in the kindergarten and another seventy in the adjacent primaria. The children hardly noticed us newcomers until we got involved with them in some capacity. We then experienced the school differently. From the outside, one felt very left out, useless, almost envious of these free, busy children. When participating, one felt like a child again. This experience began a process. It tapped our childhood experiences. It revealed early needs which had not been met, e.g. the freedom to explore and interact spontaneously in one’s social and physical environment. Towards the end of the visit I knew that it would be difficult to work with children according to these principles and practices in our
culture, but I wasn’t prepared to deny or forget my experiences at the Pestalozzi.

In May of 1989, I returned to Montreal. In the fall I became a full-time student in the Master of Arts in Child Study program, and a part-time teacher at a private French-English, Montessori school. After the first week at this school, I had in my care eighteen children between the ages of two and five years, the majority of whom had a language other than English as their first language. The teacher who worked the other half of the day with them had been trained in France; she was not a Montessori-trained teacher. She had ideas about teaching which differed from the Montessori method and from my experiences. This situation was not easy. In addition to the differences between myself and the other teacher, the differences between the Montessori kindergarten in Munich and the Pestalozzi kindergarten in Tumbaco engendered a lot of conflict in me. Under these circumstances, I was not able to function as a "good" Montessori directress. I neither attained the balance of freedom and discipline of the Montessori kindergarten in Munich, nor the autonomy of the Pestalozzi kindergarten children in Tumbaco. I was closer to having created anarchy.

Some months later, seeking a more suitable opportunity, I decided to contact local mothers of children between two-and-a-half and four years of age and to start a small children’s group in my parents’ home. In my former bedroom,
I created an environment for the children based on what I had learned from the Montessori method and the Pestalozzi school. Through this work with the children, I refined the environment and my role in it, based on what I had learned, observed, experienced and implemented previously and now experienced in this new context.

Well into the writing of this thesis an opportunity came along to meet Jean Liedloff, the author of the book *The Continuum Concept*. Allowing human nature to work successfully. (1985). I had just lent Jean Liedloff’s book to my sister-in-law and she in return lent me her *Mothering* magazine in which there was an article by Jean Liedloff entitled "Normal neurotics like us" (1991, p. 33-37) and at the end, a small advertisement about a tour to Bali hosted by Jean Liedloff. The intention was to experience the Balinese as an example of people who are living closer to the continuum that Jean writes about in her book. This led to my spending almost two months in Bali. I was able to see how the Balinese interact with their children and to come to better understand what Jean was writing about.

The organization of this thesis is the following. I introduce the individuals who have inspired me: Maria Montessori, Rebeca and Mauricio Wild and Jean Liedloff. I present their principles and practices in thought with respect to the child, the environment and the adult through reference to the Montessori method, the Wild’s active school and Liedloff’s continuum concept. I then present these
principles and practices in action by describing examples of the Montessori method, the active school, and the continuum concept. Examples of the Montessori method are the first Casa dei Bambini in San Lorenzo, Italy in 1907; a Munich model Montessori kindergarten in 1987 and a private German-English Montessori kindergarten also in Munich which I visited that same year. The examples given of an active school are the Pestalozzi kindergartens in Tumbaco, and Santa Rosa, Ecuador. The Yequana Stone Age Indians living in the Venezuelan jungle, through whom Jean Liedloff came to her idea of the continuum concept; the Balinese living on a small island in the Java Sea, whom I experienced on a two month visit; and Jean Liedloff's suggestions on how we in the West can approach this continuum again are described to illustrate the principles and practices underlying her notion of a continuum concept.

This sets the stage for a description of transitions in my thoughts and actions based on my learning, observing, experiencing and implementing the Montessori method, the Wild's active school, and Jean Liedloff's continuum concept. I apply Kuhn's (1970) model of paradigms and paradigm shifts, by which he depicted the development of science, to my description of transitions in my thoughts and actions. Lee (1982) defines a paradigm as a mental model used to make sense of observations and experiences, often mistaken for reality itself. I refer to the Montessori method, the Wild's active school and Jean Liedloff's continuum concept
as paradigms through which I learned to interpret observations and experiences to guide my role as a teacher of young children. Transitions in my thoughts and actions are depicted as paradigm shifts.

In conclusion, I present my personal paradigm to show how this process of adopting paradigms, shifting paradigms and integrating my feelings, thoughts and actions and growing with children defines my role as a teacher of young children.

I hope that this thesis will encourage other teachers as well as parents to seek, identify and synthesize paradigms which better integrate their feelings, thoughts and actions, guide their continuous interactions with children and lead to their growing with children. I hope it will also encourage both novice and experienced teachers, as well as parents to search for or to create new learning and teaching paradigms when the current ones do not fit the children, the context and their own feelings, thoughts and actions.
CHAPTER 1

Maria Montessori's Method of Education

It is my hope that, starting from the individual study of the child educated with our method, other educators will set forth the results of their experiments. These are the pedagogical books which await us in the future. (Montessori, 1912, p. 774).

The Montessori principles and practices I learned about in my Association Montessori International (A.M.I.) teacher training course and observed in action in Montessori kindergartens in Munich, Germany, have played a major role in the development of my personal educational principles and practices both in thought and in action.

In this part of the thesis I present the background of Maria Montessori based on the following biographies: Standing (1957); Kramer (1976); Montessori, Mario Jr. (1976); and Hainstock (1978). I outline her principles and practices in thought by looking at what she wrote about the child, the environment and the adult. I refer mainly to Montessori's early books: The Montessori Method. Scientific pedagogy as applied to child education in the "Children's Houses" (1909/1912); Pedagogical Anthropology (1910/1913); Dr. Montessori's Own Handbook (1914) and; Volume one of The Advanced Montessori Method: Spontaneous Activity in Education (1916/1917). All these books, except Pedagogical Anthropology, are translations of books Maria Montessori wrote in Italian. Pedagogical Anthropology is a translation of a student's diligently kept notes of Maria Montessori's
university lectures, given over a period of four years.

Two of her later books: The Secret of Childhood (1936) and The Absorbent Mind (1949/1964), an almost verbatim record of a series of lectures given by Maria Montessori at the 24th international training course in Ahmedabad, India are also referred to. The Discovery of the Child (1962/1967) which I also refer to is a revised edition of Montessori (1909/1912). The following secondary sources were also used; articles in McClure’s Magazine (1911a; 1911b; 1912) Kilpatrick’s (1914); The Montessori System Examined; Applebaum’s (1971) "The growth of the Montessori movement in the United States, 1909-1970", and Gross’ (1986) Montessori’s Concept of Personality.

Finally, to show how these Montessori principles and practices were put into action, I describe three Montessori schools: the first Casa dei Bambini in 1907 in San Lorenzo, Italy, a contemporary Munich model Montessori kindergarten where non-handicapped and handicapped children learn side by side, and a private German-English Montessori kindergarten in Munich. Information on the first Casa dei Bambini is taken from Montessori (1909/1912; 1914); Tozier (1911a; 1911b; 1912); George (1912) and Kramer (1976). Information on the Munich model Montessori kindergarten is taken from Hellbruegge (1978; 1989) and Holstiege (1987) and my own visit. The description of the German-English Montessori kindergarten in Munich is based on my observations made over a three month period.
Maria Montessori's Background

Maria Montessori was born in Chiaravalle, in the province of Ancona, Italy on August 31, 1870, the year of the unification of Italy. It was a time of post-revolutionary optimism and hope for the oppressed.

Maria Montessori's father, as described by Kramer (1976), was "an old-fashioned gentleman of conservative temper and military habits" (p.22). In his youth he had been an officer in the Regiment of the Italian People's Movement, which fought for the expansion and re-establishment of the Monarchy of Victor Emmanuel the Second. He had studied rhetoric and math, wrote with a fine hand and spoke only Italian. He became a respectable member of the bourgeois civil service, and belonged to a generation that welcomed the creation of the New Italy, but found itself bewildered by the changes that came with it. Applebaum (1971) describes him as a military man descending from a noble family of Bologna.

Kramer (1976) describes Maria Montessori's mother, who was eight years younger than her husband, as an unusually well-educated woman for her time. She was very patriotic and devoted to the ideals of liberation and union of Italy. Applebaum (1971) writes that Renilda Stoppani was the niece of a famous Italian philosopher-scientist, Antonio Stoppani. Kramer (1976) writes of a monument erected in his honour by the university of Milan. With their only daughter, Maria,
she had an affectionate and understanding relationship. Applebaum (1971) also wrote that she believed in rigid discipline and raised her child in accordance with these beliefs.

After Maria Montessori turned twelve, her family moved to Rome so that she could get a better education (Applebaum, 1971). Her parents wanted her to become a teacher (Kramer, 1976). Before Maria discovered her academic abilities, she had wanted to be an actress. Then as her interest and aptitude in math grew, she chose to go to an engineering school for boys only, against the wishes of her parents. By the time of her graduation, her interests had shifted from the physical sciences (a career in engineering) to the biological sciences (a career in medicine).

At the time of Maria Montessori's entry to university, women were only admitted to the social sciences. Only through strong persistence did Montessori succeed in getting into the medical school in Rome (Kramer, 1976). She was the first woman in Italy to do this and therefore suffered many hardships. For example, she had to do her anatomy labs alone at night, since it was not acceptable for young men to do this in the presence of a woman. In 1896, Maria Montessori became the first female doctor in Italy.

This led to her being chosen, twice in a row, to attend the International Women's Congress as a representative of Rome. The first Congress she attended was held in Berlin, just a few months after her graduation. Here she delivered
an eloquent speech in support of women in the work force. At the second congress, held in London, she spoke against child labour in the Sicilian mines. During the year between the two congresses, she voluntarily continued the research she had begun for her medical degree at the psychiatric clinic of the university. She went to the asylums of Rome to observe children and to distinguish between the severe cases of mentally, physically and learning disabled children. How much of their state was due to environmental factors and how much to organic disorders was unknown. This surely was a question which Maria Montessori was already spending time reading and thinking about. (Kramer, 1976). She observed these dirty and deprived children and did extensive research in the libraries of Europe for methods which could help her to awaken these children’s social and cognitive faculties. Later, she was appointed director of the Department of Anthropology at the University of Rome. She also continued to work at other hospitals and in private practice.

In her research, she came across for the first time the names of two French doctors who were to influence her work enormously. One was the ear, throat, and nose doctor, Jean Marc Gaspard Itard (1774-1838) who had been the director of the National Institute for the Deaf and Mute of France. This doctor was known for his work with a young boy who had grown up in the wild, now known in the literature as the Wild Boy of Aveyron. This child had no language and lacked
social skills. He had been diagnosed as having an incurable disease and as being uneducable and unsocializable by the famous psychiatrist, Phillipe Pinel (1745-1826). Montessori (1909/1912) describes Itard, as a former student of philosophy and a follower of the principle of Helvetius: "Man is nothing without the work of man" (p.150). He believed in the omnipotence of education and was opposed to the educational principle which Rousseau had promulgated before the revolution: "Tout est bien sortant des mains de l'Auteur des choses, tout dégénère dans les mains de l'homme", -that is, the work of education is deleterious and spoils man. Itard divides the education of the savage into two parts. In the first, he endeavours to lead the child from natural life to social life; and in the second he attempts the intellectual education of the idiot. Later, in the same book, Montessori (1909/1912), writes about Itard's work with the wild boy of Aveyron,

I believe that there exists no document which offers so poignant and so eloquent a contrast between the life of nature and the life of society, and which so graphically shows that society is made up solely of renunciations and restraints (p. 152).

Hansel (1974), cited in Hellbrugge and Montessori (1978) states five principal aims of Itard's work with the wild boy of Aveyron:

1. To interest him in social life by rendering it more pleasant to him than the one he was then
leading and above all more like the life which he just left.

2. To awaken his nervous sensitivity by the most energetic stimulation and also through intense emotion.

3. To extend the range of his ideas by giving him new needs and by increasing his social contacts.

4. To lead him to the use of speech by inducing the exercise of imitation through the imperious law of necessity.

5. To induce him to employ a simple mental operation upon an object which meets his physical needs, over a period of time and then to transfer this to objects of instructions. (p. 36) (Trans., K. Hausen)

Hansel (1974) comments that this methodology sounds very much like behaviour modification.

The other doctor who enormously influenced Montessori's work was Edward Seguin (1812-1880), a former teacher and an unofficial student of Itard's (Boyd, 1914; Kramer, 1976). Seguin's ancestors for generations had been eminent physicians. On Itard's request, Seguin continued Itard's work. Seguin pursued experiments with small groups of "idiotic" children which led to the publication of, Traitement moral, hygiène et éducation des idiots et des autres enfants arrièrés ou retardés dans leur développement. In 1866 his other work, Idiocy and its Treatment by the
Physiological Method, was published in the United States, where he had emigrated.

Seguin divided education into a sequence of stages of development, from physical movement to intellectual tasks. He developed a series of graduated motor exercises using gym and daily life objects to stimulate motor and sensory pathways. These materials and others that he designed to train the senses are the forerunners of the Montessori materials.

In Marvin Rowen’s introduction to Seguin’s Report on Education, published in 1875, he describes Seguin’s physiological method as

...being firmly rooted in the belief that organ structure and function were inseparably intertwined. All manifestations of life were seen as expressions of functions residing in bodily organs. To modify a function one must be able to ‘take hold’ of that organ. Since the organs of sensation were within the ‘reach’ of the educator, instruction was accomplished, not by appealing to reason and ideas, but by perceptual training. Physiological education of the senses must precede development of the mind. (p. iv).

In Hansel (1974), cited in Hellbruegge and Montessori (1978) Seguin’s method is characterized by the postulates:

1. One sense must be able to complement another one.

2. Incomplete sensory-motor training which misleads
us instead to follow the command of the will must receive special training by which its original ability can be intellectualized without limits.

3. The senses have to be trained symmetrically.

4. The use of artistic senses enlarges the basis of experience, for real knowledge evolves only from experience.

5. Sensory experiences are intellectual functions. (p. 38) (Trans., K. Hausen)

Maria Montessori apparently had much difficulty (Kramer 1976; Standing, 1957) finding details of Seguin's method and she practically had to rediscover them. In a longer stay in France in 1899, she learned that teachers had access to Seguin's book, but they were only using his findings mechanically. His idea that mentally deficient children could be educated through this different method had however been dismissed as an illusion. Maria Montessori also learned that in Germany, Seguin's materials were to be found in some schools but they were almost never used.

According to Jervolino (1975), it was the popular belief at that time that mentally deficient children were to be educated like normal children since they were similar but weaker in their mental capabilities. Seguin's idea that a different method could bring these children up to the level of "normal" children and perhaps "normal" children to a higher level was not a popular one. Maria Montessori,
coming from the medical field, however, understood Seguin's point of view, which perhaps people in education were not able to, due to the nature of their training.

In London, that same year, Maria Montessori still was not able to find a copy of Seguin's second book. In Montessori (1962/1967) she writes "The fact that this book was unknown in England although it had been published in the English language made me think the Seguin system had never been understood". (p. 25).

During the 1897-1898 university term, Maria Montessori attended courses in pedagogy in Rome as an auditor and read the major works on educational theory of the last two hundred years. She read the works of Rousseau (1712-1778); Pereira (1715-1780), a neighbor of Rousseau, from whom education based on sense-training originated and who was the founder of the institute of which Itard was the director; Pestalozzi (1746-1827) and Froebel (1782-1852).

From Rousseau, Kramer (1976) writes, Montessori took the idea that the child's education should begin with the concrete rather than the abstract. What also came down to Montessori through educators who followed Rousseau's tradition was the idea of developing the senses prior to abstract learning in a schooling structure.

From Pereira, a famous educator of deaf-mutes, Montessori may have taken her idea of the supremacy of the sense of touch in learning.

Kramer (1976) writes that Montessori refined and
developed Pestalozzi's revolutionary notion of providing formal exercises which moved from simple to complex, and concrete to abstract for the successive stages of learning both mathematical symbols and language.

According to Kramer (1976), Montessori took on the following aims of an educator from Froebel:

1. To discover universal principles of life and apply them scientifically so as to fully develop man's divine spiritual nature.
2. To focus on the child's experience with the real world and the unfolding of his natural capacities.
3. To focus on learning as a process of self-discovery as the child passes through successive stages of development, by means of self-activity with as little adult intervention as possible. (p. 66)

In 1898 Maria Montessori gave a lecture on "Moral Education" at a Pedagogical Congress in Turin, Italy. Here she stated her view that mental deficiency was chiefly a pedagogical problem rather than a medical one. This led the Minister of Education, Guido Baccelli, to ask her to give a series of lectures in Rome on the education of mentally deficient children. This was the beginning of the practice of a scientific method of education in Italy and it led to the opening of a school for mentally deficient children in the elementary schools. For two years Maria Montessori successfully directed this Scuola Magistrali Ortofrenica. Later a Medical Pedagogy Institute was founded by a
philanthropic organization to which idiot children were brought from asylums.

From 1899 to 1901, Maria Montessori was involved in training teachers in her method of observation and education of mentally deficient children. She continued to make trips to London and Paris to further her research. She worked long days in the school, and in the evenings worked on the tables, charts and comparative analyses based on the observations she had made during the day. She also spent much time making material for use in the school. These two years she refers to as her only real qualifying years in the field of education. The successes were great. Some of these children learned to read and write and passed examinations given to "normal" children of the same age.

From 1902 to 1904, Maria Montessori returned to the University of Rome to study experimental psychology, anthropological pedagogy and educational philosophy. She looked into the connection between the German physiological psychologist Wundt (1832-1920), the psychological principles popular at that time, Seguin's physiological method of education, and applied them to the education of "normal" children. She also translated Itard and Seguin's early books into Italian. On completing the translation of a six-hundred-page work of Seguin, Maria Montessori received a copy of an English translation of this 1866 book. In this work she learned that her most respected predecessor had come to the same conclusion that she had, namely this method
could lead to a complete human regeneration if applied to "normal" children.

From 1904 to 1908, Maria Montessori became a professor of anthropology and held the Chair of this department at the University of Rome. As was mentioned earlier her book Pedagogical Anthropology (1909/1912) is a translation of a student’s diligently preserved notes of Maria Montessori’s university lectures, given over this four-year period. During this time the first large publication of a journal called Educational Anthropology came out. Montessori continued to teach her method, to practice medicine in clinics and hospitals as well as in her private practice, and to do anthropological research.

In 1906, Edoardo Talamo, the head of a real-estate agency, asked Maria Montessori to facilitate the set-up of childcare facilities in tenement houses being built in the slums of Rome. This gave Montessori an opportunity to apply her research and practices with the feeble-minded to normal, deprived children. In this proposition, Montessori saw a

...two-fold importance: the social importance which it assumes through its peculiarity of being a school within a house, and its purely pedagogical importance gained through its methods for the education of very young children which now made a trial (Montessori, (1909/1912, p. 43).

In January, 1907, the first Casa dei Bambini was established. By November, 1908, four such schools existed
for children of similar tenements. About this progress Montessori writes

It was emphatically not any method of education which caused these explosions, because the method did not exist; psychology followed them up and the method was built as a result of this volcanic eruption in the child (Montessori, 1963, p. 70).

Wundt's definition of experimental psychology as quoted by Montessori (1976, p. 63) was "it can be reduced to one single method, that is, observation which is regulated with precision". Applebaum (1971, p.20) writes "she [Montessori] began with several pre-determined principles she had derived from either her research and studies or her previous teaching experience".

Montessori's work was first introduced to the American public by McClure's Magazine: "An educational wonder-worker: The methods of Maria Montessori". (Vol 37, No. 1) and "The Montessori schools in Rome". (Vol. 38, No. 2). A more detailed description was published in Montessori (1909/1912) The Montessori Method. Scientific pedagogy as applied to child education in the "Children's Houses", which had been translated from the Italian version II metodo della pedagogia scientifica applicato all'educazione infantile nelle case dei bambini (1909) by A. George (the first American who was trained by Maria Montessori). This book was translated into twenty-four languages by 1917 and much later (1962) revised and published under the English title The
Discovery of the Child. In 1913, Maria Montessori went to America. The trip was arranged by S.S. McClure, who was no longer the publisher of *McClure's Magazine*.

According to Boyd (1914), Switzerland passed a law in June 1911 establishing the Montessori system in all its public schools. In 1912, preparations were being made to establish Montessori schools in England, India, China, Mexico, Korea, the Argentine Republic and in the United States (New York City and Boston). According to Kramer (1976) about two hundred books and articles on the Montessori phenomenon had appeared in America and England in the years from 1909 to 1914, more than seventy in the year 1913 alone. In 1913, William Heard Kilpatrick of Colombia University's Teacher's College, the leading teacher-training institution in the United States, was the keynote speaker at the meeting of the International Kindergarten Union and he took this opportunity to state his position against the Montessori method. He later elaborated this position in his book *The Montessori System Examined* (1914).

In 1916, Maria Montessori published her book: *L'Autoeducazione Nelle Scuole Elementari* which came out in English as the two volumes called *Spontaneous Activity in Education* and *The Montessori Elementary Materials*.

Between 1915 and 1918, Kramer reports that some sixty books about the Montessori method were published in the United States, only five of which appeared in the latter year. By the twenties, the flood had subsided and the name
Montessori was seldom seen in print in the United States.

In 1926, Maria Montessori gave a talk on "Education and Freedom" in Geneva, Switzerland. When the nationalist and fascist movements began, Montessori schools were driven underground or closed in Italy and Germany. In St. Petersburg, Russia, children of the Czar's family and his servants continued to be educated in a Montessori school. Schools had been opened in China, Japan, Canada and Chile. Preschools had been opened in Austria, Holland, United States and India.

In 1939, due to the political situation in Europe, Maria Montessori accepted an invitation to go to India. There and in Ceylon she gave courses. In 1946, Montessori returned to Europe and gave courses in London and Edinburgh. In 1947, she re-established the Montessori Society in Italy. In 1949, she returned to India to give another course and to open some schools. *The Absorbent Mind* (Montessori, 1949) is an almost verbatim record of this series of lectures given by Montessori at the 24th International Training Course in Ahmedabad, India. She also attended a large International Montessori Congress, held in San Remo, Italy, received an Honorary Degree from the Sorbonne and was nominated for the Nobel Peace Prize three successive times. In 1950, she gave a talk at UNESCO and was named Honorary citizen of Perugia, Milano and Ancona. She also received a Dr. of Philosophy from the University of Amsterdam. In 1952, she died in Holland where she is now buried.
Principles and Practices in Thought

The child.

In Montessori's first book (1909/1912) about the children's houses, she writes:

...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. The child is a body which grows, and a soul which develops. These two forms, physiological and psychic [psychological] have one eternal font, life itself (p. 104).

Maria Montessori believed strongly that the origins of development in the species as well as in the individual lie within the organism. (Montessori, 1909/1912). The fruitful germ from which life comes develops in itself according to a biological destiny fixed through heredity. Life makes itself manifest; life creates; life gives. Life is held within certain limits and bound by certain laws. The fixed characteristics of a species do not change - they can only vary. We can act on variations which are in relation to the environment, and whose limits vary slightly in the species and in the individual, but we cannot act upon the mutations, for they are stronger than the modifying elements of the environment. Montessori explains: a species cannot mutate or change into another species through any phenomenon of
adaptation, as, on the other hand, a great human genius cannot be suffocated by any limitation, nor by any false form of education. Montessori describes life as a

...superb goddess, always advancing, overthrowing the obstacles which the environment places in the way of her triumph whether it be a question of species or individuals, there persists always the forward march of those victorious ones in whom this mysterious life-force is strong and vital (Montessori, 1909/1912, p. 106).

In Maria Montessori's writings one notices many terms which she borrowed from other sciences to describe the phenomena of child development which she observed. She noted similarities and differences between humans and other species as well as between the human infant, child and adult.

In accordance with her position as a professor of pedagogical anthropology, she described the child's morphological growth in comparison with that of the adult's. Montessori, (1909/1912) writes

...a child in the general morphological growth of his body is characterized by having a torso greatly developed in comparison with the lower limbs. In the new-born child the length of the torso from the top of the head to the curve of the groin, is equal to 68% of the total length of the body. The limbs then are barely 32% of the stature. During growth these
relative proportions change in a most noticeable way; thus, for example, in the adult the torso is fully half of the entire stature and, according to the individual, corresponds to 51% or 52% of it (p. 138).

Montessori then described how the morphological difference between the new-born child and adult is slowly bridged. In the first years of the child’s life the torso remains tremendously developed, compared to the limbs. In one year, the height of the torso corresponds to 65% of the total stature, in two years to 63%, in three years to 62%.

Montessori (1964/1949) stated that although human infants are born with a few instinctive and automatic actions necessary for life (crying, sucking, and breathing), they are basically helpless. They have no fixed innate behaviours and their adaptability is therefore unlimited. Infants come into the world as members of a society of adults, who are ill-equipped to understand them. Their actions are limited by a characteristic helplessness and their relationship to other humans. Their initial movements are chaotic and unorganized. Gradually they become regulated, coordinated, and restrained through learning and conscious direction.

Using terminology from embryology, Montessori described two embryonic periods, a prenatal, physical (phenotype) embryonic stage that is shared with other species; and a postnatal, psychological (genotype) embryonic stage, specific to humans.
Maria Montessori characterized the infant mind as working unconsciously and being driven from within, as opposed to the adult mind which can work consciously and be driven from without. In language reminiscent of Freud's work she wrote about a work drive and mental energies. She also used Freud's term "libido" as well as Percy Nunn's term "horme" to refer to a general, dynamic, universal life force which is independent of all external influences and is supplied by nature. Maria Montessori labelled the child's mind an "absorbent mind" (Montessori, 1949/1964). What is absorbed is determined by the sensitive periods and is supported by the mental energies of the work drive. Material is absorbed and "incarnated" through the infant's interaction with things in the environment, and in this way the substance of the psychological embryo is formed. Gradually the child mind becomes more and more similar to the adult one.

Influenced by the Mutation Theory of the Dutch botanist, Hugo De Vries (Kramer, 1976; Standing, 1957), in particular his discovery of distinct periods of sensitivity in animal and plant development, Maria Montessori set out to find their equivalent in child development. She wrote (Montessori, 1936) about sensitive periods specific to the human infant/child. Once evolved, these sensitive periods continue to build to perfection while the corresponding sensibility gradually disappears. Among these sensitive periods are those for language (0-6 years), order (2-4
years), interest in small objects (2.5-6 years), social
behaviour (2.5-7 years), training of the senses (3-6 years),
cultural subjects (3-6 years).

Montessori called the period from 0 to 6 years of age,
the sensorimotor stage. This is one of the few ways in
which her theory differed from Piaget's. Piaget's sensory
motor stage was limited to only the first two years of life.
Montessori characterized the sensorimotor stage as a period
of high motivation and pleasure in learning, in which
irreversible progress in the formation of the mind takes
place. This period is divided into two substages. The first
substage (0 - 3 years) is characterized by the unconscious
assimilation of the child's environment by the absorbent
mind. During these years all images, especially those
satisfying human potentialities and sensitive periods, are
absorbed. It is a time of unconscious, creative development
which leads to the formation of the mind. Three sensitive
periods emerge: i.) for movement, ii.) for language and
iii.) for order.

In the sensitive period for movement, the development
of the hand, balance and walking occur. During this
sensitive period, the child learns to stand upright and to
walk, becomes stronger and takes part in interactions with
other humans and with the environment. These abilities are
critical for the development of personality and
intelligence, since it is assumed that there is nothing in
the mind that was not first experienced sensorially.
One of the earliest and longest sensitive periods (up to the fourth year) is the one that leads the child to acquire the language of the environment. Language acquisition is a complicated process in which seeing, hearing and speaking are involved and it is considered to be closely related to the emotional development of the child. The child initially perceives speech without pairing it into meaningful sound units. At four months, the child fixates on the lips of speaking individuals and produces nonverbal sounds (training of speech muscles). At six months, the child produces syllables that belong to the language heard. The first sign that the child is beginning to understand language is laughing in response to single words. In the early months up to the fourth year, a child can learn any language easily.

In the sensitive period for order, Montessori distinguishes between two principles: 1.) sensitivity for external order and 2.) sensitivity for internal order. Through the sensitivity for order, the child takes in every element of orientation of the surroundings that satisfies the need for order and builds an internal representation of the environment. An external environment which is routine and stable is believed to facilitate the process, and give the child a sense of prediction and control of the environment. At the high point of this sensitive period (third year), the child shows a lively interest in the order of things in space and time. The child gets upset when
regular or routine occurrences are disrupted. Montessori describes the intense protest (sign that something isn't right) as a "mood". When in familiar orderly surroundings and/or in a routine, such "moods" rarely occur. The sensitive period for order is usually completed towards the end of the third year.

These sensitive periods and the absorbent mind work together in an intricate way, influencing and enhancing each other. This process can only be indirectly influenced. The child grows and develops harmoniously from one substage to the next if the sensitive periods in conjunction with the human potentialities of the previous substage are adequately satisfied. Otherwise, deficits in the different areas will appear and these can only be overcome through consistent, appropriate hard work (if at all). Montessori refers to the transition from the first to the second substage as a social rebirth of man.

The second substage (3 - 6 years) is characterized by the actualization and perfection of earlier learning. Two sensitive periods dominate this stage and a third one prepares the child for the next stage. The sensitive periods serve 1.) to develop consciousness/will through individual activities in the environment (strengthening the will; Ego development), 2.) to refine and perfect previously acquired abilities (movement, language, order) and 3.) to develop sensitivity for social life.

The first sensitive period (development of
consciousness/the will) is manifested in the child's conscious interest in certain sequences of actions, and by the mind's conscious guidance of actions (both in their selection and the actual carrying out of them), rather than by some unconscious mechanism as was the case in the first substage. The second sensitive period manifests itself in the child's consciousness of minute differences in language, movement and order. In the third sensitive period, the social skills of the child are still guided by the mind, and not by a conscious awareness of a social group. Children who come together do not do so consciously. Montessori refers to this time as the stage of the social embryo. It is important that children have many social experiences because these are necessary for the subsequent development of moral judgment and social activity. The influence of development is now somewhat more possible through direct encouragement, conscious support, and by facilitating the interaction of the child with the environment and people.

Development is characterized as external acts or work stimulating internal development which then manifests itself. These two processes are also inextricably intertwined. Work develops the child spiritually. A child with a fuller spiritual development works better and the improved work delights him/her. The mental grasp of an idea requires repetition and this repetition is an exercise which develops life. In this way internal self-development leads to external self-discipline. The will and the mind are
believed to be formed in this way and obedience, considered by Montessori to be a law of life, is a result of this development. Obedience first appears in the child as a latent instinct when the personality begins to take form. The inherent personality limits the preparing or perfection of physical and mental development: the preparing and perfection occur on the same track.

Montessori (1909/1912) gives the following example to illustrate this. The child begins to try a certain exercise and after some time goes through it perfectly; s/he is delighted, stares at it and wishes to do it over again, but for some time subsequently, the exercise is not a success. Then comes a time when the child can do it nearly every time when s/he tries voluntarily, but makes mistakes if someone else asks him/her to do it. The external command does not as yet produce the voluntary act. When, however, the exercise always succeeds, then a request from someone else can bring about orderly adequate action on the child’s part, and the child is able each time to execute the action requested. Finally, there is a period of complete development in which the capacity to perform an operation is permanently acquired. So there are three stages: a subconscious period in which order is produced from a disordered mind by a mysterious inner impulse, producing a completed act outside of consciousness; a conscious period in which some action is carried out in part by the will; and a third period in which the will can direct and cause the
acts in answer to someone else's request. According to Montessori (1909/1912) this is how obedience develops. She claims that harmony is refinement not contrast, and therefore there must be a finesse of the senses if we are to appreciate harmony. This is to be accomplished by repeating exercises until they can be perfectly directed by the will.

In conclusion, Montessori sees development progressing through the child's preparing and perfecting him/herself through his/her powers. The child's progress is guided by an inner force/voice of nature which distinguishes him/her as an individual. Liberty, fostered by rigorous avoidance of the arrest of spontaneous movements and the imposition of arbitrary tasks as well as the suppression or destruction of useless or dangerous acts, is crucial, particularly in the early stages when the child draws the forces needed for development from nature. Discipline and obedience follow the formation of the will and the mind, which are prepared in detail by means of distinct repeated exercises. This makes the child's adaptation to civilization as smooth as possible.

The function of childhood for Montessori is to reach the human potential through complete physical, mental, moral and spiritual development at each stage. As a result of her observations and research, she believed that this can be attained through liberty and mastery of the self, through spontaneous interactions between the body and the soul guided by innate inner laws, facilitated by a prepared
environment (described in the next section).

Like Freud (Kramer, 1976) Montessori considers early development crucial to the further development of the child. Her method therefore facilitates development to the fullest, in order to lay a strong foundation for further motor, cognitive and social development.

Montessori wrote about "normalized" children. This refers to both a process and a product of the Montessori method. It refers to children who are autonomous, able to select, concentrate and successfully use the materials of the prepared environment. The process of normalization is to further the building of inner cognitive structures which lead to what Montessori called a normalized child.

According to Gross (1986) the concept of personality and its organization is the essence of the Montessori method. Personality is defined as the totality of one's potentialities. Physical potentialities include the system of relationships involving brain, sense organs and muscles. This is more potent than the "vegetative system" due to the relationship with the mental abilities, particularly the will. The vegetative system for the most part is "constant" and "fixed". The mental potentialities include the intellectual, volitional, affective and moral abilities. The intellectual abilities are acts of distinguishing, classifying, cataloguing and processing facts, and in addition powers of imagination and abstraction. The volitional abilities are the will power/mental activity that
directs the physical elements. The emotional abilities are the feelings of joy and satisfaction, and experiences conducive to healthy development. Feelings of frustration and incompleteness are experiences that don't satisfy a person's primitive impulses. The moral abilities are mental activities involved with conscious decisions of right and wrong. Such decisions of right and wrong are first processed from a "learned pattern of behaviour" and then based on an "inner conscience" which causes us to recognize the circumstances favourable to the inner conscience. They are bound up with life itself and not with acquired social habits.

The environment.

Maria Montessori believed humans originally belonged to nature (1909/1912). When humans discovered the secret of intensifying the production of the soil, they passed from a natural state to the artificial state of civilized life. Montessori believed the child draws the forces necessary for physical and spiritual development from nature and then follows the same path to adulthood which humans did to become civilized, renouncing the life of nature in the process. Education, according to Montessori should soften this transition from nature to social life. Natural liberties should be sacrificed only as much as is necessary for the acquisition of the greater pleasures which are offered by civilization.
Maria Montessori created an environment for the child based on her observations of children and her extensive reading. According to Montessori (1909/1912) the environment should: 1.) liberate the children, and ii.) facilitate the directress' observation of the children. These are the two ingredients Montessori considered necessary for the practice of scientific pedagogy.

The Milan school of scientific pedagogy, established by a well-known physician and supported by Giuseppe Sergi, an anthropologist, involved a methodical study of the student/child, carried out using the framework of pedagogical anthropology and experimental psychology. In Montessori (1909-1912), she writes

It is not enough, then, to prepare in our Masters the scientific spirit. We must also make ready the school for their observation. The school must permit free, natural manifestations of the child if in the school scientific pedagogy is to be born (p. 15).

Maria Montessori considered the environment a secondary factor in the phenomenon of life. It could modify, in that it could help or hinder, but it could never create, as the interior factor of all plants and animals can (Montessori (1909-1912). It can act more strongly upon the individual life the less fixed and strong that individual life may be. It can act in two opposite ways, favouring life or stifling life.

Gross (1986) writes that the Montessori environment
should provide the opportunity for the satisfaction of one's primitive urges. An "atmosphere of liberty" and "external objects" are necessary environmental conditions for the spontaneous development of the personality. Liberty is the individual's freedom to act in accordance with the natural laws of development. Didactic materials, the external objects, act as a "gymnasium" for one's sensibilities. They form a staircase of materials which represent the means for the child's ascent to higher levels of formation. The function of the materials in the environment is to create the occasion for intellectual and volitional activities which simultaneously enhance their development while serving to coordinate all the elements of personality.

This environment is to facilitate further observation and to become the child's key to the universe. It takes into consideration the child's absorbent mind, the sensitive periods, the mental energies, the work drive and the means of the child's construction of his/her personality.

From these observations the materials of the Montessori prepared environment crystallized. This environment is divided into practical life exercises, sensorial materials, math materials, language materials, and cultural (science, history and geography) materials. They stand on open shelves in a specific developmental order. Each material has a name, a particular purpose and an error control, so that once the child has been shown how to use it, it can be chosen and used freely and autonomously. Each exercise
consists of an ordered set of steps which are complete in themselves. The skills the child learns using the materials are the key to the universe.

The practical life materials are considered fundamental. They consist of a wide variety of activities isolated from daily life that are meant to improve sensorimotor coordination, refine and perfect previous learning, make the child independent, and prepare the child for later academic learning.

One example of such an exercise is the clothes peg exercise, which consists of a square plastic basket with coloured clothes pegs, and involves carrying the material to the place of work and then removing and replacing the clothes pegs. This requires hand-eye coordination and finger dexterity which prepare the child for holding and directing a pencil in writing. When mastered, this skill allows the child to hang up wet towels or clothes for drying (a typical activity in a large Montessori class).

The sensorial materials were designed to develop the senses individually and also to prepare the child for later academic learning. The sense of touch is considered fundamental. The purpose of the exercises is to refine and perfect earlier learning, identify contrasts, pairs and seriations, and to prepare the child for later academic learning.

An example of such a material is the pink tower which consists of ten cubes of the size 1, 2, ... 10 ccm. The cubes
are carried one at a time to the selected place of work. In this way, there is movement involved and each cube is isolated. The contrast between the smallest and the largest cube can be isolated, and a series of ten built. Then the child can experiment freely. When the child has decided s/he is finished, the largest cube is isolated and carried back to the shelf. The tower is rebuilt in its original place. There are ten cubes to inherently prepare the child for the decimal system. The sequence can later be matched to a similar series of prisms.

The math materials consist of concrete materials which help the child to understand the structure of the decimal system and later to perform the basic mathematical operations of addition, multiplication subtraction and division. The progression is always from the concrete to the abstract, from the whole to its parts, and sensory motor learning is still an important channel of this learning.

The language materials are Maria Montessori's own, as far as I have been able to ascertain (Montessori, 1912/1909; 1914; 1976). Although she separated the skills involved in writing and reading, they can be learned in parallel. Writing has been subdivided into the mechanics of holding and directing a writing implement, and into knowing the letter/sound correspondences. For the former, Maria Montessori designed geometric insets, the sandpaper letters and the movable alphabet. The geometric insets are square metal insets with removable geometric shapes, which can be
traced and filled in with continuous lines starting from the top left, moving down and up towards the right. This is preparation for holding and guiding a writing implement. The sandpaper alphabet is used to learn the shapes of the letters and the sounds that are associated with them through sensorimotor learning. The movable alphabet allows one to write without the exertion of actually writing.

For reading, Maria Montessori started off by associating known objects with their spoken names. This is part of every exercise, and it becomes an isolated exercise in itself. When the names of objects are known, the written names can be matched to the objects. Short phonetic words are learned before longer ones. Irregularities are isolated and learned individually. One exercise does not have to be completed before moving on to another. For example, one can have worked with some of the sandpaper letters and move on to work with these letters in the movable alphabet. Also, one can start the spoken and written object name exercises long before all the letters are known. There is a lot of room for flexibility and for individual differences.

The cultural materials consist of simple science experiments, sensorial geography materials, etc. The geography materials consist of a small globe with land made of sandpaper and water painted blue; another globe where the continents are colour-coded; some land and water forms in small three-dimensional forms (island-lake, gulf-peninsula etc.) geography puzzles, and a set of flags of all the
countries of the world.

The environment is structured to meet the needs of the child according to Montessori's views, and to prepare the child for later academic learning. In this environment, the child is free to select a material, but must acquire the discipline to work appropriately with it. Through the concentration that the materials require, the child is to come to a polarization of his/her attention, and this normalizes the child. I have observed occurrences of this phenomenon and it is really quite miraculous.

The adult.

There are typically two adults in a Montessori classroom: one Montessori directress trained in the Montessori method and an untrained assistant. Their role is to facilitate the link between the child and the prepared environment. The directress must understand the use and the purpose of the materials and how and when to demonstrate them to each individual child in the class. Montessori wrote

A great art must suggest the moment, and limit the intervention, in order that we shall arouse no perturbation, cause no deviation, but rather that we shall help the soul; which is coming into the fullness of life and which shall live from its own forces.

(Montessori 1909/1912, p. 115)

Regarding Montessori material demonstrations she wrote,
...brief, simple and objective lessons must be considered by the adult as an explanation of the object and of the use which the child can make of it. The fundamental guide must be the method of observation, in which is included and understood the liberty of the child. So the teacher shall observe whether the child interests himself in the object, how he is interested in it, for how long, etc., even noticing the expression of his face and she must take great care not to offend the principles of liberty. For, if she provokes the child to make an unnatural effort, she will no longer know what is the spontaneous activity of the child. If, therefore, the lesson rigorously prepared in this brevity, simplicity and truth is not understood by the child, is not accepted by him as an explanation of the object, the teacher must be warned of two things: first, not to insist by repeating the lesson; second, not to make the child feel that he has made a mistake, or that he has not understood, because in doing so she will thus alter the natural state which must be used by her in making her psychological observations. (Montessori, 1909/1912, p. 108).

About Montessori directresses she wrote:

Our scientific teachers, instead, are familiar with certain instruments and know how to move the muscles of the hand and arm in order to use these instruments; besides this, they have an intellectual preparation
which consists of a series of typical tests, which they have, in a barren and mechanical way, learned how to supply. (Montessori, 1909/1912, p. 7)

Two pages later in the same book Montessori wrote:

It is my belief that the thing which we should cultivate in our teachers is more the spirit than the mechanical skill of the scientist; that is, the direction of the preparation should be toward the spirit rather than toward the mechanism. In other words we wish to awaken in the mind of the educator an interest in natural phenomena to such an extent that, loving nature, he shall understand the anxious and expectant attitude of one who has prepared an experiment and who awaits a revelation from it. (Montessori 1909/1912, p. 9)

Towards the end of this same book Montessori wrote:

The educator must be as one inspired by a deep worship of life, and must through this reverence respect while he observes with human interest the development of the child life. We must neither mar nor stifle the mysterious powers which lie within these two forms: the physiological (body) and the psychic (soul), of growth but we must await from them the manifestations which we know will succeed one another. (Montessori, 1909/1912, p. 104).

The directress must be constantly observing and guiding the children to the appropriate use of the materials and to
respecting each other and their environment. This is particularly important in the beginning. Through observation, the directress should become knowledgeable about each child’s development, weaknesses and strengths.

Montessori (1914) considers observation to be the principal tool of teaching since it lies at the base of her pedagogical method. She compares these methods of observation to those of the biologist, zoologist, medical doctor, experimental psychologist and pedagogical anthropologist. McClure therefore called her the woman who looks at children as a naturalist looks at bees.

Kilpatrick (1914) acknowledges the far-reaching effects the study of science had upon Montessori and her educational theory. He claims that in the general wish to apply scientific conceptions to education, few surpass her. He points out that in addition to the general demand for a scientific attitude on the part of teachers, we find scientific elements of her procedure based on her scientific experience. For example, the teacher must keep both anthropomorphic and psychological records of each child to show to visitors.

Kilpatrick (1914) claims however that too often the data are so recorded that they barely do more than keep alive in the teacher a general spirit of child observation. Montessori’s intention was that we learn to refine our powers of observation, both in individual cases and to schooling as a whole. Instead of remembering that
approximately ten children spent the morning gardening, we
can begin to "see" each individual and to remember the
impression that the child made, whether s/he took a leading
role, perhaps, or imitated the others; whether s/he had
arguments or set about solving problems. Gradually we
become able to define the possible origin for all these
different behaviours; whether they are following an
essential need, in accordance with their inner growth, or
whether they are acting "at second hand", showing interest
in order to attract attention or recognition from another
child, or from an adult.

Montessori's other application of the scientific
attitude is found in her concept of liberty of the child as
a prerequisite for the scientific study of educational data.
"If a new and scientific pedagogy", says Madame Montessori,
"is to arise from the study of the individual, such a study
must occupy itself with the observation of free children".
(Montessori 1909/1912, p. 28)

Montessori (1909/1912) writes that one cannot create
observers by saying "observe" but rather giving them the
power and means for this observation. These means, she
claims, are procured by educating the senses. This leads to
self-education. Refined and well-trained senses bring about
closer observation of the environment, attract the attention
and lead to psychosensory education. Montessori (1967)
declared that directresses should be trained in educational
anthropology and experimental psychology to take physical
measurements and carry out psychological experiments. The
directress must become much more a passive than an active
influence, and her passivity shall be composed of anxious
scientific curiosity, and of absolute respect for the
phenomenon which she wishes to observe. The activity must
lie in the phenomenon. She must understand and feel her
position as observer and permit and observe every
manifestation that does not offend or annoy others, whatever
it be, and under whatever form it expresses itself.

This observation should lead to a study of life and its
divine secrets and it should guide the directress in her
directing activity and giving lessons. These lessons should
be brief, simple, and consist only of the absolute truth.
The directress' observations guide her to know when, to whom
and for how long to present a lesson. The child's interest
in the object lesson, how s/he is interested in it, for how
long, even the expression on the child's face are noted. The
directress should not insist on repeating a lesson or making
a child feel s/he has not understood because this can cause
the child to make an effort to understand, altering his/her
natural state which the directress needs to make her
psychological observations.

The directress creates an order in the class which is
then to be reflected in the children's work habits and their
interactions. Such order should give the children a feeling
of security and accomplishment. The directress is required
to attain a good balance between freedom and discipline, as
well as respect for one another and the environment.

The following descriptions of the first Casa dei Bambini in San Lorenzo, Italy, in 1907; and observations made at two contemporary Montessori kindergartens in Munich, Germany are given to illustrate these principles and practices in action.

Principles and Practices in Action

The first Casa dei Bambini in Italy.

The first Casa was started in January of 1907, at 58 Via dei Marsi, in San Lorenzo, a very poor barrio of Rome. San Lorenzo is a quarter where the underpaid live, often unemployed workingmen, a common type in a city which has no factory industries. It is the home of him who undergoes the period of surveillance to which he is condemned after his prison sentence is ended. They are all here, mingled, huddled together. The district of San Lorenzo sprung into being between 1884 and 1888 at the time of a great building fever. No standards, either social or hygienic, guided these new constructions. The greater the space covered the greater the gain of the interested banks and companies was. (Montessori, 1909/1912, p. 49)

The first Casa dei Bambini was annexed to such a workingmen's tenement.

Kramer (1976) describes the conditions under which the environment of the first Casa dei Bambini was constructed.
Some real estate men asked Montessori to be in charge of facilities for the children in order to get them off the streets and to restrain them from damaging their tenement buildings. These men were not prepared to spend a penny on toys or equipment of any kind, and there was no money for meals. There was a room, provisions for one supervising adult and fifty or sixty wild children ranging in age from two to seven years.

Montessori set about enlisting the support of society women she knew to be interested in social projects, asking them to help collect funds for toys and materials, and to improve food and sanitation. Montessori found an untrained woman of about forty, named Candida Nuccitelli, the daughter of the building porter, and put her in charge of looking after the children under her guidance and direction. According to Applebaum (1971) Candida had begun a training in education, and was working as a seamstress. Montessori was still very occupied with her many other responsibilities of teaching, research, and practice. She could sometimes only stop in once a week to hear a report of what had been going on and to make her own observations. It was only in November that she started to come more frequently, to observe and experiment.

The environment at the Casa dei Bambini consisted of ample playground space for a garden in direct communication with the schoolroom, so that the children were free to go and come as they liked throughout the entire day. Desks and
benches or stationary chairs were abolished and replaced with light, solid, small and large tables which the children could carry, and little chairs of wood and wicker armchairs. There was a little washstand, so low that the children could use it, painted with white waterproof enamel, broad upper and lower shelves which held little white enamel basins, small shelves for soap dishes, nail brushes, towels, etc. plus a receptacle into which water emptied. Each child also had a small cupboard to put away the soap, nail brush and tooth brush. A series of long, low cupboards for the didactic materials, with doors which could be opened easily by the children, was decorated with plants, aquariums and toys with which the children were allowed to play freely. There was ample blackboard space, hung so the children could use it readily. Attractive pictures such as Raphael’s Madonna della Seggiola were hung on the walls. The physical setting was a naturally bright space.

Montessori then brought in some teaching materials based on those Itard and Seguin had designed for the feeble-minded, which she had modified in her work with the children at the orthophrenic school. She asked the assistant to make them available to the children, placing no restrictions upon the teacher and imposing no special duties. At this initial stage, Montessori merely wanted to be able to observe. The environment was still fairly simple. There were some toys which friends had donated, rough tables of the kind used in offices at which three children could be seated, a desk for
the teacher, and a massive storage cabinet in which the toys and materials could be locked at night.

Gradually over the period of a few weeks, Montessori noticed that the sullen, disinterested, withdrawn and rebellious children showed a remarkable interest in the didactic materials. They chose them over the toys and drawing materials. Different from the retarded children who had to be coaxed into paying attention, these normal children immediately began to place wooden cylinders in the corresponding holes in a board, arrange cubes in descending order of size to build a tower, put circles, squares, and rectangles into spaces of the same shape in a wooden tray. These children preferred these materials to dolls, balls and little wagons and they would persist at a task, repeating it over and over again. They developed unsuspected powers of concentration and began to change socially as well. They all looked healthier, even though there had been no change in diet or the amount of time spent outdoors.

From timid and wild as they were before, the children became sociable and communicative. They showed different relationships with each other. Their personalities grew, and they showed extraordinary understanding, activity, and confidence. They were happy and joyous. (Montessori, 1909/1912, p. XX)

Montessori observed these behaviours, pondered over their significance and proceeded to make some changes in the environment. For example, mats for working on the floor
were added when Montessori observed that the children spontaneously sat on the floor. Low open shelves to hold the materials that she had adapted from Seguin, (and others that she created or modified to aid the child in attaining his or her developmental potential) later replaced the closed cupboards. She talked with the teacher about how the children used the materials, watched them herself when she was there, sometimes for hours at a time. She continually made slight modifications to the materials to better adapt them to the normal children’s use. When she hit on the right thing, she stopped modifying and then observed to discover what should be added to the classroom.

Over the years through further observations and experimentation, this prepared environment became more and more complete and fixed.

Applebaum (1971) describes this period in the following way. The room was equipped with a little bit of everything. Initially the material was kept out of reach of the children until the teacher distributed it. Gradually the children demonstrated a change from possessiveness and mishandling of the objects to a sense of love and care for those things which were given to them. At that point, open cabinets (now indispensable to any Montessori school) were added and the children were allowed to get their own material. It was noted which equipment the children selected and what they did not use. The latter was then eliminated from the environment.
Fifty or sixty children between the ages of two and seven years were present from nine in the morning to five in the evening. Montessori believed these hours were necessary in order to follow a directed line of action which would be helpful to the growth of the child.

An outline of a schedule had been hung in the casa but never entirely followed. Montessori concluded that a schedule in which the material is distributed in an arbitrary fashion is not adapted to a regime of liberty. Kramer (1976) writes that the day began with a series of exercises of practical life: cleanliness, order, poise and conversation and that this was the only part of the program that was fixed, since it proved to be successful.

Before the children entered the schoolroom, white aprons were put on over their clothes and it was checked that all the materials were in order and clean. As they entered the schoolroom, an inspection of cleanliness was made. This was carried out in the presence of the mothers, without calling their attention to it directly. The children's hands, nails, neck, ears, face and teeth were examined and their hair groomed. If any garments were torn, soiled or ripped, if buttons were lacking, or if the shoes were not clean, it was called to the attention of the child. In this way, the children became accustomed to observing and taking an interest in themselves. As part of this cleanliness routine the children were bathed once a week on the day of their birth. Montessori designed a tub which
allowed the teacher to bathe two children simultaneously in separate water.

A biological chart including such information as the children’s weight, standing and sitting height was completed for each child. Montessori also designed practical devices with which these measurements could be taken once a month, on the date of the child’s birth. Once a year, on the child’s birthday, a visit to the doctor was made to fill in other details of the biological chart. The teacher also visited the home to fill in some background information.

After this fixed part of the morning, the teacher began to demonstrate various materials to individual children. Initially, only the practical life and the sensorial materials were introduced. Montessori had originally thought that the children were too young to be taught to read and write. It was only when the children requested and showed great interest that Montessori made some materials, presented them to the children and attained miraculous results.

Lunch and a minimum of a one-hour rest were a routine part of the day. If one were to look in, in the morning, one would have seen children busy at different tasks: some sweeping the floor, others playing with some toys that were donated by Montessori’s friends and acquaintances; others would be using various materials; all would be busy at one thing or another. The teacher would have her eye on the children as a group and would be occupied with a single
child or a small group of children.

The first Casas fulfilled three-fold expectations. As school within houses, they had a social function. As a method of education for the young, they had a pedagogical function. In their comparison of children who had not the force to develop (elementary school age mentally deficient children) and those who had not yet developed (three to six year-old children who had not yet been to school) they also had an experimental function.

A Munich model Montessori kindergarten.

Over twenty years ago, Drs. Pechstein and Hellbruegge completed research in social and language development showing that infants and young children reared in mixed age groups are more advanced than those reared in groups of same-aged children (Hellbruegge 1978; 1989). The length of stay in same age groups caused developmental lags to increase. From this finding, the two medical doctors concluded that the segregation and isolation of handicapped infants and children must therefore be a further handicap. This led to the founding of live-in and out-patient clinics for handicapped infants and children. An eclectic group of doctors and therapists got together to work under the motto: early diagnosis, early socialization and early intervention minimize the effects of handicaps on child development. This clinic is now affiliated with the social medicine and child medicine faculties of the university in Munich; the
German Academy for Developmental Rehabilitation and Action Sonnenschein, which financially supports the Montessori kindergartens, elementary and special education classes for multiple and differently handicapped and non-handicapped children.

Margaret Aurin, a former student of Maria Montessori who had started the first Montessori kindergarten in Bavaria, helped set up the first Munich model Montessori kindergarten. It was started in a renovated house near the university and a children's medical and therapy center, called the Children's Center. It began with ten non-handicapped children, and then gradually handicapped and more non-handicapped children were introduced. There was space for 50 children. Experience showed that the ratio of non-handicapped to handicapped children that functioned best was four to one. The results were good as long as the educators believed in the method and in integration and as long as the handicapped children were introduced gradually and appropriately. In 1985, the kindergarten and the elementary classes which had been added moved to a large new facility near the in-patient clinic and hospital. A morning in a kindergarten in this new facility will now be described. This description is based on my visit, Hellbruegge (1978; 1989) and Holstiege (1987).

The new, large, pink complex houses kindergarten, elementary and secondary classes, a gym, swimming pool, staff room and offices, and an outdoor playground to which
all classrooms have easy access. The whole building is wheel-chair accessible. Many of the rooms are octagonal. They have many windows, a large one-way observation window for family, staff and visitors, and many windows to the outside to make the rooms very bright. The three kindergartens are adjacent to each other. They are on the first floor and have direct access to the outside and to the gym.

The three kindergarten rooms each accommodate thirty children, of whom seven or eight have different handicaps. There is a morning and an afternoon group. In total there are therefore six kindergarten classes, and two teachers trained in the Montessori method, in each kindergarten. In one kindergarten, the teacher herself had a physical handicap. There are more Montessori materials available than in the average Montessori kindergarten, since some of the classical Montessori materials have been adapted for use with handicapped children. This was given a lot of thought when the rooms were first designed, for one does not want the children to be overwhelmed by the complexity of the environment. Movable shelves were designed for their flexibility. They could be turned to the wall and moved to any area without disturbing the order of the prepared environment.

The morning routine is the following. At eight, the children begin to arrive. From nine to ten-thirty or eleven, there is free work and then a snack is shared. Soon
thereafter it is time for the children to get ready to go outside from where they are picked up or bused home.

The gym and pool are visited once a week. There are a few circle activities. The children are left free to choose what they work at and the teacher at an opportune moment demonstrates new materials to the children.

My observation was that almost all the children were talking and busy working at different things. A few were idle, but as long as they were not disturbing another child, this was acceptable. The teachers were observing the whole room and at the same time working diligently with one child at a time.

The Montessori principles and practices are rigorously adhered to. The handicapped children are treated no differently from the non-handicapped. Special treatment is received in the individual and small group therapy sessions. Therapists come to observe the children in the kindergarten, and exchanges between teacher, therapist, doctor and parent are fostered. The general advancement of the class is not rushed and the emphasis is more on social and cognitive integration of the group.

A private German-English Montessori kindergarten in Munich.

A white stucco duplex in a suburb of Munich, the home of a Montessori trained teacher, teacher trainer and mother of two, who has worked in the field for ten or eleven years,
houses this kindergarten. The ground floor and the backyard are all part of the kindergarten. There are approximately twenty-five children and three adults. Two adults, Elsabret, an American elementary school teacher, wife of a musician and mother of several children, and Colleen, an American student of psychology with an MA in social work, wife of a renowned Gestalt therapist, and mother of two, speak only English in the kindergarten. Frau Roth, the German owner of the kindergarten, Montessori trained in Munich and Washington, D.C., wife of an American and mother of two speaks only German in the kindergarten. The children speak whichever language they choose. The children themselves come from different language backgrounds. The atmosphere is such that this is not a problem. The children loved these miraculous teachers who were able to understand them so well.

After eight o'clock, the door bell starts to ring. Frau Roth, Colleen or Elsabret opens the door and greets the child. Coats are hung on the child's own hook, boots stood up below and then the child passes the bathroom and a small room on the way to the main room where most of the kindergarten activities take place. At the back of this room, there is a child-sized, real kitchen where lunch is cooked every day by the children for the children and teachers. At the other end of the room are all the typical Montessori materials for children aged three to six. Near the kitchen are the practical life materials. Behind them
are the language materials and a shelf with books. Next to them are the music materials and a piano. The geography materials stand here too. At the front end of the long room are the math materials. Along the other long wall are the sensorial materials and above them hang maps of the continents made out of felt (the land is white and the water blue). Dolls from the continents stand below the maps. In the small room near the door by the kitchen is a quiet area where children can work individually or in small groups on language or math. A door opposite the one that comes from this room leads to the backyard, which contains a sandbox, a simple climber, a small wooden house and a cedar hedge one can creep behind to stay out of sight.

As the children arrive they often like to set their name on the magnetic board indicating where they would like to sit for lunch. The teachers have often already placed their names on the board and the children use their names as a way to orient their decision. This is no simple task but the majority of children can do it with ease. Their own name is found and then the name(s) of the person they want to sit beside, or a place they want to sit at, is located.

The first children to arrive see a teacher unloading yesterday’s dishes from the dishwasher and returning them to the kitchen cupboard or folding towels and placing them in the cupboard. Often the children like to help with this. Daily the name of the day and the number of the day are changed and the plants are watered. The morning starts
slowly with practical tasks.

As the morning progresses, the children settle down to work and the teachers give material demonstrations. Small groups form and the teachers always have an eye for things which are developing. The children are treated with a lot of respect and dignity and this is reciprocated.

Around 10:30 or 11:00, the child who has brought the food for lunch is called, if s/he is not already waiting, and is asked to choose four or five children to help prepare the meal. One teacher stays in the kitchen with the children. Everything from cooking the meal to setting the tables is done in the next half-hour to forty-five minutes. Since the same tables that are used for work are used for eating, the children who are working at the tables must put what they are doing away or do it on a mat on the floor. The doors to the outside are open and those children who have decided to go out to play have dressed appropriately. The teachers disperse themselves according to the children's locations. Shortly before the meal is ready, a bell is rung indicating that the children should put away what they are doing, come in from outside, and sit down at their previously selected places which are not indicated by name cards. Usually the children are hungry by this time and are waiting for the meal to be ready.

Four to six children sit at a table. Each table has a pitcher with something to drink in it. Each table setting consists of a fork, spoon and knife, a plate, cup and a
napkin. The tables have table cloths and look very inviting. The meal is not started until all children are sitting down. The teachers put the serving bowls on each table. Then one wishes those at one’s table "Bon Appetit" and begins to eat.

After the meal, the children from one table at a time bring their plates to the sink. The plates, cutlery and cups are separately stacked so they can later be rinsed and loaded in the dishwasher by one of the teachers. The children then brush their teeth. One teacher puts toothpaste on the brushes and observes that the children’s teeth are well brushed. It is then soon time to go home.

Once a week, a man comes in to do music with the children. Occasionally a special guest comes to visit and show something from his/her culture or country. For example when I was visiting this kindergarten, a friend of mine from Alaska came and showed the children some games played by the children in Alaska, and an East Indian woman showed the children how she puts on her sari.

Summary

The well-organized structure of the Montessori room facilitates the freedom and discipline that Maria Montessori considered of such importance for the full development of the child. It also allows the teacher to observe and understand the child, to facilitate the child’s development and to take a peripheral and yet crucial position in the on-
goings of the class. The prepared environment and the role of the teacher permit children of different ages to find their developmentally appropriate places in the class.
CHAPTER TWO

The Wild's Active School

I am used to being with children. But this morning I felt totally flattened by the vitality of these children. Among them I did not exist, and they only took notice of me when they had nothing better to do. As long as they were busy with their own projects they forgot all about me - I never felt so insignificant -(remarks about the Wild's active school, from young teacher who works in poverty stricken area in the Andes) - (Wild, 1986, p. 151).

Rebeca and Mauricio Wild's active school as described in Rebeca's books: Education for Being. The experiences of an active school (1986/1990a); and Sein zum erziehen. Mit Kindern leben lernen. [Being Educable. Learning to live from children] (1991) and as I experienced it on a ten month visit to their active school, the Pestalozzi, in Tumbaco and Santa Rosa, Ecuador, have also played a major role in the development of my educational principles and practices, both in thought and in action.

To better understand the principles and practices of the active school, I present the Wild's background and outline their principles and practices in thought, by looking at what they wrote about the child, the environment and the adult. I refer to Rebeca Wild (1986/1990a; 1991), a Pestalozzi bulletin (R. Wild, 1990b) and some documents (M. Wild, 1990a; 1990b) and many of the sources that are referred to in these works. For example Montessori's and Piaget's works, Elkind (1976; 1981; 1989) Axline (1964;

To illustrate these principles and practices in action, I then describe the Pestalozzi I kindergarten in Tumbaco and the smaller Pestalozzi II kindergarten in Santa Rosa, based on my experiences at these Pesalozzi kindergartens in 1988-89, and in Rebeca Wild (1986/1990a).

The Wild's Background

Rebeca Wild was born in 1939, and was raised in Germany. Mauricio Wild born to Swiss parents, grew up in Ecuador and then in Switzerland. Rebeca and Mauricio met in 1959 in Southern Germany while working as tour guides. Rebeca was a student in German studies and Mauricio was travelling. In 1961 Rebeca joined Mauricio in Ecuador.

Before becoming interested in education, Mauricio and Rebeca Wild undertook many adventures to discover more about themselves and their surroundings. They tried out different life styles and professions. They managed a banana plantation and then moved to the city of Guayaquil and took office jobs. In the end they came to the conclusion that they wanted to live in harmony with their environment and themselves and that they were willing to give up security for autonomy.
Prior to the starting of their school, they spent five years studying social issues at Columbia University in New York City and then in Puerto Rico. The birth of their first son led to some unanticipated changes, including the move from New York City to Puerto Rico. A friend, noticing their initial struggles, gave them one of Maria Montessori's books to read, and this encouraged Rebeca to go to London, England to take a Montessori training course. She completed both the theoretical and the practical training for primary and elementary levels and returned to Puerto Rico with materials that she had made and collected. Here Rebeca set up her first play group.

Subsequently, Mauricio worked one year for the Anglican church in Cali, Columbia and Quito, Ecuador. In Cali, Rebeca founded a small kindergarten for their first son who was then five. With the move to Quito, their son was sent to a private German school. The first symptoms of a school phobia emerged in him but were not recognized as such, until years later.

With the move to a neighbouring town, where Mauricio worked on an organic farm project which employed fifty families, came the request from the head teacher that Rebeca help set up a kindergarten for the village children. Here, Rebeca had the opportunity to relive the experience that Maria Montesorri must have had in her first Casa dei Bambini, in San Lorenzo. The furniture as well as most of the materials were self-made. Children who attended the
kindergarten were not accustomed to using paper and pencil, did not speak Spanish and were poor and shoeless. After only one year, these children were able to facilitate the arrival of new children in the kindergarten (R. Wild, 1986/1990a).

The Wild's son went to a Salesianer school with the local children. At this school, he was one of fifty children, the majority of whom were indigenous or mestizos (Spanish-Indian mix). The single teacher was very strict and with such a large class, could not keep track of all the children. Being the only white-skinned, blonde child made their sons' school phobia worse. After several years he was allowed to stop going to school and he chose to work on the farm until he felt ready to go back, a year later.

This period in the Wild's life brought with it a keen desire to better understand child development and neurological development, as well as an interest in different pedagogical models. They found Piaget's books on child development to be scientific descriptions of Maria Montessori's more mystical writings. Elkind's (1976; 1981; 1989) work on child development and education was a good bridging between Montessori, Piaget and contemporary educational principles and practices. Of particular interest to the Wild's were the books of Emmi Pikler (1988; 1991) (a Hungarian pediatrician born in Vienna in 1902) which describe how adults can support children's autonomy; Heinrich Jacoby (1989; 1991) a German born Jew who later became Swiss: a student of music and later of harmony and
form; a director and teacher at the Odenwald school and later giver of seminars on musicalness, giftedness and teaching) who wrote on human development, learning and talent; and Elfriede Hengstenberg (1991) (a German gymnastics teacher who studied the works of Elsa Gindler and Heinrich Jacoby and who, when she met Emmi Pikler, noticed that they had both come to similar conclusions about how adults should relate to children) who described her work with children as a gymnastics teacher. Also of great intrigue to the Wild's were Maclean's (1973) description of the tripartite brain and Janov (1973), and Janov and Holden's (1962; 1977) use of this brain development model in describing the feeling child, emotional abnormalities and their causes. Some of the educational models that they looked into were Neill's Summerhill (1960), Freinet's Ecole Moderne (1970; 1977; 1978) and the open schools of England and the United States. Virginia Axline's (1964; 1987) book on play therapy was also of much practical use to the Wild's.

When the Wild's second son was two-and-a-half years old and the organic farming project had come to an end, Mauricio and Rebeca decided to start a Montessori kindergarten in Tumbaco, a valley outside of Quito. It was to pay for itself and include a parallel kindergarten for poor children. The name chosen for their school was the Pestalozzi, Pesta for short, in memory of the Swiss educator, Heinrich Pestalozzi. The main school was the
Pestalozzi I and the other was the Pestalozzi II.

The kindergarten project began in 1977 with four children, including the Wild’s younger son. It was started in their rented home in the country and was later extended to another structure which they had build. At the end of the first year, kindergarten was made compulsory in Ecuador and the Pestalozzi I’s enrollment went up to 50 children between the ages of three and five, and they trained two more teachers. Mauricio and one other teacher bused the children to and from school in the morning. A full-time carpenter was hired to make all the furniture and materials for both the Pestalozzi I and II, (the parallel kindergarten in a poor village, supported by the Pestalozzi I) and also to sell to other schools in the neighbourhood for revenue. This helped to make the Pestalozzi financially self-sufficient. The next year, 75 children were enrolled in the Pestalozzi I and 25 in the Pestalozzi II.

Principles and Practices in Thought

The child.

The Wild’s believe that there is an underlying genetic plan which guides development and hence the maturation of the human organism. This genetic plan has exact rules like a chess game, but there are infinite variables particular to different environments and cultures. They believe the plan only manifests itself fully if the organism’s basic needs are satisfied (R. Wild, 1990b).
The Wild’s identify these needs in accordance with the biological development of the organism’s brain and nervous systems. For example, the infant brain consists of a functioning reticular formation only. Its needs are therefore quite different from the organism of seven or eight years which now has a developing limbic system, or the fifteen-year-old organism in which the neocortex is being built up. The needs of the organism change according to biological development. The Wild’s adopted the beliefs of Janov (1973) and Janov and Holden (1962; 1977) who described how inadequate experiences result in a blockage in the part of the brain that registers them in order to protect the other cerebral zones, especially those in the process of developing. The neurons are believed to function like this also. These blockages require energy. The natural tendency of the body therefore is to relieve itself of these blockages when circumstances permit. The natural way of doing this is by means of profound laughing or crying which shake up the body and free it of tensions, caused by blockages.

The Wild’s think that crying, laughing and/or horning around are the best kind of therapy possible. The child should continue to feel comfortable to cry or laugh and to feel any emotional experience to the fullest, so as to avoid any blockage and hindrances to later development.

Development is seen as a part of maturation, not as conditioned from without. The Wild’s argue that development
is a natural and inevitable process which occurs as a function of the child’s spontaneous interactions with an environment that satisfies his/her needs. They believe as did Maria Montessori, that nature guides the child through sensitive periods and that only the child is able to balance inner and outer stimuli. Together with Montessori, they believe the senses become windows of the soul, effortlessly absorbing all that is beneficial for growth and developing it in the "darkroom" of the unconscious mind. The inner guidance, undisturbed by previous wrong handling, selects activities at its own personal rhythm which lets it find a new equilibrium with each new undertaking. In this way the child becomes active not hectic, his/her movements become coordinated, and s/he becomes a happy, harmonious being. Such a child can become immersed in activity for long stretches of time without tiring. The child respects other people and objects, and remains a healthy organism. If the child is permitted to follow this inner guidance a secure, happy, helpful, person who lives every day to the fullest is expected to result.

The child is believed to have a timeless rhythm of life focused on the present. S/he has a need to move, to touch, to make noises, to try new things, to do without having a definite purpose in mind, simply out of the need to do. The child inexplicably repeats seemingly useless actions and is frequently unaware of the needs of others, particularly those of adults. There is a strong will present to somehow
achieve what is felt as an inner necessity. It is often incomprehensible to the adult. The child's development depends on the spontaneous, autonomous interactions with the objects of the environment and the unconditional satisfaction of the basic need to feel wanted. The Wild's believe that only under such conditions can the child feel a true emotional security. They also believe that the processes of maturation should be continuous over all the years of development. Reasoning is believed to be a biological process which results from an environment of love and liberty of interaction.

The optimal development of the child is seen as occurring through minimally hindered interaction with the environment and with other children of various ages, with as little adult intervention as possible. The sensitive periods identified by Maria Montessori are respected and considered to guide the child to a better understanding of the environment and his/her own internal drives. The child's free selection of a material, individual or group activity, and the self-determination of his/her personal rhythm are not interfered with, so that the level of consciousness needed to develop autonomously and to adapt to an ever changing world can be achieved.

The founders are firm believers in the therapeutic value of play. They believe that children in time heal themselves and then catch up on whatever formal learning they have missed. Before school learning can be successful
and meaningful, the child has to have reached an internal balance which permits learning. If one observes the children closely and understands the purpose of the materials, and the building blocks of intelligent thought, one clearly recognizes that a lot of learning is constantly taking place.

Unstructured, open-ended and representative (socio-dramatic and imitative) play of the child are believed to be just as important as structured play. It is also believed that the work with structured materials will be of little worth if the child has not spent a lot of time exploring his/her natural environment first.

The Wild's believe as does Jacoby (1989) that the child who misbehaves is doing so due to an adult's behaviours. Experience has brought them both to the conclusion that adult behaviours can best be inferred from the child's behaviours. The Wild's also believe as does Pikler (1988) that the child learns step by step to move independently, to get what it wants to play with on its own and will alter its place and position freely. They also believe as does Jacoby (1989) that the child has a natural ability to recognize patterns in math and language and that comparing and measuring lie at the foundation of the child's discovery of these patterns. Like Hengstenberg (1991) the Wild's believe in letting children observe, watch and try on their own, letting them go alone into a store and shop, letting them experience through their own bodies the feeling of
purposeful and unpurposeful behaviours.

The environment.

The Wild's believe that the environment should facilitate children's spontaneous actions. It should be non-directive, respecting the organism's biological processes at all levels. Natural limits, mutually agreed upon, create mutual respect and a relaxed atmosphere required for authentic development. The environment should contain the basic elements of nature which nourish the evolution of our species. Moreover it should be saturated with all kinds of cultural ingredients which characterize human life.

It should allow the child to remain full of curiosity and to build trust in him/herself and the world. It should contain materials which invite the child into activity by refining and calling into play all the senses, not only coordinating movements but also helping the child to order and organize the world. It allows free experimentation with many sorts of objects, especially natural materials. Both open-ended, unstructured materials which involve an element of surprise and lead to new discoveries, challenges and possibilities for play, and self-correcting, structured materials should be included. The Wild's believe that these materials can only be useful if before coming to use them, the child has had the opportunity to store up countless unstructured experiences and sensory impressions in the
actual world. They believe as the environment and the child's understanding take shape, the foundations of intelligent thought are laid.

To create such an environment the Wild's tried to fulfil the basic conditions which corresponded to their own convictions about life and their belief that outer and inner environments had to develop in harmony.

An active education environment for children is meant to foster free, creative, non-defensive, and spontaneous interaction between children, their environment and adults. It is to be a very relaxed atmosphere, free of dangers and false expectations. In such an environment, the child can continuously respond to internal and external stimuli. Internal stimuli corresponding to the basic needs of the child are given priority over the external stimuli. External stimuli that become sufficiently aggressive, persistent or associated with the basic needs of the child are also to be listened to. Internal needs will however always persist, although blocked, until they have been attended to. A relaxed atmosphere produces an environment in which the child can attend to his/her internal needs, permitting the restructuring of experienced blockages. Stimulation, expectations or demands of the organism which exist in addition to authentic needs are required for the creation of mechanisms of adaptation. These probably will alter the response threshold to stimuli with the subsequent complications of overstimulation, stress, boredom and the
consequent illnesses and social disabilities.

It is obvious that real dangers (cars in the street) exist and can invade the relaxed atmosphere. As disconcerting as these real dangers may be, the relaxed atmosphere should be defined by the type of relating which occurs. An educator should be able to create and/or maintain a relaxed atmosphere (M. Wild, 1990a).

Social reality has its limits and laws. Clearly defined limits and rules are indispensable in an environment prepared for the children in which a relaxed atmosphere is to be created and maintained. The definition of these limits or rules should be established through functional criteria. Within these limits the children should be free to do what they desire (M. Wild, 1990a).

Reality is finite. At the level of concrete realities, we do not have problems accepting limits which we essentially perceive as laws of nature. All of us function within these laws. If contemporary science would integrate little by little into their macro conception, the vision that these laws also have evolved characteristics, these limits and laws which appear to us immobile would not be perceived as constants but instead as variables (M. Wild, 1990b).

Some examples of such limits or rules for the environment prepared for preschool children are the following: Used materials must be returned. No destroying materials. No taking materials which others are using,
without asking them. No attacking other children physically or verbally. For playing with sand or water an apron must be worn. Garbage must be thrown in the garbage pail.

The environment prepared for children should be suited to the developmental needs of the children for whom it is constructed. It should take sensory-motor, socio-emotional and cognitive development into consideration. First and foremost it should allow children the freedom to move freely in and out of doors; it should allow selection of activities which satisfy all developmental needs; and it should be constructed in such a way that children can discover these activities at their own pace and in their own way.

The outdoors should include living and non-living natural things, and sufficient space to run and hide. Free-roaming animals, wild and cultivated plants, sand, rocks, wood and water are but some possible examples of what could be found in this environment. Some items for balancing, climbing and building are other possibilities. Ideal are things that require few or no safety rules, and things with which children can make their own discoveries about how to use them.

Indoors, both structured and open-ended, less structured materials should be offered. All items should have their designated places. Small tables and chairs and cushions to sit on the floor should be present. The inner space should be organized into different types of areas. The Montessori materials displayed on open shelves, in their
order of difficulty are divided into the areas: sensorial materials; math materials, and early language materials. Many of the more academic Montessori materials that would be found in a traditional Montessori kindergarten for three to six-year-olds are first offered to the children in the primaria of the active school, because of the Wild's belief that hands-on experience with raw materials leads to the spontaneous comparing and measuring which helps the child to discover patterns underlying math and language development and later learning. The Montessori practical life materials are replaced by less structured, more open-ended play activities, e.g. water and sand play, gardening, cooking and representational play areas. Music instruments, and many non-Montessori materials that would not be found in a classical Montessori kindergarten can be offered. Construction toys, puzzles, small kitchen area, doll house, puppet theater, block area, trucks and cars, a doll area and an arts and crafts cupboard are but some possibilities. They should be culturally relevant and not redundant with the other materials.

The aim is to have a limited area for quiet, concentrated play and others for louder, more rough and tumble play; areas with structured materials and others with unstructured, open-ended materials; areas or times for individual or small group play and others for large group play; and activities that can be selected and others that are offered at a particular time only. The environment is
designed to facilitate individual selection of activities, for how long, with whom and when.

The active school environment should be complete in the sense that it should allow all children to find the social and material interactions needed for their complete development. This environment should respect the individual rhythm and path for learning and development of each child. It should facilitate development and learning guided from within the child rather than from without.

The adult.

Rebeca Wild (1988/1990a) writes about adults who are simply themselves gaining the trust of children and starting to observe themselves, in just the same way as they learn to observe the children. She states one can ask oneself "Am I really being myself in this moment, or am I imitating?" and soon follow other questions: "Why do I have days that I love being with children and days I find it difficult?"

Rebeca Wild, like Montessori, advocates that daily we submit ourselves to the discipline of writing down our observations from the classroom, and keeping a diary referring both to each individual child and the day's events in general. As we write and remember and think back, we often find ourselves able to "feel" about individual children/situations and to understand connections that had not reached our conscious understanding in the morning's chaos. New ideas surface for this or that child, and we
take a closer look at our own mistakes and resolve to alter things when necessary. In this way we learn to refine our powers of observation, both in individual cases and for the school as a whole.

How can we make it possible for each child to gain experience in those activities which correspond to his own "self", and avoid the educational process "cluttering up" the paths by which the child can find his/her own inner guidance in difficult situations? Children who habitually ask "what to do next" or try to guess what would be required "because parents and teachers know best", find it very difficult to find their own way. Adults should therefore be non-directive, respecting the organism's biological processes at all levels.

The Wild's ideas about the role of the adult in the Pestalozzi were greatly influenced by the work of Maria Montessori; and supported by Elsa Gindler (1885-1961), Heinrich Jacoby (1899-1964), Elfriede Hengstenberg (1892-19??) and Emmi Pikler (1902-1984).

Elsa Grindler graduated in 1912 from the Kallmeyer Seminar for Harmonious Gymnastics. In 1913, while Kallmeyer was away Gindler replaced him. In 1917, Gindler started to give her own seminars on Harmonious Body Movement based on the creative development of her own ideas. She played a significant role in the development of this field. Unfortunately few records remain about her early work since the documentation was lost in the war.
Heinrich Jacoby studied music in 1907, in Strasbourg, Germany. From 1908 to 1913, he was a student of the director and composer, Hans Pfitzner. In 1913, Jacoby rejected this traditional method of teaching music and began to teach harmony and FORMENLEHRE at the Jacques Dalcroze Teaching Institute in Dresden. In 1915, he became the director of a music teacher training institute in Dresden. From 1917 to 1919, in Munich, he gave seminars and did research on universals and limits in sensory training and on the causes of unmusicalness. From 1919 to 1922, he trained music teachers at the Odenwald school and did research on the relationship between child-rearing and the child's ability to express himself/herself. From 1922 to 1924, he participated in the founding of an experimental high school in Dresden. From 1924 to 1933, he gave workshops in Dresden and then Berlin to teachers, doctors, special education teachers, psychotherapists, and artists on the practical pedagogical results of his investigations. He generalized his findings about musical expression to difficulties in speech, language and voice, movement and artistic expression.

In 1926, Jacoby and Gindler started to work closely together. They tried to get adults to unlearn patterns that had hindered their ability to enjoy life. With their students they tried to learn more about the degenerate patterns of the organism in the various stages of life.

With respect to the teacher, Heinrich Jacoby (1989)
believed that the teacher must come to understand each child. When this has been done the need to get angry or to punish the child will diminish, since it becomes apparent that misbehaviour is usually due to an adult's behaviour. The teacher must find the opportunity to give the attention needed to the misbehaving child. The teacher's challenge is to get to know all the children and to build an affectionate caring relationship with each one of them.

To know the curriculum is not enough. More important is to know how the knowledge that is being taught was invented or developed over the years (e.g. number system and scripts). Rather than teach static information, the teacher can show how the information was acquired and changed over time and across cultures/peoples. The teacher should only teach facts, and allow the child to discover conventions on his/her own, as much as possible (i.e. standard units of measurement = convention of convenience).

Jacoby (1989) claims one can offer the child things or means with which s/he can help him/herself, but one can't give the child learning. Teaching, he believes is not needed. It is redundant. He emphasizes the importance of being ready to make mistakes/to stumble and to become aware of it, sooner and sooner after the fact. Eventually the child comes to notice before stumbling and then no longer has to stumble. Jacoby emphasizes that one should recognize the importance of errors and the fun of doing something wrong and modifying one's actions to get it right. It is
not the teacher's place to say what is to be done next, or how something is to be done correctly, but rather the teacher should expect the child to take the next step. In this way the child and the participating adult can come to understand why a particular change is necessary.

The teacher should connect with the child's interests in comparing and measuring, not with the child's words. Rather than teaching the child symbols and names, the teacher can let the child discover that the answers for problems being investigated are within the child, that the child is just not yet aware of this. Let the child discover things and their usefulness, discover what adults already know. It can be very fruitful for the teacher to go together with the child on discovery tours, and try to really sense what the interest of the child are and continue to connect with these interests. Questions and suggestions from the child's own world can lead to children working together. If children take the lead, rather than the teachers leading them through a schema which usually has little relationship to everyday life, it is possible to avoid imposing order on the child too quickly. Order can only be obtained by the child at the end of a process, when it has become possible to have an overview of what has been done.

Jacoby suggests that during the first weeks or months of school the teacher should do nothing that resembles school-like activities so that the children realize that the
teacher is a normal human being, and that there exists a continuum between home and school and between people known to the children. Like Pestalozzi, Jacoby believes that relationships between adults and children depend on the heart not reason.

Basically, Jacoby advocates that adults should not try to interest children in something, but rather should learn to sense what children are interested in and go along with this. He points out that at the foundation of all learning are the two functions of comparing and measuring, rather than the teaching of symbols and names for things.

Elfriede Hengstenberg was trained as a gymnastics teacher. From 1915 on, she worked in private and public schools, in Berlin. When she was 25 years old, she studied under Elsa Gindler who had a major influence on her work. From 1920 on, Hengstenberg belonged to the close circle of Gindler’s friends who continued to further develop her ideas. In 1924, Hengstenberg began to study intensely the ideas and results of Heinrich Jacoby’s work. Hengstenberg devoted the rest of her life to working with children in accordance with the work of Jacoby and Gindler and her own experiences. In 1935, Elfriede Hengstenberg and Emmi Pikler met and noticed that, independently from one another, they had come to recognize the significance of the autonomy of
the child in development, to which adults interacting with children could orient themselves.

Hengstenberg (1991) writes that as a gymnastics teacher, she tried to create for the children a more understanding relationship between what the children practiced in her classes and what they needed for their free development in life. She had to search for tasks which would bring out life's problems in an encompassing, explanatory fashion. In order to set the wheels of an unhindered development back into motion, she had to pursue her interest not only in the physical development of the child but of the child's complete development. Such tasks had to allow the child to teach him/herself.

From her observation of the children in her classes she concluded that change can come to children who are permitted to discover their own disturbed behaviours with their own senses and come to their own solutions about how to deal with them. As a gymnastics teacher she therefore considered her role to be the making of such independent investigation and discovery possible. This possibility should be similar to that in real life only differing in that there would be more quiet time allotted in the instruction to get the undesirable behaviours back onto the right path. The art is to let the children investigate and discover independently. What Hengstenberg tried to do was select certain tasks that she believed were needed by the children, present them in such a way that the children would enjoy them; prepare
objects and apparatuses that entice the children towards experimentation and leave them to experiment independently, so that on the one hand their interests are met and on the other hand conflicts are worked out. She advocates letting them tackle difficulties on their own, with the adult not mixing into the solution/resolution process. Elfriede Hengstenberg used this time to make her own observations and discoveries and when the children's independent attempts reached a certain point, she offered them possible explanations and suggestions. The children can come upon discoveries that go far beyond the realm of gymnastics through this process, for example satisfaction and contentment in their work and the ability to come to understand certain physical relationships.

Elfriede Hengstenberg believes that imitation is one of the worst ways to mislead children from the route of self-discovery. It can lead to the jumping-over of the intermediate stages of repeated attempts, which the child has behind him/her and bring the child too quickly to stages for which the child is not yet ready. Encouragement and pushing a child forward disallows the child a natural contact with his/her own being and it can lead to over-achievement. Hengstenberg suggests rather that if a task gets too difficult for a child we should rather search for an easier route, so that the child realizes it isn't really that hard, that s/he only has to find out how to do it.

Emmi Pikler studied medicine in Vienna. She then
practiced as a pediatrician for ten years, in Budapest. From 1946 to 1979, she was the director of the Staatlichen Methodologischen Zentralinstituts fuer Saeuglingsheime, [State Methodological Central Institute for Infant Orphanages] in Budapest. She published numerous articles and books on child rearing, child care and development and about the circumstances of infants and toddlers (0 to 3 year olds) in the family and in homes.

According to Pikler (1988) the adult should not encourage the child by helping, because this hinders or enhances the child’s reselection of this activity. If the child is left to solve problems, s/he will continue to play actively and peacefully. This will allow the adult more time to care for individual children without feeling constantly under stress and hectic. S/he also then is ready to give help or quiet a child down, when this is really needed. A better relationship can develop, the children are happier, more active and have the desire to move around in their play area. Autonomous motor development fostered by such a relationship is very important for the child’s further development.

As mentioned earlier, both Pikler and Hengstenberg independently came to recognize the child’s need for autonomy in development and how this was dependent on the adult’s behaviour in interaction with the child. Pikler had experienced this with children from birth to three years of age and Hengstenberg with children older than three years.
Self-direction of the child in an environment that leads to discoveries was at the heart of their work.

The Pestalozzi kindergartens illustrate child-environment-adult interactions in active education and show the active education principles and practices in action.

Principles and Practices in Action

The Pestalozzi I kindergarten in Tumbaco, Ecuador.

An environment was created in which the child’s understanding could take shape, laying the foundation of intelligent thought. This environment was originally constructed on what the Wild’s knew was in line with their feelings: the Montessori method. A carpentry shop was built to construct the buildings, furniture and materials. A tremendous amount of mental preparation were also required. A continual readiness to change, endless inventing, constructing, bringing together, ordering and maintaining materials was demanded. There were never enough hands to carry out all the ideas bubbling during the work with the children. The on-going process, which grew organically according to inner and outer needs continues to develop. It is a very personal kind of work which leads to a maturing process.

The adults who worked in this environment had to be committed to continuing to detect the genuine needs of the children and to see their skills, in order to facilitate the satisfaction of these needs. This mobilized qualities in
both adults and children and they and their environment underwent a transformation which made the present full of meaning (R. Wild, 1991).

The Wild’s tried to fulfil the basic conditions which corresponded to their own convictions about life and their belief that outer and inner environments should develop in harmony. I was able to observe how this was actualized at the Pestalozzi I kindergarten in Tumbaco. The following is a description of a typical morning.

By eight fifteen a.m. all the children have arrived either by bus, on foot, or brought by a parent. They come with a lunch box containing a snack and occasionally a favorite toy from home. As they get off the bus or enter through the gate, they are greeted by Mauricio, the teachers and other children who have arrived before them. As the children pass through the gate, they quickly disperse into the large kindergarten area. Some children seek rough and tumble play, others choose more well-defined activities offered in the Casa Vieja; some simply enjoy conversing with friends or watching what another is doing. The possibilities are endless.

The Pestalozzi I kindergarten area consists of the Casa Vieja: several rooms on the ground floor of the founders’ home; the Casa Nueva: a hexagonal room with lots of windows, adjacent to the office and the designated outdoor area surrounding the neighbouring buildings. This space is contiguous with the primaria and secondaria. The
kindergarten children are only free to move within the area designated as the kindergarten. Children from the primaria and the secondaria can however return to the kindergarten at any time. The optimal climate of Tumbaco permits the indoors to be continuous with the outdoors.

Outside, close to the Casa Vieja (to be described later), is a sand box, in the shade of an over-hanging roof; in the open, a short distance from the sandbox, are four plastic basins at waist level for water play. There are several wooden climbers with boards that a child can request to have moved by a teacher, a picnic table, two small wooden playhouses, several old car tires, two cement pipes one in vertical the other in horizontal position, a large sand pile, a balancing bar and beams at different heights for hanging and climbing on. For any play involving water, an apron must be worn. For sand and water play there are small spades and plastic bottles and tubing. Outside wandering around on the premises are two llamas, two dogs, occasionally a duck and a turkey.

In the Casa Vieja there is a room with a harpsichord; an area with Montessori sensorial materials, puzzles and some simple construction toys for table play; an area with the Montessori early language materials, some self-made adapted Montessori math materials, and some musical instruments; a small room with materials for group activities (lego, concentration, picture blocks, construction toys and some simple craft materials etc.) and
in the hall, a small library with sitting space. In the entrance are open cubbies with the children’s names on them.

In the Casa Nueva, there are designated areas for different types of representative play and arts and crafts activities. There is a simple kitchen with running water, a small table with chairs, shelves with dishes, cutlery and knives, and some basic mechanical kitchen appliances. Daily some vegetables, fruits or dried food are added. There is a very simple doll centre with some wooden doll beds, some dolls and empty shelf space, three easels for painting, a block center with unpainted blocks for various shapes and sizes. The next area has hand-painted animal and car blocks and a large piece of plywood with landscapes painted on each side. The adjacent area has a large wooden two-storey doll house with simple furniture made out of wood, and a puppet house. There is a corner with a cupboard-door through which the children play store. This play is an imitation of the shopping procedure that families do on a daily basis. Here there is also a large basket with scrap material and wool and some sewing equipment. Beside this is a large cupboard with crayons, coloured pencils, scissors, paper, a stapler, tape, a hole punch, elastic bands, string etc. given out by the teacher or a helper from the primaria, and some hammers, nails and saws for the workbench just outside the Casa Nueva. In the middle of this room are four long tables with small stools for art and craft activities.

The adults selected to be teachers at the kindergarten
of the Pestalozzi are people who are at peace with themselves, who don’t feel compelled to teach children, who feel comfortable with children, and who have taken a course with Mauricio and Rebeca which involves learning about the Pestalozzi philosophy and the use of function of the Montessori materials, and who have acquired a certain number of hours of observation and practice in the kindergarten. Often these adults have had no prior teacher training, but have children of their own and a strong interest in the work of the Pestalozzi. Adults who want to work in the primaria or secondaria of the Pestalozzi must begin by working for a substantial time in the kindergarten.

Six such full-time teachers and Mauricio, when he is not otherwise busy, are to be found on the kindergarten premises if one looks carefully. The teachers rotate on a weekly basis through five kindergarten areas. One teacher is free to move from one area to another and to relieve a teacher or to help out in a stressful situation. They may be seen being chased by a group of children in the yard, playing a game with a child, giving out a requested material, talking or simply walking around or sitting at a picnic table observing unobtrusively.

The role of the teacher in the kindergarten is to make sure that certain concretely defined limits are respected by the children; to be available to give emotional support to the children by being part of a secure, free environment; to be in a position to give physical contact to children who
need it; to observe the children in a non-obtrusive way and to become a part of the children's environment without intervening in the children's development.

To give the children some limits and structure in their daily activities, the following concretely defined rules exist: a.) wear aprons for play involving water, b.) put names on art work and when completed put into cubby, c.) walk and speak quietly inside, d.) go to the bathroom one child at a time, e.) return the art and workbench materials fifteen minutes before el proyecto, f.) line up for snack, g.) do not take indoor materials outside and vice versa, h.) do not play by the windows, i.) do not disturb the animals, j.) throw all garbage in the waste bins, k.) put personal belongings not worn or being used in your cubby, l.) ask teachers to move boards on climbers, and m.) do not hurt other children.

To give the children some structure in their morning without disrupting their play too much, certain activities are offered each day at the same time. At ten fifteen the teachers sing out "a sacar las mesas, para el jugo" and the children inside using the tables put their toys away and carry the tables and stools outside. Another group of children waits at the kitchen door to take the juice and snack outside. Others wait impatiently for the snack or have gotten their lunch boxes out of their cubbies. At ten-thirty the teachers sing out "el proyecto". In the Casa Nueva, an exemplar has been hung of a simple art and craft
activity for which materials have been prepared. Fifteen minutes earlier, the art and wood-working tools e.g. scissors, crayons, tape, hammers and nails etc. that the teacher or a helper from the primaria gave out on request have to be returned to the cupboard. The necessary preparations for el proyecto are made. If a lot of children participate, then two other teachers come and sit at one of the tables and make a project. At eleven, Rebeca Wild comes from the primaria singing "el baile" or "es la hora de la musica ca ca" and the children who want to participate or watch follow her to the Casa Vieja. Following this, there is story-reading or telling in a designated quiet place.

At twelve, the teachers call out "es la hora de la casa". Some children have been waiting with their lunch boxes, others have to stop their play. A few simply want to wait until the last minute before making their way to the gate where buses, cars or an adult awaits them.

Every third Wednesday is paseo, an outing, if enough children are interested. This often involved walking and running to a nearby eucalyptus forest. One teacher tries to stay at the front of the group, the others in the middle and one follows up the rear with the younger and more timid children. The children always find many kinds of things that fascinate them and this makes the hike exciting and fun. The teachers are there to keep an overview, to set limits and to assure the children’s safety, nothing more.

The Pesta children have shown that they can adapt
quickly to new environments and situations and excel academically when they switch to more formal forms of education (R. Wild, 1986/1990a).

The teacher’s afternoons are taken up with attending staff meetings and individual parent interviews, preparing parent evenings and making more materials of learning more about the ones that are already present.

Monday afternoons, the kindergarten teachers get together to talk over who will work in which area during the week. The kindergarten is divided into five different areas and the teachers rotate through these areas on a weekly basis. In these staff meetings, it is also decided who will prepare the art/craft project for each day of the week. This is for "el proyecto", an art/craft activity which is offered to all the children each morning at the same time. Different jobs assigned, and problems encountered in the previous week or special events coming up, are discussed. Children with problems or the children of parents who have requested an interview are discussed, a report is written up and two teachers are selected to attend the parent interview. Usually two or three children are discussed each week. The reports consist of observations the teachers have made regarding: a.) how often the child plays with sand and water, b.) does the child like brisk physical play, c.) does the child accept physical contact from adults, d.) does the child participate in dance, music or art activities, e.) who are the child’s friend’s, f.) what are the child’s
favorite toys/materials, g.) how developed is the child's fine and gross motor movements, h.) what is the child's language ability, i.) does the child associate words with actions, j.) how concentrated is the child, k.) how independent is the child, and l.) what are the child's eating habits like.

On Tuesdays, the teachers work with the Montessori materials. They learn more about the materials and their use and practice using them and demonstrating them to each other. They also discuss any interesting developments or difficulties they have had during the week using the materials with the children. New materials are sometimes also constructed during this time.

On Wednesday afternoons, individual parent interviews which have been requested by the teacher or by the parent take place. In these interviews the parents are told about the child's behaviour in the kindergarten, based on the report written jointly by the teachers in the Monday meeting. The parents are asked to express their concerns and describe how the child is at home. This can lead to a discussion that facilitates understanding of the child in question by the child's parent and teachers. The parents are encouraged to visit the kindergarten, to request another meeting if they so desire, and also to attend the parent evenings. If the parents never attend these evenings, their child's place at the kindergarten is put in jeopardy. Two evenings a month are parent evenings: one evening is a
seminar and the other a conference. They are held by Mauricio Wild and the teachers of the kindergarten. They are about the philosophy of the Pestalozzi, child development, education and parenting.

The Pestalozzi II kindergarten in Santa Rosa, Ecuador.

Beate (German teacher trainee) and Anja (friend from Germany visiting Beate) arrive earlier than expected at the home where I am living. I'm in the middle of doing laundry, washing dishes and making breakfast. The night before I was up till three a.m. preparing Tuesday's project. Rafael (father of the family with whom I live) was sick all night.

At eight Beate and I set off. We walk to the highway, then along it in the direction of Puembo to the first gas station. A closed-off pick-up truck gives us a lift. At the gas station we buy some bread and bananas and ask for directions. A Tumbaco bus comes by, we ask once more and meet three children who are on their way to the Pesta II. They are very lively and friendly. However, one senses they are a little hesitant to talk with us.

We arrive at 8:25. Two women are standing conversing on the grounds, the teachers and majority of children have not yet arrived. Outside is a slide, a simple climber, the identical water play basins as at the Pesta I, two swing sets, lots of tires, some stationary others portable, and some large metal containers. Inside one large room with a cement floor and high windows is divided into the following
areas: kitchen, store, book corner, construction toys, craft materials, doll center, sensorial materials, cubby corner, puzzles and painting areas. Six or seven tables with small stools stand in the middle of the room. There is also a blackboard and a teacher's desk with the Ecuadorian flag on it.

Soon the teachers, Aurora and Sonja arrive and the transport, a big old blue car, arrives. More children of different sizes climb out. Some remain outside and play, others go inside, sit at the tables and colour, a few choose sensorial materials and work on a plastic cover on the floor, a couple have put on aprons to paint. It is quite quiet. Every now and then a child calls Senora or Aurora when s/he wants to show some just completed work, to ask for something or to complain about another child's behaviour. Outside the children spontaneously divide themselves into play groups. One group of boys plays roughly with the tires. Small groups of girls are more interested in the swings and slide, or simply sit on tires and eat. As I sit on a swing Gabriel, a mentally retarded boy comes to sit on my lap. This is the first interaction between one of the children and myself. After this many children come to sit on my lap, to talk and to question me. At 10:30 it is eating time. All the children sit outside and eat what they have brought in their lunch boxes. At 11:00 a project is offered, at 11:30, a storytime followed by sing-song and then it is time to go home. Every fifteen days they go on an outing.
Summary

The well-planned indoor and outdoor environment of the kindergartens facilitates free, spontaneous activities and interactions between the children. Open-ended, unstructured as well as structured materials, both a natural setting and a more contrived one, make up this environment. The large group of children and adults makes for a dynamic and creative constellation of activity in which every child can find an appropriate developmental niche.
CHAPTER THREE

Jean Liedloff's Continuum Concept

If these educators base their relationship to the children upon being available, children will be able to utilize their own efficient, natural way of education themselves, by making use of the people, things, and events of their world, to imitate, observe, and practice upon, motivated by their own social, imitative natures. (Liedloff, 1985, p. 65)

Jean Liedloff's book, The Continuum Concept. Allowing human nature to work successfully (1985) and my visit to Bali, Indonesia on a tour co-hosted by Jean Liedloff in April 1992, have also had a major impact on the development of my principles and practices.

In this section of the thesis I therefore present Jean Liedloff's background, and I outline her principles and practices in thought by looking at what she wrote about the child, the environment and the adult. I refer mainly to her book and her article "Normal neurotics like us" published in Mothering (Fall, 1991).

To illustrate these principles and practices in action, I describe the Yequana Indians, Stone Age peoples whom Jean Liedloff observed and identified as still living in harmony with human nature; the Balinese whom Jean Liedloff claims are still living close to this state of harmony; and the problems we in the West have with living in harmony with human nature. For information on the Yequana I refer solely
to Jean Liedloff (1985). The description of the Balinese is based on Brandies-McGunigle (1991) and my own limited experiences of Bali, and some reading I have done to better understand the people and the culture. These books are Covaribus (193), The Island of Bali; Mead and Bateson’s (1942) Balinese Character: A photographic analysis; Mead (1951), Growth and Culture: A photographic study of Balinese childhood volume I: Essays on Religion, Ritual and Art and volume II: Essays on Society, Tradition, and Crafts; and Jensen and Suryani’s (1992), The Balinese People. A reinvestigation of character. The description of how we in the West can get back to living in harmony with human nature is taken from Liedloff (1985).

Jean Liedloff’s Background

Jean Liedloff was born and raised in New York. Her ancestors, who have been in the United States for many generations, were of German-Jewish descent. Jean Liedloff’s parents were both artists. Her mother was a talented, intellectual woman who, according to the stories Jean has told me, probably never should have had children. Her parents divorced early and Jean and her sister were brought up by their grandmother. According to Jean, her mother was not around when she needed her most, and she had been disappointed each time she had reached out for her mother.

At eight years old while at camp in Maine, Jean experienced a unique sense of harmony. Falling a little
behind during a nature excursion, Jean saw a light beaming through fir trees onto a small moss-covered hill. "The whole picture had a completeness, an all-there quality of such dense power that it stopped me in my tracks, "I felt the anxiety that coloured my life fall away. This, at last, was where things were as they ought to be" wrote Jean (Liedloff, 1985, p. 4). Gloria Steinem (1992) quotes Liedloff (1985, p. 5)

I knew, even at eight, that the confusion of values thrust upon me by parents, teachers, other children, nannies, camp counselors, and others would only worsen as I grew up. The years would add complications and steer me into more and more impenetrable tangles of rights and wrongs, desirables and undesirables. I had already seen enough to know that. But if I could keep The Glade with me, I thought, I would never get lost. Jean was able to use this experience to help her cope with life well into her teens.

Liedloff (1985, p 4) writes "it gave a glimpse of the existence of an order without revealing its construction, or how one could sustain a view of it in the muddle of day-to-day living". A little later in the same book she writes "The brief vision was too fragile to survive the trip back to applicability". When she was about fifteen years old she lost The Glade. During this time of living in the city and studying she lost her attachment to nature. When her grandmother, with whom she had been living, died she left
college and went alone by ship to Europe. Liedloff (1985, p. 6) writes

In my cabin on the ship bound for France, I wept for fear I had gambled away everything familiar to me for a hope of something nameless... I wandered about Paris sketching and writing poetry. I was offered a job as a model at Dior, but did not take it ...I still could not have said what I was looking for.

In Florence, Italy, Jean was invited by some Italians to go with them on a diamond expedition into the Venezuelan jungle. She made a quick decision to join them. Liedloff (1985) writes she went to the South American jungle with no theory to prove, no more than a normal curiosity about Indians and a vague sense that she might learn something significant.

In her book, Jean writes about how she rediscovered The Glade one day during one of the early expeditions while sitting down in the jungle, with a book,

I found a seat among the roots of a large tree that overhung the river. I read....not daydreaming but following the story with normal attentiveness, when suddenly I was struck with terrific force by a realization....I had lost it [The Glade], and now in a grownup Glade, the biggest jungle on earth, it had returned. The mysteries of jungle life, the ways of its animals and plants, its dramatic storms and sunsets, its snakes, its orchids, its fascinating
virginity, the hardness of making one’s way in it, and the generosity of beauty all made it appear even more actively and profoundly right. I was right on a grand scale.

It was The Glade, lost, found, and now recognized, this time forever. Around me, overhead, underfoot, everything was right, being born, living, dying and being replaced without a break in the order of it all. I ran my hands lovingly over the great roots that held me like an armchair, and began to entertain the idea of staying in the jungle for the rest of my life. (p. 4-8)

Jean participated in five expeditions, and each one brought her closer to the Stone Age Indians living in the jungle. About the time between expeditions Liedloff (1985) writes

I had found no rightness for myself at all. I had only seen it from outside and managed to recognize it, and very superficially at that. I somehow did not see the obvious: that the Indians as humans like myself and also as participants in the jungle’s rightness were the common denominator, the link between the harmony around me and my want of it. (p. 9)

After the fourth expedition a valuable unlearning process was started. She began to reverse the tearing-down process. Bit by bit she began to perceive the order that underlay not only her South American observations,
but also the fragments into which she had broken her experiences of civilized life.

She returned on a fifth expedition with important questions e.g. What is the Yequana view of the universe, of mythology, and of shamanic doings? The answers she found led her conclusion that people in the West had tragically misunderstood their own nature, that the way they were treating their babies and children was not appropriate for human beings and this was, along with many other customs that abuse our nature, the cause of widespread alienation, neurosis and unhappiness. This fifth and final expedition confirmed retrospectively her observations, which were then published in her book, The Continuum Concept. Allowing human nature to work successfully (1985).

Jean then lived in London, England for some years. She looked for a way to apply the continuum concept to adult troubles. First she tried to give the formative experiences of baby and childhood back to adults, but this was impractical, difficult and cumbersome. Then she concentrated on negative or traumatic early experiences. In the late seventies, she joined Dr. F. Lake who had done pioneering research in abreaction therapy (primal techniques that allow people, by means of special breathing, to relive their earliest terrors, the birth passage, and even prenatal experiences). This experience showed Jean that the offences to peoples's sensibilities begin already in utero. She also came to the conclusion that this reliving of early
experiences was in itself not therapeutic. It rarely made a
difference in the individual's life, so she then closed her
practice for a while. (Liedloff, 1991)

During these years, Jean wrote for the Sunday Times,
worked as an interpreter, was a founding editor of the
magazine The Ecologist, and lectured and broadcast around
the world to students, doctors, parents, psychotherapists
and the general public who were looking for explanations and
remedies for personal alienation and social ills.

When she again practiced and taught psychotherapy based
on her continuum concept ideas, she worked with people's
beliefs, since she had noticed that there was an underlying
belief of being wrong, of not being good enough, not
lovable, disappointing, incompetent, insignificant,
unserving, inadequate, evil, bad, or in some other way not
"right". Jean Liedloff therefore searched for words which
would describe how human beings would have to feel about
themselves in order to live optimally, to feel at home in
their own skins and represent themselves accurately to
others. She thought back to her experiences among the
Yequana and came up with the words WORTHY and WELCOME. Her
approach was now to do the detective work into the
experiences that form inner beliefs; searching out facts;
reinterpreting and reevaluating experiences that were
uncovered; examining past and present experiences for
expressions of untrue beliefs. What is true and what isn't
is sorted out in therapy, the old unconscious beliefs are
identified and replaced with true ones, leading to a significant change in the quality of life.

Presently Jean Liedloff lives in Sausalility, California on a houseboat called the White Elephant. She attends conferences, gives workshops, and does consulting over the telephone, attempting to help people bridge a "normal" distance from nature and arrive at what she sees as the evolutionary source of well-being. Her message of integrating infants and children with adults and all people with nature, has spawned an international network to share practical ways of accomplishing this in modern life.

Jean Liedloff's principles and practices in thought about the child, the environment and the adult are derived from her assumption that if one wants to know what is correct for our species, one must study human subjects who have not left the continuum concept of appropriate behaviour and environment. She also points out that it is essential to keep constant watch for opportunities to reinstate our innate ability to choose what is suitable.

Principles and Practices in Thought

The child.

According to Jean Liedloff (1985) the forces that put the human infant together know in advance what s/he will need as a function of experience. The design of each human-being is a reflection of the experience s/he is expected
to encounter. The experience s/he can tolerate is defined by the circumstances to which his/her antecedents were adapted.

At the moment of birth, a radical change from infant in the womb to an infant in arms takes place. Changes in moisture, temperature, sound and in the degree of independence occur. The infant has no sense of time and therefore no hope. It lives in a state of eternal now. Its lack of experience makes time seem intolerably long and it therefore cries for results.

According to Jean Liedloff (1985) the infant is born with innate, intrinsically interwoven tendencies and expectations. Some such basic tendencies are to imitate, to suckle, to avoid physical harm, to crawl etc.. These tendencies and expectations are imitative, cooperative, inclined to preserving the individual and the species, and include knowing how to care for infants and having the ability to do so.

The infant is also assumed to be born innately social, and has the need to be accepted as a well-intentioned, naturally social individual who is trying to do the right thing, and who wants reliable reactions from its elders for guidance. The infant and later the child seek information about what is done and not done.

What the infant expects in the way of treatment and circumstances is what should become available. When this does not take place, internal sets of tendencies interact,
and corrective or compensatory tendencies make an effort to restore stability. Jean Liedloff believes that an infant or child is more likely to do what s/he senses is expected rather than what s/he is told to do. For example a chronic, unsatisfied longing for a mother's acceptance can reinforce, to the point of self-destructiveness, the infant/child's need to do what s/he feels is expected by the mother or her representatives regardless of what s/he is told to do. A sound continuum infant/child, on the other hand, will have a working set of innate tendencies to do the suitable thing, e.g. imitating, exploring, examining, not injuring him/herself or other people, coming in out of the rain, making pleasing noises and faces when people behave correctly, responding to signals in younger children etc.. A deprived child, or one who is expected to behave antisocially, can transgress an innate sense of fitness to the extent that requirements and susceptibility to the expectations of others have been transgressed.

As the infant matures into a child, s/he can begin to recognize the relative nature of events in time as well as a scale and value system. Liedloff(1985) believes if the child has received a full complement of in-arms experience s/he will have no need to beg for attention in excess of physical requirements, for s/he will not, like the children one has known in civilized circumstances, need reassurance to affirm either existence or lovableness. A child who expends an enormous amount of energy trying to get the
attention of an adult is not getting the required acceptable experiences. Jean Liedloff (1985) also believes that a child’s curiosity and desire to do things him/herself are the definition of a capacity to learn without sacrificing any part of the whole of development.

The child’s ability to form a succession of concepts of increasing complexity is reflected in the verbal abilities of the developing child. His/her view of the universe, and the relationship of the self to other, change with that development and a time-conditioned concept of time. This leads to a conceptual gap between different age groups, an unbridgeable gulf between what is meant and what is understood by infants/children in their universe and adults in theirs. Language is of limited value in their interaction. Each age group grasps the conceptual structures appropriate to its development, following the example of children a little older than themselves until a full complement of verbal thought forms exist that are eventually able to take in adult views, and context.

Jean Liedloff (1985) distinguishes between evolution and change. In evolution, the way of diversification is ever more precisely adapted to our requirements, leading to stability. Change on the other hand destroys by introducing behaviour or circumstances which do not take into account the entire range of factors concerned in serving our best interests. It makes us vulnerable, it replaces a piece of well-integrated behaviour with one that is not. It replaces
what is complex and adapted, and it places strain on the
equilibrium of all intricately related factors inside and
outside the system, leading a vulnerability. In each life
form, the tendency to evolve is not random but to further
its own interests. It is directed at greater stability
(diversity and complexity leading to better adaptability).
The resistance to change is not in conflict with the
tendency to evolve. It is an indispensable force in keeping
any system stable.

Learning according to Jean Liedloff is a process of
fulfilling expectations for certain kinds of information,
which increase in a definite order of complexity as do
patterns of speech.

Liedloff (1985) points out that the cortex development
of the human brain is distinct from all other species,
including our own ancestors. She believes that this
development, which allows us to store recollections of the
past and present, led to our conscious decision to leave the
continuum.

The environment.

Jean Liedloff writes about an environment providing
what the child is expected to need. She writes about
culture and language, which begin with the expectation and
tendency to find their content in the environment. First
and foremost it should present the child with the expected
influences and examples of social behaviour.
Jean Liedloff considers an evolved culture one which fulfills its people's social expectations and tendencies, through a way of life. The superficial features of these structures are the most variable and the basic tenets are the least variable. Cultures which have evolved over a long period of time are resistant to change as are stable systems in nature. They rely more on instincts than on intellect. The more a culture relies on its intellect, the more restraints on individuals are required to maintain it.

The cultural environment in which human development flourishes provides an unchanging way of life which requires work and cooperation of its members, not in excess of their natures; it consists of families which are close to other families; children who accompany adults wherever they go; different generations living under the same roof; and leadership that emerges naturally, and is initiated only when individuals are impractical. It consists of a number of people who live and work together, a few families up to a few hundred, who are interested in maintaining good relations with each other.

Jean Liedloff considers a total verbal environment, undistorted and unedited, to be best suited to permitting the child to absorb what s/he can. As long as the child's mind is allowed to leave what it cannot digest, it cannot be harmed by concepts it cannot understand. Persons of any age are not called upon to use a false point of view. The verbal communication between adults and children is of a
very basic sort, whereas between children there is a stratified system of conversation that consists of total verbal exchanges which diminish as their ages differ. The verbal environment of the child provides language in which the human potential for verbalizing can grow.

The adult.

First of all Jean Liedloff believes that the adult who has fears, who feels unworthy, unwelcome and/or guilty has these beliefs due to erroneous early experiences and that these will stand in the way of a healthy relationship with children. Truth acquired by induction and deduction, reevaluation of beliefs unexamined since formed in childhood, or data gleaned from others who had no investment in forgetting some event that seemed cataclysmic to the subject, brings about transformation.

The adult should assume innate sociability and should respect each individual as his own proprietor and act accordingly. She gives the example of an adult's expression of surprise when a child has behaved socially implies that sociality it is unexpected, uncharacteristic and unusual to the child. She writes this may please the child's reason but his/her feeling will be of uneasiness at having failed to know what had been expected. This is what Jean Liedloff believes makes the child most truly part of his culture, tribe and family.
Jean Liedloff sees adults engaged in living their own adult life, with the child in their midst. In this way, the adult can give the child an example to follow by simply doing what one has to do. The adult does not give special attention to the child, but rather creates an atmosphere that minding one's own business is a priority. The child is only noticed when s/he requires it and then no more than is useful. Jean Liedloff believes that more or less assistance than a child demands is detrimental to progress. If however the child is expending enormous amounts of energy to get an adult's attention, this is a sure signal for the adult to change the child's experiences.

The adult honours the child's autonomy by leaving choice to the child from the earliest age. This also keeps the child's judgement at peak efficiency and leads to their spontaneous protection of infants, due to their accurate sense of real dangers. An adult's guiding a child according to what the adult thinks is best diminishes the child's wholeness. This affects the child's total well-being. It can only enhance certain abilities at the expense of others.

Jean Liedloff also advocates that adults allow children to listen freely, and to take from the conversation what they can. This will eliminate any suggestion about how much is expected of the child, obviating a potential ruinous conflict.
Principles and Practices in Action

The Yequana, the Balinese and us.

Jean Liedloff (1985) shares many observations she made while with the Yequana, Stone Age Peoples living in the Venezuelan jungle, from whom she derived her notion of a continuum concept. The Balinese, whom I was able to experience on a tour co-hosted by Jean Liedloff, also practice many of these child-rearing practices that we in the West have deviated from. Before presenting some of them, I would like to point out that not all Stone Age Peoples live this way now. Yanoama, The narrative of a white girl kidnapped by Amazonian Indians, (1970) for example describes a somewhat different picture. There are depictions of babies of a rival tribe being swung against rocks. This however should not minimize Jean Liedloff’s findings. She has found and described the life style of the Yequana which according to her description and interpretation is very exemplary and offers much to be learned from.

With respect to the infant, Liedloff (1985) describes how she observed the Yequana keep their newborn infants in close physical contact until the infant was independently mobile. When the infant crawls and begins to seek independence, little attempt was made to protect the infant from common perils.
One observation Liedloff (1985) writes about which stands out in my memory is about how young Yequana children do not run away from their caregivers

...a Yequana tot would not dream of straying from his mother on a forest trail, for she does not look behind to see whether he is following, she does not suggest that there is a choice to be made, or that it is her job to keep them together; she only slows her pace to one he can maintain. Knowing this, the babe will cry out if he cannot keep up for one reason or another. A minor fall from which he can pick himself up and run a little to make up the lost seconds seldom rates even that call. Her manner shows him that she is both businesslike and patient if ever she does have to wait for him. (p. 86)

She interprets this in the following way..

It suggests that she knows that he will not take any more time than is gracefully necessary before they can continue together on their way. There is nothing of the judge in her. Her assumption of innate sociality works with his tendency to do what he perceives she expects. Stopping or going, that basic assumption remains unchanged and unquestioned. (p. 86)

Another observation she often writes about is how the young children, girls in particular, look after infants.

I saw little Yequana girls from the age of three or four (sometimes they looked even younger) taking full
charge of infants. It was clearly their favorite occupation but it did not prevent their doing other things at the same time, tending fires, fetching water and so on. Though boys are seldom given long-term care of infants, they are very fond of picking them up and playing with them. Young men in their teens look for infants to play with when they come back from their day's activities. They throw babies in the air and catch them, laughing loudly and sharing a hilarious time with their tiny tribesmen, whose range of experience and sense of loveableness is happily enriched. (p. 90)

Her interpretation of this observation is

They did not tire of infants, as they would have of dolls. The continuum is at its strongest, it seems, in the protection of infants, and the endless patience and loving care they need is there in every child, boys included. (p. 90)

With respect to protecting infants and young children from danger Liedloff (1985) observed

There are many potentially dangerous situations among the Yequana. Omnipresence of machetes, knives, all razor sharp and all available to step on, fall against, or play with. Babies, too young to have learned about handles, picked them up by the blades and, as I watched, waved them about in their dimpled fists. They not only did not sever their own fingers or injure
themselves at all, but if they were in their mother's arms, they managed to miss hurting her also. Babies, like puppies, played about beside the family fire without interference from their respective elders. (p. 102)

This faith in the child seems to be related to their assumption that ...

...a person's judgement is thought to be adequate to make any decision he feels motivated to make. The impulse to make a decision is evidence of the ability to do it suitably; small children do not make large decisions; they are strongly interested in self-preservation, and in matters beyond their powers of comprehension they look to elders to judge what is best. Leaving the choice to the child from the earliest age keeps his judgment at peak efficiency, either to delegate or to make decisions. Caution asserts itself relative to the responsibility involve, and errors are thus kept at an absolute minimum. A decision taken in this way receives no opposition from the child and therefore works with harmony and pleasure for all concerned. (Liedloff, 1985, p. 94)

With respect to adult child verbal communication Jean Liedloff (1985) made the following observations. There is only a very basic "Wait here" or "Hand me that" sort of verbal communication between adults and children. There is a stratified system of conversation
that consists of total verbal exchanges by children of approximately the same age with diminishing communicating as age differs. There is minimal chat between the boys and the girls whose lives and interests are so very different from one another’s and seldom, even as adults, do they seem to have occasion for long talks between the sexes (p. 105).

When adults converse, children generally listen. They do not talk among themselves. At no time is a person of any age called upon to use a false point of view. (p. 105)

...adults say anything they have to say in front of children and the children listen, comprehending the proceedings according to their abilities. When the time comes for a child to join the adults, he has grown to understand their speech and patterns and point of view at his own pace, without the necessity of having to discredit a series of patterns and points of view confected by them for children. (p. 106)

No orders are given to a child that run counter to his own inclinations how to play, how much to eat, when to sleep and so on. But where his help is required, he is expected to comply instantly. Commands like "Bring some water!" "Chop some wood!" "Hand me that!" or "Give
the baby a banana! are given with the same assumption of innate sociality, in the firm knowledge that a child wants to be of service and to join in the work of his people. No one watches to see whether the child obeys, there is no doubt of his will to cooperate. As the social animal he is, he does as he is expected without hesitation and to the very best of his ability. (p. 91)

Liedloff (1985) describes their daily lives: Yequana girls spend their childhood with other girls and women, participating in their work at home or in gardens. Boys run about together much of the time. They can only be with their fathers on suitable occasions. In the meantime, the little boys are shooting a thousand shots at grasshoppers, or at little birds. The men are out hunting, shooting only once or twice all day. This would give little boys little chance to develop this skill, except at finding or retrieving game.

Boys and girls go swimming almost every day. In canoeing, too, they are expert incredibly early. Boys and girls often go together. They guide heavy dugouts through tricky currents and rapids sometimes with a crew all under six or seven years old.

The Yequana child, free of the need for reassurance, is also able to do things on his or her own. Child or adult of either sex, often go fishing alone. Basketry and weapon making and repairing are done by boys and men, working alone. Women or girls often hammer the teeth into cassava
graters, weave armbands or hammocks, and cook often in solitude, or with an infant as companion.

The Yequana however never permit themselves to suffer boredom or loneliness. Most of their time is spent in the company of their peers. Hunting, certain kinds of fishing, some stages of canoe making, and house building are done by groups of men. They go on trading trips in groups, and several at a time slash and burn the areas where they plant their gardens. Groups of women and girls walk to the gardens and go through the processes of making cassava, fetching water and firewood. Groups of boys practice shooting arrows and blowing darts, play games, swim, fish, explore or gather food. When men, women, girls, and boys or families, do things together, all talk a great deal with high spirits and good humor. Laughter is very frequent. The young men often whoop joyously in chorus at the end of a good story, piece of news, or joke. Such a party atmosphere is the everyday norm.

The Balinese, like the Yequana, keep their newborns in close physical contact, until they are six months old; older siblings, girls more than boys look after young siblings; and children learn from being with their peers and older counterparts.

Balinese life is full of rituals (Brandeis-McCunigle, 1991). Pregnancy is considered a great blessing, since children are revered as celestial beings recently descended from the realm of the gods and goddesses. At pregnancy,
prayers are given in hope that baby will be strong and healthy: lavish offerings, decorations and feasts are prepared, elaborate costumes worn and music and laughter shimmer the air. At three months a shaman performs a naming ceremony. The name is temporary but leads to the parents being called "mother/father of ______". Most children are referred to by their place in birth order. Names that last through a lifetime are given later by the family. Children under the age of six months are not allowed to touch the earth to preserve their divine nature. When their feet do touch the ground for the first time the event is heralded by a big ceremony. Each subsequent stage of life right up to cremation at death is honoured by rituals and ceremonies for purification and spiritual strengthening.

On my visit to Bali, I was struck by the similarities of the Balinese to the observations Jean Liedloff had made among the Yequana. Infants seemed peaceful and content, and they did not deliberately wander far from their caregivers. They were present almost everywhere. In Ubud where I spent most of my time, I observed a fifteen-year-old tending a shop, with her two-year-old sister in her care. The fifteen-year-old went about her business when there were customers and when there weren’t, she either conversed with me or her little sister. When the two-year-old had discovered a book of matches on the ground the fifteen-year-old lit a match in her presence and then gave it to her. The two-year-old held it till the flame came close to her
finger and then dropped it on the dirt floor. The flame was put out and the heat of the match was gone. The fifteen-year-old then lit another match. The two-year-old came to watch but she did not take the lit match when it was again offered to her. When the two-year-old got tired she simply lay down on the floor with a pillow under her head which her sister had offered to her. She had a bottle of milk which she took when she wanted and when the fifteen-year-old ate something, she gave some to her little sister. If the fifteen-year-old had to leave the shop, she left her sister in my care or in the care of a neighbour who would look in occasionally.

Men are seen in the early morning or late afternoons holding infants or standing or squatting on the ground near a toddler. They are present and aware of the child and at the same time everything else that is going on in their surroundings.

In the villages, life resembles Yequana life even more. Children are seen everywhere. Craftsmen work in open bailes with their sons as informal and later more formal apprentices. Women and young girls carry infants on their hips. Young children are looked after by older siblings. They are not over-protected, but they are respected.

With respect to us in the West, Jean describes the following common observations

...a number of small children being chased by grown-ups in Manhattan’s Central park. Mothers and nurses were
to be seen flapping about, bent unbecomingly at the hips, hands outstretched and voice shrill, begging with unconvincing threats for the fugitive toddlers to come to heel. They varied that nerve-racking performance with trying to carry on park-bench conversations with one another while calling out to charges who were nearing the limits of their allowed distances, or the women were leaping up and rushing after outright escapees, who had caught on to the rules of the game and taken the first relaxation of surveillance as the signal for a break. (Liedloff, 1985, p. 87)

Liedloff interprets this observation as interference, which substitutes the adult's will for the child's. It tries to make the child do the right thing, possibly setting the child's progress back several weeks.

Liedloff (1985) believes that our Western children are tacitly acknowledged to bear a permanent burden of pain (the longing for more loving than s/he has had). They are given hugs and kisses and fond words for the smallest bumps. This may not help their scraped knees, but the total peinload is lightened at a moment when it is especially strained.

Liedloff (1985) states it is no coincidence that Western "civilized" peoples have perhaps the most carefully protected children in history as regards external safeguards, and are therefore the least expected to know how to look after themselves. She attributes this to her belief that the machinery for looking after themselves is in only
partial use, putting a great deal of the burden upon the caretakers.

Liedloff (1985) also points out how Western adults and children take false points of view when speaking with one another. They try to guess what or how much a child's mind can take in, resulting in cross-purpose, misunderstandings, disappointments, anger and a general loss of harmony.

Liedloff (1985, p. 106) also points out how our teaching children

... 'good' will always be rewarded and 'evil' always punished, promises are always kept, grownups never tell lies, and so on, not only necessitates slapping them down later for being "unrealistic" and "immature" if they have by chance gone on believing the nursery fictions, but also a sense of disillusionment that usually applies to their upbringing in general and what they believed to be the culture they were expected to follow. The results are confusion about how to behave, as the basis for action is snatched away, and suspicion of anything else their culture tells them. It is the intellect trying to "decide" what a child can understand.

From these statements it is clear that Jean Liedloff finds we are living in a highly alienated culture, and a pathological civilization. She refers to us as a "civilization blinded mind" (p. 9).

Liedloff (1985) writes
...we are living lives for which evolution didn't prepare us. Our faculties are crippled by deprivation. Our standard of life increases without the quality of life increasing. Unhappiness is a function of ourselves not being able to deal with others (p. 107).

Summary

Jean Liedloff's premise is that "to be described as social creatures we must have a strong proclivity for behaving as we feel we are expected to". (Liedloff, 1985, p. 104) She points out for anyone trying to apply continuum principles in civilized life, this changeover to trust in children's self-protecting ability will be one of the most difficult problems. To translate some of these observations into our daily interactions with children Liedloff (1985) suggests:

...leave children to their own devices, they will be better off without our vigilance. Stealing apprehensive glances at them risks being caught at it and having the look taken for an expectation of inefficiency. Require faith in the ability of babies to sense the slightest factors in their surroundings and that they will conduct themselves safely among them. (p. 104)

Liedloff firmly believes we have no choice but to find our way back to that knowledge common to the Yequana and our own
ancestors, through the use of the intellect. We must again learn to act as though one believed first.
CHAPTER FOUR

Transitions in my Thoughts and Actions

That's what learning is. You suddenly understand something you've understood all your life, but in a new way.
Doris Lessing (Steinem, 1992, p. 166)

In this chapter I will describe the transitions in my thoughts and actions brought on through my contact with Maria Montessori, Rebeca and Mauricio Wild and Jean Liedloff's ideas, by referring to the theoretical construct of a paradigm and paradigm shifts stated in Kuhn's (1970) book The Structure of Scientific Revolutions. In this book, Kuhn describes major movements or shifts in models or world views of science using the notion of paradigms and their shifts. In the early stages, facts are randomly gathered. Then these facts are related to each other forming a pre-paradigm stage. As implicit rules come to define the field, a paradigm stage is reached. Kuhn defines a paradigm as a "set of recurrent and quasi-standard illustrations of various theories in their conceptual, observational and instrumental applications" (p. 43) not as a set of definable rules and assumptions. When evidence arises which is contrary to a paradigm, or which cannot be explained by a paradigm, the paradigm must be changed or replaced with a more encompassing one. This is the way Kuhn accounts for new scientific communities arising, accompanied by new theories and research methodologies, to validate the match
between theory and "reality".

Lee (1982) defines a paradigm as a mental model used to make sense of experience, often mistaken for reality itself. In the previous chapters, I have depicted the principles and practices of the Montessori method, the Wild's active school and Jean Liedloff's continuum concept. In this chapter I refer to my understanding of these approaches as personal paradigms. I show how I came to adopt these paradigms and describe the subsequent transitions in my thoughts and actions.

Paradigm Shifts in my Thoughts and Actions

Pre-paradigm stage.

When I first began working with children in several day cares, I saw a lot of different approaches. There were different ways and reasons for disciplining a child, there were different degrees of child-environment-adult centeredness, and often there were great discrepancies between teachers and activities taking place in different rooms and/or at different times of the day. What also made me uncomfortable were the numerous transitions from one caregiver to another that could occur over the course of a day.

When I had one group of children under my care for a longer period of time, I tried to work in accordance with my intuitive principles and practices, but I often found this rather discouraging. The space and set-up of the room were
not conducive to how I wanted to work. Already at this time I wanted to respect the children's intrinsic interests and their individual rhythms. I wanted to facilitate their development guided from within. I did not want to direct them according to a schedule made to fit my needs and those of the group. I wanted to respect their likes and dislikes, their desire to move, to observe and take in everyday happenings with all their being. The summer staff, most of whom were not trained in early childhood education, did not understand my dilemma and could therefore not be very supportive. I also did not have the required skills and understanding to proceed in the way I wanted to.

Adoption of the Montessori paradigm.

While in my last year of undergraduate studies, I ran experiments for my honours thesis and simultaneously for my thesis adviser's research. Friends and colleagues were writing GRE's and SAT's and applying to different graduate schools in Canada and the U.S. My boyfriend was completing his M.A. in physics, and then going on to do a PhD. We were hard working and ambitious.

I read the requirements and the outlines for graduate programs and knew I did not want to continue on in what I had begun in my undergraduate work. I decided I wanted a career working with young children. I wanted to learn something practical, something meaningful, something that could lead to my independence and autonomy, something that
could be done anywhere, a type of work that would allow me to be an interested and creative learner and that could benefit needy children. I did not want to do research. It was too impersonal and required that one specialize and be very competitive. I was sure I did not want to do what was required to be really good at this, and I did not want to be mediocre.

An internationally recognized training in the Montessori method was the tool with which I thought I could begin to achieve my aim. Having worked at the Mackay Center for physically and mentally handicapped children and done some work with an autistic boy, I wanted my training to include handicapped children. Therefore I decided to go to Munich, Germany where the Montessori-training course specialized in the integration of handicapped children into the Montessori class.

I continued to work in the language and cognition lab of my honours thesis adviser, and to tutor the autistic boy until shortly before my departure for Germany, in mid-summer. Attending the open part of a conference on computers and language, I learned of a psychologist who had graduated from McGill and was working at the Max Planck Institute for Psychiatry in Munich. I decided to look him up and see if he might have some work for me. I was not yet able to make a clean break from what I had been doing at McGill. I missed the prestige that was associated with doing research. I located the Max Planck Institute for
Psychiatry and found the psychologist. He referred me to someone in the psychology department who liked to hire foreigners. The psychologist hired me to analyze some videos of patient-therapist interactions, using a facial action coding system. He signed the papers I needed to get a work visa and then I had to train myself in the use of this coding system. This job gave me access to a library, a swimming pool and weekly conferences. I spent a lot of time here. I discovered I was not yet able to make the transition from research to practice; from psychology to early childhood education. I still wanted both.

The work I ended up doing mostly was proof-reading a book that this psychologist had written and translated into English. This psychologist was very good to me. He introduced me to people and events, he respected me and the work I did for him. This connection was very beneficial.

When the Montessori training program started in October, I was familiar with the Munich libraries, bookstores, swimming pools, museums and of course some of the beautiful villages and hiking trails, accessible by the S-bahn (rail transportation). I was very ready to start the training. I had bought my books in German and had even started to read some of them in advance.

Our training course was divided into sections: lectures and conferences for one semester, observations and practicum for another semester. We were a group of twenty-five: there were two men, the majority were educators, a few were
teachers, psychologists, one was an occupational therapist. For almost everyone this training was a supplementary training. For me, it was the first practical career training I was to receive.

I often visited the morning conferences for the staff held at the Children’s Center, which were also attended by doctors, therapists and educators. They were a half-hour long and focused on a different issue each morning. Sometimes specialists were brought in. They were often very interesting and dynamic.

Our mornings continued with lectures about the Children’s Center (therapy and medicine). Someone from each department came in and talked to us about his/her work. In the afternoon, we discussed Montessori theory and learned how to demonstrate the materials to a child. We had to practice this, simulating child and directress roles. This went on five days a week during the first semester. It was quite intensive. At the end of the semester, we were examined on our knowledge of theory and ability to demonstrate the materials.

In the second semester, we went to Montessori kindergartens to observe and/or to practice teach. We had short written and oral assignments. We also had a unit on Montessori therapy as it was developed and practiced at the Children’s Center. Montessori materials adapted and modified so they could be used by children with various handicaps were shown to us. These materials were used in
the therapy sessions and were then found by the child in the kindergarten. We had the opportunity to observe individual and small group therapy sessions and then went to observe kindergarten and school classes in the Munich Model Montessori School, where handicapped and non-handicapped children were educated side by side.

The hardest part about the training for me was to relax and start feeling. I felt very numb after all the years of sitting at desks, reading and writing. In this training, for the first time in a long time, I needed all my faculties in an integrated way and my intellect felt very separate from my feelings and my movements. I felt that for years I had pushed myself or allowed myself to feel pressured to keep up with a system of education that did not respect my needs. I started to feel a certain resentment towards authority and this came out in the way I interacted with the materials. I resented the rigid material demonstrations. I wanted to experiment with the materials in my own way. Through this interaction, I found myself coming to understand things I had once been taught by rote methods in public school. I went through some trying times, but I learned a lot and it was a step in the direction that I had chosen to go.

The weeks during and the months after the course spent observing in the private Montessori kindergarten in Munich, were very beneficial. I was always on time, helped out with the clean-up and did anything that was asked of me by the
directresses or the children. I was very ready to absorb. I was not yet confident enough in myself, nor was I in tune with my inner self. While there, I felt a tension. I felt I should do something and at the same time I could not do anything. No one expected more of me at this time and I appreciated this. I am glad that both they and I had the patience to wait until it came from me.

During these months I was also helping out at a small Montessori-oriented children's group run by a former graduate of the same training course I had just completed. The group was significantly smaller than the private Montessori kindergarten and therefore a closer-knit group. There was more interaction between the mothers and the directress. It was more casual and not so perfect. There were materials other than just the Montessori ones. I felt much more comfortable and accepted here, and therefore was able to participate in a useful way. I got to know these children and come close to them. One of the mothers invited me over for lunch. The directress shared a lot of her insights and difficulties with me, and she asked me what I thought. Here I saw how the directress was learning to be firm, to observe and interact with the children.

I was able to share with this directress things that I had observed in the private kindergarten. I was able to interact with the children without the Montessori materials, which I think lessened the tension I was feeling in the private Montessori kindergarten. I could be myself and did
not have to be the perfect Montessori directress, which I knew I was not. In this environment I felt accepted for who I was, and I could discuss how I felt without being measured against Montessori principles and practices.

Through these two experiences, I came to see how many of the things we had been taught in the Montessori training course were correct and derived from observations in the praxis. It seems I had to discover this for myself: it was not enough for me to take someone’s word. I had to see them in practice. There was to be no more force-feeding for me.

By the end of my stay, I had made many of the observations that Maria Montessori had made, and I had come to respect the Montessori principles and practices in thought and in action.

What I had learned from Montessori’s books, my training and my experiences in Montessori kindergartens about the child formed a foundation for my further development. Montessori’s descriptions of the stages of development, the sensitive periods, the absorbent mind and observations she made of children at particular stages in their development or learning have helped me significantly to better understand the child. Maria Montessori had an incredible eye for detail, a very extraordinary mind and ability to articulate her discoveries, in a way that made them useful to others working with children.

What I particularly liked about Montessori was her deep respect for the child and for development guided from
within. These principles were in agreement with my feelings and thoughts. Montessori had found evidence of this through her observations of children. Her beliefs and observations then led her to design an environment for children which took these principles and corresponding practices into consideration. My observations and experiences in the private Montessori kindergarten validated the importance of the Montessori prepared environment in part and as a whole.

Maria Montessori understood the cognitive development of the child, but I felt she did not know or write enough about the socio-emotional development of the child and the role of fantasy/imagination in these early years. Montessori advocated that the child be firmly grounded in reality before the imagination be developed. These were areas I felt the Montessori paradigm did not explain well.

Montessori, representative of the views of her time, believed that human beings were once a part of nature, and that through the advances of agricultural practices which freed a large sector of the population to develop other technologies, human beings became civilized. She believed that the child had to go through a similar process in development to become a member of the civilized adult society. Education was the tool with which to accomplish this. The child was to be weaned away from nature to become a social and civilized being. I have difficulties with this belief of hers, and I think it may in part be due to our living at different times. Today, we seem to be moving
towards the integration of human kind and nature again. I believe that the so-called "civilized" world has caused a lot of harm to the earth. I also believe that the child is innately social. I do not agree that the role of education is to wean children from nature in order to civilize and socialize them. These are points of the Montessori paradigm with which I disagree.

Paradigm shift.

In mid-December I returned to Montreal for Christmas. I did not know if I was going to stay in Montreal and pick up the life I had left behind, or return to Munich to continue to work in the Montessori kindergartens. My options were open.

I had returned to Montreal with Rebeca Wild's first book in my purse. I had started to read it on the plane and then came back to it during the Christmas holidays. This book initiated a shift in thought and action from the Montessori paradigm towards the Pestalozzi paradigm.

After a few day in Montreal, I went back to McGill to see what was new. I discovered two courses: Cognitive Science offered by my former adviser, and Cognitive Development, both offered in the winter semester. I registered as a special student. In the class of my adviser, I was immediately recognized and asked if I wanted to work for him again. I followed him to his office and before I knew it, I was learning how to use the new software
in which he had recently invested. I felt torn. I felt a
need to keep up with these advancements, I wanted to get
back into things, but I also felt this would be a step away
from the other changes I was trying to make.

I decided to take the job and to attend the two
courses, but I did not like the work and I was a different
type of student. I did not sit in class writing notes
madly, while taping lectures so I could listen to them again
later that night. A certain resentment was welling up in
me. At this pace of information transmission, and in the
form of a monologue, I had no chance to digest the material,
and discussion was not expected by the lecturers. They were
intimidating. They knew much more than we did and we were
swallowing and swallowing in ever faster gulps. I completed
the semester. I got B's. I learned some things and did not
learn others. It was becoming clear to me that I did not
want to be in this situation any more. When the semester
came to an end, I quit and got a job at a local day care
again.

In the day care, I worked with infants and two-year-
olds; later, I had a group of three-year-olds for two
months. I was able to observe, interact and enjoy the
children. I still had a lot of the same complaints I had
had about day care. I did not like the set-up, all the
scheduling and the herding of children from one activity to
another. I tried to create more flexibility and to come to
understand the children in a deeper way. I enjoyed this
work but missed the advantages of the Montessori prepared environment and of working with staff and parents who held shared beliefs.

I began to read Rebeca Wild’s first book, I was again inspired. Here was an authentic, personal description of a journey in thought and action similar to the one I had begun. Feeling very moved by what Rebeca had written, experienced and done, I decided to write to get more information about the school she and her husband had started in Tumbaco, Ecuador. I wanted to know if it was possible to visit.

This book added a significant dimension to what I had learned and experienced in Munich. It explained the socio-emotional development of the child, which is not dealt with to my satisfaction in the Montessori paradigm. The Wild’s expressed a deep faith in the child and in intrinsic development. Human biological processes and nature’s role in the guidance of child development were trusted fully. They did not see the main role of education as being the civilization of children in order to help them adapt to an adult society. They presented a more humanistic belief in the function of education and had a deep faith in the spontaneous, unmanipulated development of the child’s mind through interaction with peers and the physical environment.

While continuing to work at the day care, I received various written communications from the Wild’s and in mid-summer, I learned that I had been selected to be a teacher
trainee at the school. In mid-September, 1988 I left for Ecuador.

Adoption of the Pestalozzi paradigm.

I arrived in Quito, Ecuador. The Wild's met me at the airport and dropped me off at the home of a young German family with whom they were in close contact.

I still remember sitting at the table with Andi and Wolle, young parents of a blond, blue-eyed, three-year-old and Hanis, a physicist who was working on a way to purify water using crystals. They shared a typical German supper of bread, cheese and sausage with me, we exchanged information about ourselves and then I went off to bed feeling very ready to sleep.

Early the next morning I woke up and went into the kitchen to look outside. It had been too dark to see anything the previous evening when I arrived. I saw flowering fruit trees, a rather wild looking garden and off in the distance the green Andes and a clear, blue sky. I could hear dogs barking and chickens clucking. The colours and smells I experienced were new and exciting. Hanis was going off to buy some buns for breakfast. I asked if I could do anything and started to wash the left-over dishes.

In the early afternoon I was picked up by Rebeca in their old, white van. I got my first glimpse of the Pesta, the village of Tumbaco and a few possible places where I could live for the next months. The first week I slept on
the Wild's couch. I attended a course Mauricio and Rebeca were giving for prospective teachers and Pesta parents. Here I met an American woman who had married an Ecuadorian sociologist. She told me she had first come to Ecuador with the Peace Corps. She was now a music teacher and had three children all of whom were going to the Pesta. Previously the family had lived in Alaska where the children had gone to a Montessori school. I also met a young teacher who lived in the interior of Ecuador in the jungle, who was taking the Pestalozzi ideas back with him. We attended Mauricio's talks on Pestalozzi philosophy in the mornings and worked with the materials of the primaria with Rebeca in the afternoons. The atmosphere was one of warmth, caring and great dedication.

About a week later the other Germans started to arrive. I then moved into a three-bedroom house about a half-hour walk away from the Pesta with: Antje a physiotherapist from Hamburg, who had just lost her parents and inherited some money; Heike who was using this visit for a praktikum she needed to complete for her program in socio-pedagogy at the University of Bamberg; and Tobias, a young man, the son of a school girlfriend of Rebeca's, who had just gone through a difficult divorce. We spent some time acclimatizing to each other and our new setting. Rebeca had shown us the basics in the village at Tumbaco, told us when the school would start, asked us to attend an organizational meeting and invited us to a fiesta at the secretary's home next to the
Pesta. Other than that we were on our own and enjoying it.

At the organizational meeting, we were told what the school hours were, that we could observe or participate in anything as long as we did not disturb the natural progression of things. We were requested to let the Wild's know when we were not coming. An afternoon was set aside where Rebeca and/or Mauricio would meet with us to introduce the Pesta philosophy, to discuss any observations or questions we had and to introduce the materials to us.

The fiesta to which all the teachers, Pesta regulars and ourselves were invited was on the Saturday before the Pesta started. There was music, dancing, volleyball playing and much food and drink offered. There was a big crowd and a lot of activity. I did not stay too long because I do not drink and I had planned to join a pilgrimage of some sort which I had seen advertised in Quito. At the location from which transportation was arranged, I met an American peace corps volunteer. She was the only English-speaking person I met that weekend. This pilgrimage took me to the north of Quito, into the Andes. It ended the following evening in the town of Otavalo. On this walk I saw some of the beautiful terrain of Ecuador, I met many locals and experienced extreme heat, rain and hail. It was a great introduction to the country and the people. That evening I went to a small town called Ibarra, where the American peace corps volunteer lived. Here small horse-drawn carts are still a popular means of transportation. That night we went
into Otavalo, a town known for its beautiful setting in the Andes, an Indian market, and many restaurants. We attended a concert of Otavalano Indians sponsored by the pilgrimage organization. We then slept in the peace corps headquarters in Otavalo. I became a little sick and returned to Tumbaco the next day to get ready for the start of school.

For the next three or four months, I lived with the Germans and walked to the Pesta once, often twice daily. Our days were quite complete. Five mornings a week we were at the Pesta, afternoons we attended teacher meetings, or our own meeting with Rebeca and/or Mauricio. Several nights a month we attended the parent evenings. In our free time we did our laundry by hand, did our shopping on foot, cooked our meals from scratch, read and wrote a lot, went for walks and started to enjoy immensely living in the moment. Time was a different concept here: its preciseness and urgency were lacking. This different notion of time brought with it a different reality from the one with which we were familiar. Another difference was the spirit of festivity. There was one fiesta after another, at which a lot of drinking and dancing was common, two things I had never done much of.

My time at the Pesta brought on a crude awakening. To see these respected, self-initiating, spontaneous, active children was both enlightening and painful. I felt somewhat deceived by my own schooling, having followed a curriculum I was not partial to and which had been imposed on me. I felt
both envy and great admiration for these children. The experience was very refreshing. It gave me the courage to trust and respect my inner voice, and those of the children around me.

I chose to spend Christmas alone for the first time in my life. The Germans had Ecuadorian boyfriends or friends from back home with whom they were travelling. I spent one night in Ibarra and then took a train to a town, San Lorenzo, on the north coast of Ecuador which can only be reached by a long one-day train or boat ride. On this train, I again met a lot of locals and a German tourist with whom I then shared accommodations for one night. I stayed on in this hot, fishing town of predominantly black people. I took the time to watch the daily life of the locals and to contemplate my time spent at the Pesta. I met an Ecuadorian who was studying anthroposophic agricultural practices in Amsterdam, travelling with a British woman who was studying Spanish literature for a year in Quito. Her father was an actor and had performed at Stratford, Ontario. They were staying for just one night as were most tourists. I was beginning to forget the person who I thought I was supposed to be, and beginning to feel quite comfortable with who I now thought I actually was. I dressed in the colourful bright synthetic clothing worn by the dark women here, I ate the local food, I did a lot of nothing all day and started to feel comfortable with this, even to enjoy it. This was something that I had felt was not at all condoned in the
culture from which I came, and yet it was so natural for me here. For me this was very consoling.

The next few months I continued to go to the Pesta regularly, and I spent most of my spare time making materials that I could use back home. Materials were very cheap, and I had the time and the motivation. In Ecuador many school children do not have enough money to buy books so they are required to buy only particular pages; for example sheets with colour pictures of different species of flowers, birds, animals, fruits, or of cars, musical instruments etc... I purchased these, cut them out and mounted them on small pieces of wood that I had cut, as had been done at the Pesta. They had taken a classical Montessori material (language classification cards which can be purchased or made by the teacher), modified it and reconstructed it in a cheap and useful way. The traditional Montessori material consists of a set of salient pictures which represent a linguistic category. These would then be used in forming associations between pictorial, auditory and later orthographic representations. It was a self-correcting material as all the Montessori materials are, but required an initial demonstration by the teacher. The Pesta had adapted this material, retaining the Montessori method's adherence to the principles of progressing from familiar to the unfamiliar, from the concrete to the abstract and from contrasting to pairing to seriating. However they also incorporated their beliefs in learning guided by human
processes in a context of spontaneous interactions with peers and the physical environment. The school now had materials that could be used in a multitude of different ways, and teachers who were aware of Montessori principles and practices. However, they relied more on the child’s spontaneous interactions to guide when and how a material was going to be used, rather than giving a Montessori demonstration of the material at a developmentally and individually appropriate moment determined by the teacher. For example pairs of pictures of living and non-living objects could be used for playing lotto, concentration; or they could be used for card games. The children came to learn what the Montessori demonstrations would have taught them, but in accordance with their way of being rather than one that Montessori had carved out as being universal for all children. The Wild’s believed that if universals are truly universal they will manifest themselves spontaneously, independent of the highly structured Montessori environment and demonstrations.

The making and using of one’s own materials facilitates one’s understanding of the learning and teaching process and helps one to come to a better understanding of the child/ren. It also shows one why a material is made the way it is, and occasionally how one could make it still better to fit one’s own teaching and learning situation. There are then two ways to go. A material can become frozen, and good for a very specific exercise in a series of such
exercises or it can be made more flexible, simple and therefore useful in many different ways in different contexts to be spontaneously determined in each situation.

I had now observed both in the kindergarden and in the primaria. In the kindergarden, I occasionally prepared an arts and crafts activity for "el proyectoc. In the casa vieja and the casa nueva, children invited me into their activities, and at other times I selected activities which interested me and children came to join in.

We were now invited by Mauricio and Rebeca to attend individual parent meetings (if parents consented) and continued to attend parent conferences and seminars. I kept notes of what was said. I took in as much as I could, I drew pictures in my mind and on paper. I began to see how Montessori and the Wild's had integrated an understanding of the child into their lives. Mauricio was skilled at communicating this to the parents. Many of the parents became very interested in his ideas, some challenged his views, many participated in lively discussions drawing on their rich personal experiences. I started to feel, not only to see, what was going on and in the end I started to act in accordance with what I was feeling. I regret that it took me so long to get to this state, but more than anything else I am grateful that I experienced it at all.

During this time I then moved in with a young Ecuadorian mother whose three children were in the Pesta kindergarten. She had also taken a great interest in the
Pesta, taken their training course, observed and participated frequently at the Pesta, and started to make her own materials. She also dreamed of starting her own small school and had already started to take in two or three children two afternoons a week. We shared resources and inspirations. This was a productive time for both of us.

For me this visit to the Pesta was a return to the self that I once had been. It was another step in the journey of reuniting the feeling, thinking and acting parts of my being. It was not the end of a journey but rather another new beginning.

Paradigm shift.

In mid-May, it was time to return to Montreal. It was not yet high season. There would be ample time to re-adjust to Montreal and still find a summer job. It was not only a good time to return, but it was also time to leave Tumbaco. Our practicum was coming to an end and it was time to move on. I would take the Pestalozzi paradigm with me in thought, but I was doubtful I could put it into action in Montreal. I would however keep its memories close to me.

After a week or two, I found a summer job at a day care where I used to substitute, and a full-time, part-time job at a private French-English Montessori school for the fall. The two months’ work at the day care showed me how unique the Pesta really was. As good as this day care was, there were many rules and regulations, and teachers were
directing, entertaining and intervening almost all the time. The atmosphere was completely different. Time was divided into many activity blocks. The teacher guided the child's eating habits right up to how and when children went to the bathroom. In the playground, the teachers were either mediating, looking out for potential conflict or dangerous situations, or talking among themselves. The rooms were small and cluttered with toys. The walls were full of pictures and notes on how certain things were to be done. There was not the same space and time for spontaneity. In a way, the child's day in the day care was a miniature replica of the adult's day in the world. There was a schedule of daily and hourly activity-filled time slots set out in advance by the teacher. The teachers were always very busy and the children did not always seem as content and satisfied as they might be.

In August I had to attend a teacher-training session for the Montessori school job. It was given by a teacher with an A.M.I. recognized training from the Toronto Montessori Institute. She had worked at this school already one year and was hired on a three-year contract. She presented one Montessori material after another very quickly and then we had a little time to try them out ourselves. She knew them well, but experience and feeling were lacking. One rather got the feeling that she was doing this for the money and that was about it. Her heart was not really in it. The director informed us that we should make records at
the beginning of each week indicating what material from each section we intended to present to each child that week. We were then to record the date each material demonstration was given to each child. A few other technical things were discussed.

In September the children started to arrive at the Montessori school. I was to work half the day, and a young woman from France, trained there in early childhood education and with a lot of practical experience in the field, was to work the other part of the day. She was to speak only French and to be solely in charge of the language materials (there were only French language materials). I was to speak only English, and to present the math materials. The other materials we both presented. A minority of the children came from English-speaking homes. There were eighteen children registered between the ages of two and five years.

The first week, the only children who attended were those who had been at the school the previous year. There was school only in the morning and both the French-speaking teacher and I worked together. We spent the first week getting to know each other and the children.

The second week we decided we would both come in full-time to coordinate the routine and rules even though we were only being paid for half the time. All the children now came for the whole day. I still remember demonstrating how to carry a chair, how to walk around the room without
Dumping into anything, how to select and carry a material to the place of work, a few early practical life materials, and the bathroom routine. All the shelfsets except for the top shelf of the practical life materials shelfset were covered by green plastic bags. Those first two weeks the children were still very quiet and obedient and I was feeling very awkward.

The third week we started working alone part-time. Gradually new materials were made available and presented to interested children on an individual basis. The undressing and dressing routine was introduced as it got colder. The day consisted of a series of routines and rule-governed activities.

By November all the shelfsets were open. A music and a movement class were introduced. The director of the school told us we should prepare a theme on children of the world. Neither of us was too thrilled about this idea but we were not consulted. The director wanted to see an outline of how we were going to do this at our next meeting. We obediently but unwillingly did so.

I became progressively more unhappy in this situation. I was conforming to principles and practices with which I did not agree. In addition, I was having discipline problems. I had not attained the Montessori balance between freedom and discipline. My counterpart was not having these kinds of problems, because she did not compromise her own principles and practices and she started off being very
strict and remained very firm. I hung in there as long as I could bear it. After having to call the director or the secretary in for help a few times, I saw I could no longer remedy this situation on my own. The moment the director stepped into the room the children's behaviour changed dramatically, as dramatically as it changed the moment she left the room. This was very revealing. The situation was not beneficial for the children or for me. I decided to ask the director if she could find someone to replace me. After a fair amount of hesitation and talking to my counterpart, she agreed to let me go. She instructed me however not to talk about this with the parents. At that point, I was so frustrated that even this concession suited me.

I was in a state of conflict. I had seen what I considered a good implementation of the Montessori principles and practices in Munich at the private German-English Montessori kindergarten and I had started the year off hoping to work towards this. I was however still under the influence of the Pestalozzi paradigm. Since I had never seen the start-up of a Montessori kindergarten, I was also ignorant of the necessary precautions I should have taken. One obstacle after another manifested itself. First, I had allowed too many children to start together in the beginning. Secondly, my counterpart, having more practical experience recognizing potential difficulties, was very strict from the beginning. Unlike me, she did not work according to Montessori principles and practices, but relied
on her own work experience. Thirdly, I was having interference from my experiences at the Pestalozzi. My expectations and demands were not as high and as academic as my counterpart's. I was more interested in achieving an environment for natural, guided from within, spontaneous learning and interaction. Fourthly, the set-up had some major disadvantages. We were upstairs on the second floor above a garage and away from the rest of the school. We could only use the paved laneway as our playground during the limited recess allotted to us, and in the winter this required eighteen children getting dressed.

In retrospect, I would do a lot of things quite differently. I now remember the words of the directress of the private German-English Montessori kindergarten "It was not like this at the beginning", and then she proceeded to tell me how she started with an empty room with boxes of packed materials and a small group of two-year-olds. In the beginning, she did nothing with Montessori materials. They just casually and very naturally got to know each other and to feel comfortable with one another. When this had been accomplished they set up the room together and she introduced one material at a time when interest arose from a child, not according to a previously made schedule. Each subsequent year, she added more two-year-olds until she had a group of two, three, four and five-year-olds. The following years she added children to replace those who left.
This discouraging experience led to the starting of my own small children's group in adherence to principles and practices which were a combination of the Montessori and Pestalozzi paradigms. I took from them what fit best the children, the environment I had, my thoughts, feelings and those of the children's mothers.

**Emergence of my teaching-learning paradigm.**

At the suggestion of some colleagues, a Ph.D student's supportive coaxing and an elderly woman's good advice and keen interest, I decided to start my own small children's group by converting my bedroom into a room for children.

Having spent a lot of time in Montessori prepared environments and at the Pesta, these experiences guided the way I organized my space and selected resources. It all came quite easily to me. I found I was not choosing one approach over the other but instead I was juggling their principles and practices to fit my context. The principle of development guided from within the child was common to both and I believed in this too. In the Montessori method, the prepared environment has a very definite function. Each material has particular direct and indirect aims; the materials are grouped and ordered; the directress presents them to individual or small groups of children and then leaves the child to practice. At the Pesta the Montessori prepared environment has been extended. Ideas from the open classroom/activity-centres approach have been adopted. The
indoors are continuous with the outdoors the way I have read was the case in many of the first Montessori schools in southern Europe. At the Pesta, the child's spontaneous interactions with the natural environment (sand, water, plants, outdoors etc.) and with the social environment (same age and slightly older and younger peers) are as important as interactions with the Montessori materials. The school environment is looser, more dynamic, less cognitively demanding and the children are truly left to select their activities and friends.

For my own work, I had over the years accumulated quite a lot of materials. In Munich I had collected all kinds of ideas for possible practical life exercises and easy ways to make materials. In Tumbaco I learned yet more ways of making one's own materials cheaply. I bought lots of little baskets, sheets which the public school children are asked to buy for specific lessons, and wood cut into small rectangles and squares, which I then sanded. These were useful for mounting pictures for lotto, concentration or domino games. In Montreal I collected lots of boxes, bottles, small containers and paper. I used a filing cabinet to organize papers and materials I had accumulated, as I had seen done at the private Montessori kindergarten in Munich. I had continents, seasons, holidays, different living and moving things, living and non-moving things, means of transportation, rocks and minerals, arts and crafts ideas etc. as categories.
When it came to setting up the room, I stored my belongings in boxes and made myself three low, long shelves to stand along three walls. I put the top shelf no higher than a young child's chest, so the children could easily carry a material from the shelf to their selected place of work or play. I used a set of bookshelves as a room divider to create more free wall space, so that the children could find privacy from others if they so chose. One shelfset was high up so only I could reach it. A collection of dolls from various countries was kept there. These were expensive dolls and the children had to be taught to treat them with care before they could use them. I decided to use my handpainted chest for puppets and dress-up clothes. These are activities which can interfere with quiet, more concentrated play or work: I therefore decided they should not be readily visible and available at all times.

I decided to place the dishes we used for snack on a little table which remained from my childhood. I bought two small square tables and one rectangular table that fit together with the square tables. I bought enough chairs so that each child in the group could have one. I bought a small stool which could be sat on or carried to the bathroom to stand on to reach the sink. I also bought six small pillows to define a child's sitting place on the floor.

I then got out all the materials I had and placed them on shelves in a more or less random manner. I kept a list
of things that were needed to make each material complete in itself. I obtained these items in the cheapest way I could. I got out toys that were left over from my childhood (a doll’s carriage, some dolls, blocks, a hand-made wooden farm, a playskool workbench and some puzzles and books etc.).

I then very generally divided the materials into practical life, sensorial, early language, math, culture, familiar toys, or toys for representative play and set them out on the shelfsets. Where I felt there were gaps, I started to make more materials. For example I did not have any of the sensorial materials for dimension. I could not make or purchase the cylinder blocks so I learned how to make the pink tower and the brown stair from the wood-working teacher at John Abbott College.

As I got calls from interested mothers, I invited the parent to come one afternoon with his/her child. We then spent a good half hour to an hour in this room together. We got to know each other and I looked after the necessary formalities. I informed the parent that I was doing this for my thesis and asked for their permission to tape the children. I told them that I was mainly interested in my development as a teacher of young children based on the influences of the Montessori method and my experiences at the Pestalozzi school in Tumbaco. When four parents with their child demonstrated their interest, a mutually agreed upon starting date was set, preceded by a parent meeting at
which all mothers were expected. At this meeting I more thoroughly informed the parents about what I wanted to do and I asked them what they expected from this experience for their child. Most of them wanted their child to be socializing with other children. Parents helped me with the few things that I was still missing. We talked about arriving and departing, toileting, and eating etc.

After these individual meetings and the group meeting, I set up the room in more detail (see Figure 1). I now know the ages, sexes and a little bit about the personalities of the children and their backgrounds.

The practical life materials I stood on the three-level shelfset (shelfset B) to the left of the entrance. I organized them as best I could from simple to difficult, from concrete to abstract, from familiar to unfamiliar. I thought these would be good materials to start off with and therefore they should be close to the entrance, close to a table and easily accessible.

The familiar toys I stood on another three-level shelfset (shelfset A) which divided the room into two sections and which was also clearly visible when one entered the room. For this reason, I thought this would be a good place to put them because these toys would probably be used a lot. They could be played with on the floor or at a table, so I wanted there to be an open floor space nearby. There was a window close by, so it was bright. The quantity and size of these materials also fit well on this shelfset.
Fig. 1. Floor plan of my children's room.
I organized the materials on this shelfset a little differently. I placed the materials for the younger children on the lowest shelf and the more intricate materials on the higher ones.

I placed the sensorial materials on half of the long, low shelfset (shelfset C) running below the high shelf where the doll collection stands. They were placed there because they required the length and lowness to make them clearly visible to a young child. I placed them on shelfset C instead of on shelfset D because many of these materials are used on the floor and require large empty floor space which was available in front of this shelfset. Also above shelfset D was a sloping roof so it did not allow for such a nice presentation of these materials. On the other half of shelfset C, I had an exhibition area which changed about every two weeks. The materials from the exhibit then filled the shelf below.

On shelfset D, I placed the arts and crafts materials. When I realized the children were sometimes forgetting the location of certain material on this shelfset, I drew lines on the shelf with chalk around each object to aid them. Later when the children knew the places of each material, I erased these lines of orientation.

The first few days I covered up all the shelves except shelfset A. I had the materials for a simple arts and crafts activity out on the table near shelfset D.
I greeted the children at the door and let the mothers decide when they were going to depart and the children decide when they were ready to go upstairs. This is how it was in the Montessori-oriented children's group. We talked casually in the entrance hall about whatever was going on at that moment. Since all the children had been here before, they knew the way upstairs. In some cases we looked out the window to wave good-bye, as was customary in the Montessori-oriented children's group in Munich, in other cases children adapted very quickly and went directly to another child or selected a toy to play with. I stayed at the periphery unless I sensed that a child felt insecure and my being closer and interacting with the child could facilitate his/her feeling more comfortable.

Towards the end of the morning I asked the children to put what they were doing back on the shelf when they were finished so we could go to the bathroom and then have snack. I had to establish the routine of going to the bathroom, washing hands and then waiting quietly in the hall till all were finished as was done in day cares. Since the bathroom was down the hall and some children needed help going to the bathroom I felt I did not have much choice but to do it this way, at least for now. As the year progressed and the children became more independent, I let them go on their own whenever they had to.

Once back in the room, I asked an older child to help me to move the tables together one at a time. I then showed
the other children who wanted to help how they could lift the chairs and bring them to the table. I set the table and asked the children to be seated. I gave each one a plate and served the snack. I then gathered the plates and put them in the plastic bin. I did everything myself to establish the way this would be done. Later, the child who brought the snack would set and serve the table. This child would choose who s/he would like to have for helpers. This way of doing things I adopted from the Montessori kindergarten in Munich where each day a different child was the cook and could choose a few children to help him/her in the kitchen.

Before going outside to wait for their mothers, I enforced a rule that the children were to stay on the grass on the front lawn. They were not allowed to go on the road, and if I called everyone was to look at me and listen. I felt I had to set these rules because I did not know how they would behave outside. The front lawn was not fenced in and I had to attend to their security. Later when I knew them better, I could loosen the parameters.

After a few mornings I cut the plastic which covered shelfset B, to reveal the first material standing on the top shelf at the left, as we did at the Montessori school in Montreal. I had decided to cover the shelfsets so I could open them gradually and the children would get a chance to use all the materials in order. This way I would not have to direct which materials the children could and could not
use. It gave me more control and it allowed for a gradual build-up of the environment. When a child showed interest in a newly revealed material, I offered to show the child the material's use. When a new material was demonstrated or used by a child for the first time, often all the children would be watching after a few minutes, and they would each wait for the material to be back on the shelf so they could try it. If a material stood for a long time without anyone noticing it, I would take it and use it or demonstrate it at an opportune moment to whomever was interested. If a child took a material before I had presented it, I made no objection. In a "good" Montessori school this would also be the case. The teacher's observations, skills and understanding of the individual children would be such that she would know the kind of guidance needed to prevent misuse of a material. Often a child watched from the distance how another child in the group uses a material, or observed carefully in another context the use of a material. This is to be encouraged. A teacher can always find another situation conducive to showing the child how to refine his/her use of the material. If a new use for a material was discovered, in some cases I was dubious. Where wa I to set the limits and how? Was I to make a hard and fast rule or evaluate each situation individually? The Montessori paradigm was quite definite about where the limits were. The Pestalozzi paradigm was much more flexible in this respect.
Working out of a limited space, and having a carpet on the floor, there were numerous combinations and activities that I could not permit either because of their immediate or prospective consequences for the environment, or upon relations between the children, or the children and myself. For example I did not allow the water-pouring exercise to be used simultaneously with the magnetic marbles. These materials were from two different shelfsets, the direct and indirect aims were not strongly linked and the materials and the environment could be harmed. I did allow the children to combine the pink tower, the brown stair and the long rods. These materials were all on the same shelfset, their aims were related and using them together did not harm the materials, the environment or interaction of the children. My own teaching and learning evolved through discovering which principles and practices were appropriate for which situations.

At the very beginning I enforced the rule that one material be used at a time, by requesting that a material be returned to its original place on the shelf before another one was taken. This was done both at the Montessori schools and the Pestalozzi. This may seem mean or to be inhibiting spontaneity, but in practice, this was not the case. Such a system helped to maintain a balance between freedom and discipline. This rule leads to respect of space, materials and others and facilitates socializing, since the children know who is doing what and they know what they can do. It
also sets parameters within which the children can operate freely and requires no clean-up time.

If a child wanted to join another child in some activity, I facilitated the negotiation. I stressed to all that they ask permission to play with someone, that if the answer was no, then they may watch but cannot touch what the child is using. They had to wait until either the child changed his/her mind or until the material was back on the shelf.

I respected the child who did not want another child to join in his/her play as much as I did if two or more children wanted to play together. A mutually negotiated outcome was the accepted one. Hurting another child was not tolerated under any circumstances. If the behaviour could not be altered by mediated negotiations, then the child had to leave and sit on the rocking chair and watch from there what the others were doing. Fortunately this rarely happened.

As the mornings and weeks went by, I gradually and rather systematically opened more and more materials and shelves. I took photos of each material that was made available and of how the room changed, in accordance with the way I learned to do this during the Montessori training course. I made checklists of the materials used by each child on each morning similar to the follow-up sheet we kept in the Montessori school in Montreal. This helped me to keep track of what materials were being used most by which
children. I could use this information to change and modify materials to make them more attractive, or to change my relationship to various materials or parts of the room to bring them more into use. I kept a journal and made some tape recordings of the verbal interactions that occurred each morning. This helped me to get more in touch with the children, to understand them at a deeper level and to have a back-up for parent meetings, for questions that parents might ask or that I may choose to discuss with them. Before the beginning of a new week, I would often look over this data collection to keep me connected with the last week’s occurrences. At the same time, I would however try my best to see each morning as distinct from the others and be open to new experiences guided by the children themselves.

When all the shelfsets were open, I made a display every two weeks as was done in the primaria of the Pestalozzi in Tumbaco. I then placed these materials on the shelf below. I hung the posters that I used in the hall-way so they could always be referred to. These displays were related to things that were happening outside, holidays or particular interests of a child or the group. One of the first displays was of dinosaurs, because one child always talked about them. When spring came around I had an exhibit of birds, then insects and later mammals. Each exhibit consisted of a poster with a wide variety of specimens of a particular category, in accordance with the Montessori principle: from the global to the specific and from whole to
the parts. I had bought encyclopedia poster-size inserts on a market in Quito, Ecuador and a dinosaur poster at the Royal Ontario Museum (ROM) in Toronto. I then had small exemplars of familiar specimens: e.g. small birds made of various materials, a collection of insects in jars, plastic dinosaurs from the ROM standing on the shelf, in accordance with the Montessori principle from the familiar/local to the not familiar/distant. In a plastic basket stood wooden cards with pairs of pictures of different members of the category being presented. This material I had adopted from the Pestalozzi kindergarten. I selected about five different pictures of specimens which I thought would be most familiar to the children. These objects and the cards could be selected for play. There were also related books standing on shelfset A, and exemplars and materials for a related arts and crafts activity. Occasionally I also had a song or tape which fit this display.

In the summer, a few excursions were made possible with the mothers’ support. These were organized in a similar fashion to the ones at the Pestalozzi. The children were asked if they would like to go and where they would like to go. The mothers were then consulted and the trip was mutually and spontaneously organized.

Working in the community in which my family had lived for the last decade, and out of our own home, had an entirely different feel to it. This was more like the Wild’s work, which makes a big effort to involve the parents in
both practical and personal ways. I was able to incorporate community happenings and get to know more about the children, their friends and relatives. A continuum, as described by Jean Liedloff was in the making. This work revived my previous interest in Jean Liedloff's book and what I have written about as the continuum concept paradigm.

Paradigm shift.

I first came across Jean Liedloff's book, *The Continuum Concept*. Allowing human nature to work successfully, in 1987 while in my Montessori teacher-training course. I found the book standing near the cash in an alternative bookstore, in Munich, Germany. I bought the book, and started to read it at once. I was fascinated by the author's clarity in expressing her ideas which had developed out of her observations of a Stone Age people in the Venezuelan jungle on her numerous jungle expeditions. This book addressed some of the issues with which I did not agree in my Montessori training. For example, I was a firm believer in the importance of the role of a mother in the early years, in the innate social nature of the child and in humanbeings becoming a part of nature rather than becoming "civilized" and separate from it through education.

Jean Liedloff's experiences in the jungle with a group of Stone Age people made her conceptualization of a theory of human development possible. It intrigued me very much the first time I read the book and I kept her ideas close to
me from then on. While well into the writing of this thesis and the work with my small children’s group, an opportunity arose to join an organized tour to Bali which was to be co-led by Jean Liedloff along with two professional guides. The tour was organized by the Institute for Noetic Sciences in California. I wrote away for more information. I could not get this tour out of my mind. I had to go. I had just enough money saved in the bank to cover my expenses. My father supported my decision, by offering to pay half the costs on the completion of this thesis. Soon everything was set. I was going to Bali to meet Jean Liedloff, the author of one of my favorite books and to experience the continuum concept in action among the Balinese.

The organized tour was two weeks long. It introduced us to Balinese child-rearing principals and practices. A panel of three prominent Balinese women of Ubud answered questions on mothering. This conversation revealed to us that births were now occurring much more frequently in hospitals and clinics, infants had pacifiers, formula was available and being used frequently by all those who could afford it. What was different from common practice in the West and more consistent with the continuum concept was: that infants are held much more, they are nursed longer and they sleep in the bed of their parents. Older siblings (from four years on) take care of them and they experience no sibling rivalry. Waking up at night was believed to be due to hunger and the baby was therefore given something to
eat. Bed-wetting was believed to be caused by a physical disorder not a psychological one and there is a natural remedy for it. Nursing is ended by putting a distasteful flavour on the nipple to repulse the baby and a hard-boiled egg is placed in the bed to substitute for the breast. Toilet-training is done very gently without scolding. These mothers spoke very practically and openly about their mothering beliefs and practices. They seemed to be doing everything very intuitively without much analyzing or questioning.

We also were able to attend the six-month ceremony of the child of a Balinese healer and his beautiful, young second wife. An atmosphere of serenity, grace and respect surrounded this ceremony. Extended family, friends and a priest were in attendance. All were dressed in their best sarongs. In due time many Balinese rituals were carried out. Offerings were presented to the Gods, a priest performed the ceremony which involved the cutting of the infant's hair, and the touching of her feet to the ground for the first time. There was much special food offered and people sat around, serene and peaceful. Some young men played cards, older men sat quietly next to each other under a baile (open, covered shelter), the women and some children were in another area. People came and went. Events took place in accordance to an inner clock. It was a timeless event which seemed to go on for hours. I have some slides.
of this event and intend to read further about the rituals that we witnessed.

In Ubud, we visited a local elementary school which functioned as a secondary school in the afternoons. The children wore uniforms, sat in rows, the teacher at the front by a blackboard with a pointer in her hand. The teacher would instruct and then ask questions. The children raised their hands when they had a response. It was a very traditional type of schooling. Jean Liedloff believed that the children seemed to be immune to the ill effects of it, due to their upbringing and role in the community.

On the eastern coast of Bali in Candi Dasa, we witnessed a small school for orphans on an Ashram. It was a very simple, one-room school. The teacher was very firm but the children were very flexible and spontaneous. Much of the day was spent outdoors, drawing, climbing and running. Inside, the children sat at desks and the teacher moved up and down the aisles between the desks.

After the tour had finished, I stayed on another month and a half in Ubud, the cultural center of Bali. During my extended stay, I continued to experience the daily life of the Balinese. I did a lot of walking. I lived on the traditional Balinese compound of a higher caste family. I stayed in communication with Jean Liedloff, who had also stayed on.

I was able to make observations that supported my belief in the notion of Jean Liedloff's continuum concept,
e.g., the value of nursing and the continued physical contact of the infant with a mother figure and later the father, the ability and strong desire of young children to care for infant siblings, the belief in reincarnation within a family lineage, the belief that infants and the old are the closest to God and are therefore to be treated with much respect, and the strength in a community of ancient shared beliefs and practices which are continuous with human nature and the natural environment. An extended family unit and well-developed relations between women of a community and the men of a community of various ages also helps to keep a community continuous and in harmony. It is more interconnected.

In theory, I believe in Jean's notion of a continuum concept. In contrast, Montessori believed that ontology follows phylogeny. Therefore the school was to wean the child from nature to adapt him/her to an industrialized society. The Wild's, like Koestler (1978) believe that the human brain has developed malignantly and this is leading to a harmful split in humans and between humans and their environment. Liedloff has experienced an ancient culture still living harmoniously with their kin, themselves and their surrounding natural environment. She gives us a model which we can work towards. There are however many obstacles that lie in our road. What the continuum concept paradigm does for me is to help me recognize a continuum or elements of it between children, their families and the community.
It provides me with a model to communicate, share and find ways to get us back on this track. The continuum concept helps me to define the role of school in our society. I think its role is to facilitate a link between the child, the family and the community. The school should not encourage another split. I see my role as facilitating the forming and strengthening of these links, by recognizing links that exist and building on these. In some families these links are more intact than in others. Having a strong kernel of such families can accommodate children from more disfunctional backgrounds. Creating an informal time and space where mothers/parents can get together to share and learn from one another is another means. Making adults aware of a continuum concept can also be facilitative. At the Pesta, it was often stressed how detrimental it can be for children to experience their parents physically or verbally attacking each other. Child/family/community links are particularly crucial in our culture, in which the nuclear family is the basic unit. Relations between women and men of the community are not so well-developed, and therefore the child is very dependent on the relationship between his/her parents. The mothers of my children’s group have formed a network. Their children visit each other and in this way the mothers get a chance to be together. They support each other. A link between the children and the mothers extends the continuum. It makes for more secure children and mothers, families and communities.
Summary

I have attempted to describe the transitions in my thoughts and actions from a pre-paradigm stage, to the adoption of a selected paradigm, to shifts in this paradigm brought on by my contact with other selected paradigms. The transitions made are often foreshadowed by my observations and experiences. For example, through my experience of working in my own way with the Montessori materials, rather than in accordance to the rigid demonstration which we were to practice in the training course, I came to understand what I had once been taught by rote methods in public school. A Thesis Committee Member suggested that this free experimenting, guided from within, perhaps shows how I anticipated the freedom which was allowed at the Pestalozzi of my second paradigm. She further pondered if this is how roots of paradigm transition grow out of dissatisfaction with the present or yearning related to the paradigm one is in.

The lack of description of the socio-emotional development of the child and the limited role of the family and community in the education of the child dissatisfied me about the Montessori paradigm. My discovery of Rebeca Wild's first book which genuinely addressed these issues among others was very important to me. Jean Liedloff's book which dealt with the development of the child in the family, community and society and described an ancient continuum between these social units was also significant to my
search. These books filled gaps in my Montessori paradigm and foreshadowed future paradigms and steps I would take to learn more about them.

The use of Kuhn's model of the structure of scientific revolutions to depict the changes in my thoughts and actions stems from my university undergraduate studies in cognitive science and was enforced by my studies of Piaget and the Wild's work at the Pestalozzi. I came to see similarities in Kuhn's and Piaget's theories and applied them to the development of my own thoughts and actions. Piaget writes about the cyclical stages of assimilation, accommodation and equilibrium: Kuhn about a cycle of transitions from pre-paradigms, to paradigms, to shifts in paradigms to new paradigms. While Piaget writes about the cognitive development of the child and Kuhn about the development of scientific theories, these processes are surprisingly similar. I found these theoretical constructs useful to help me understand and describe my search for principles and practices to guide my role as a teacher of young children.

The following chart summarizes the four paradigms through which my thoughts and actions have progressed.
<table>
<thead>
<tr>
<th>Pre-paradigm Stage</th>
<th>Thoughts</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- child-centered</td>
<td>- work in local day cares</td>
</tr>
<tr>
<td></td>
<td>- development-based</td>
<td>- babysit</td>
</tr>
<tr>
<td></td>
<td>- behaviour guided from within</td>
<td>- work at community pool</td>
</tr>
<tr>
<td></td>
<td>- nature-nurture balance</td>
<td>- some work with handicapped,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>autistic and dyslexic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Montessori Paradigm</th>
<th>Thoughts</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- education based on child</td>
<td>- Montessori teacher training</td>
</tr>
<tr>
<td></td>
<td>observation</td>
<td>for special education</td>
</tr>
<tr>
<td></td>
<td>- child development theory: phases</td>
<td>- practicum in two Montessori</td>
</tr>
<tr>
<td></td>
<td>of development, sensitive periods,</td>
<td>kindergartens in Munich</td>
</tr>
<tr>
<td></td>
<td>absorbent mind</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- education of human potential</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- balance of freedom and discipline</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- emphasis on motor and cognitive development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- emphasis on child - material of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>prepared environment - adult</td>
<td></td>
</tr>
<tr>
<td></td>
<td>interactions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- role of adult = directing/guiding</td>
<td></td>
</tr>
<tr>
<td></td>
<td>catalyst</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 2. Chart summarizing paradigms of thought and action.
Continued on next page.
<table>
<thead>
<tr>
<th>Thoughts</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pestalozzi Paradigm</td>
<td>- buy and read Rebeca Wild's book</td>
</tr>
<tr>
<td>- education based on human processes guided from within</td>
<td>- write her</td>
</tr>
<tr>
<td>- Piagetian theory of child development (repetition-schema)</td>
<td>- spend ten months at the school</td>
</tr>
<tr>
<td>- autonomy and spontaneous interaction with environment and peers</td>
<td>- start to make my own materials</td>
</tr>
<tr>
<td>- emphasis on motor, socio-emotional and cognitive development</td>
<td></td>
</tr>
<tr>
<td>- emphasis on child-child interactions</td>
<td></td>
</tr>
<tr>
<td>- role of adult is to maintain firm limits and give socio-emotional</td>
<td></td>
</tr>
<tr>
<td>- support</td>
<td></td>
</tr>
<tr>
<td>My Teaching-Learning Paradigm</td>
<td>- continue to make own materials (Montessori and Pestalozzi inspired)</td>
</tr>
<tr>
<td>- child-centered</td>
<td>- convert my bedroom into a room for children</td>
</tr>
<tr>
<td>- active learning guided from within</td>
<td>- start my own small children's group</td>
</tr>
<tr>
<td>- spontaneous interactions between peers</td>
<td></td>
</tr>
<tr>
<td>- firm, consistent limits</td>
<td></td>
</tr>
<tr>
<td>- continuum between home, school and community</td>
<td></td>
</tr>
<tr>
<td>- parent involvement crucial</td>
<td></td>
</tr>
<tr>
<td>Continuum Concept Paradigm</td>
<td>- buy and read Jean Liedloff's book</td>
</tr>
<tr>
<td>- education secondary to socio-emotional bonds with family and friends</td>
<td>- join her on a tour of Bali</td>
</tr>
<tr>
<td>- child development theory: compared to primates and stone age man</td>
<td>- explore and experience Bali</td>
</tr>
<tr>
<td>- assumption of innate sociality</td>
<td>- learn more about Jean's idea of a continuum concept</td>
</tr>
<tr>
<td>- emphasis on instincts, innateness</td>
<td></td>
</tr>
<tr>
<td>- being to be educated by life</td>
<td></td>
</tr>
<tr>
<td>- role of adult is to maintain culture, transfer heritage, connect</td>
<td></td>
</tr>
<tr>
<td>- children with their community</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 2. Chart summarizing paradigms of thought and action.

Continued from previous page.
CONCLUSION

My personal search for educational principles and practices to guide my role as a teacher of young children has been a process of learning, observing, experiencing and implementing the principles and practices of Maria Montessori's method of education, Rebeca and Mauricio Wild's active school and now Jean Liedloff's continuum concept. It has led to further reading, reflecting, and growing with children. It has culminated in the writing of this thesis and has led to my creating a learning and teaching paradigm which I feel has functioned well for me, for the children I have been working with and for their parents.

I have presented Maria Montessori's method, Rebeca and Mauricio Wild's active school and Jean Liedloff's continuum concept under the headings of principles and practices in thought and in action. Principles and practices in thought were presented in terms of a triad: the child, the environment and the adult. Principles and practices in action were descriptions of kindergartens or child rearing practices. The individual's principles and practices in thought are quite consistent with the kindergarten or child rearing principles and practices observed and described. This is part of what intrigued me about them.

These individuals' principles and practices in thought and in action were however not always consistent with my own feelings, thoughts and actions. In fact my personal
principles and practices both in thought and in action are still evolving today.

In the pre-paradigm stage, my principles and practices were not well-defined. The process of defining and refining them was just beginning. My feelings guided my role as a teacher of young children. I relied on my babysitting experiences, my own childhood recollections and discussions with my mother and other people in the field.

![Diagram](image.png)

Fig. 3. Model showing my feelings central in guiding my role as a teacher of young children at the pre-paradigm stage.

These experiences, this work and my studying linguistics and psychology at university led to my deciding that I wanted to learn more about the Montessori method. I felt I needed to know more and this was the philosophy that spoke to me.

In the Montessori paradigm stage the well-defined principles and practices of the Montessori method began to play a strong part in guiding my role as a teacher of young children. The role of directress was well-defined. I learned a philosophy which influenced my thoughts and actions. I then observed the method and the role of
directress in action. The Montessori principles and practices which I had learned and observed were not fully integrated with my own feelings, thoughts and actions. The model of this paradigm is therefore top heavy.

![Diagram]

Fig. 4. Model showing principles and practices central in guiding my role as teacher of young children in the Montessori-paradigm.

With time I became dissatisfied with the limited role of pretend and representational play in the Montessori method, of the very limited role of the family and of the guiding/directing role of the directress. I yearned for a more flexible, dynamic, spontaneous form of education. My search continued and led me to Rebeca Wild’s book. In this book I found responses to what dissatisfied me with the Montessori method.

In the Pestalozzi paradigm I adopted the Wild’s principles and practices. Due to the nature of the Pestalozzi philosophy, one’s own feelings, thoughts and actions become a more integral part of the model.
Fig. 5. Model showing my feelings, thoughts and actions becoming a more integral part in guiding my role as a teacher of young children in the Pestalozzi paradigm.

With the change of culture, context and a job first at a day care and then at a Montessori school, a conflict between the Montessori and Pestalozzi paradigms and my own feelings, thoughts and actions manifested itself. This led to the starting of my own small children's group.

My own personal teaching and learning paradigm evolved out of this work. A synthesis of my feelings, thoughts and actions occurred through the interaction and integration of the principles and practices of my mentors. My role as a teacher of young children was now carved out of the praxis in interaction with the theory and experiences I had accumulated in my search.
Fig. 6. Model showing my feelings, thoughts and actions manifesting themselves through the interaction and integration of the principles and practices of my mentors in my teaching and learning paradigm.

When the chance came along to go to Bali to learn more about Jean Liedloff and her ideas I took it. I had come across her book while in Munich, and the thoughts and experiences in it remained with me. The process of learning, observing, experiencing and changing continued.

This process has shown me that one cannot simply adopt principles and practices of others since it is not possible for them to be completely consistent with one's own feelings, thoughts and actions. One is then not in harmony. Theory alone can not guide one's role as a teacher of young children. A marriage between one's own feelings, thoughts and actions in the context of interacting with young children is the best place for one's own principles and practices to develop. Theory based on other people's experiences can provide a framework from which to do this, but a borrowed theory cannot substitute for one's
own personal principles and practices to guide one as a teacher or parent of young children.

The search I have undertaken has helped me to integrate my feelings, thoughts and actions and shown me how this is a prerequisite for being with children. After having learned, observed, experienced and implemented a set of principles and practices, my thoughts and actions, guided by my feelings/beliefs/intuitions led to further searching, and subsequently the adoption or modification of principles and practices of my mentors which met dissatisfactions or yearnings of a previous paradigm.

These paradigms have emerged from the experiences I have had. Initially I adopted the principles and practices of my mentor Maria Montessori. I saw how they affected my feelings, thoughts, and actions. Her method provided me with a framework from which to further evolve. I read her works, observed and experienced Montessori praxes in different forms. I was impressed but there were times I felt that I could not wholeheartedly follow her principles and practices. I listened to what my inner self was telling me and continued to search to resolve my dissatisfactions and to fulfil my yearnings. At times like this, I questioned the principles or I found alternative practices that achieved the principles. My feelings, thoughts and actions were not always in synchrony with the Montessori principles and practices.
My experiences at the Wild's active school facilitated the first steps towards integrating my feelings, thoughts and actions. Principles and practices were no longer the primary motivation for change.

The books that have inspired me and created my experiential and theoretical base have a common thread which is the kernel of my philosophy. That thread is a strong belief in the guidance of development from within. All three mentors believe that the child left to its own devices will flourish in an environment that meets the child's needs and intrinsic interests.

These philosophies and the subsequent experiences have led to changes in my lifestyle and have helped me to integrate my own feelings, thoughts and actions. My own principles and practices are continuously being carved out of the on-going process of one paradigm emerging out of a previous one. Where principles and practices are in conflict, I have chosen the one which better fits my beliefs, observations and experiences or have synthesized several of them.

Principles and practices which become congruent with one's own feelings, thoughts and actions and which are well-defined can lead to a praxis founded on an individual or shared theory. Praxis and theory which are not consistent with one's own feelings, thoughts and actions can bring one into conflict and/or to make the appropriate modifications of praxis and theory.
Important in this process of change is being with children. They are central. They are the key. They have the answers we are looking for. If they are thriving and happy we are succeeding. When they are not, we must continuously reflect upon our feelings, thoughts and actions in the context of the praxes and theories we gravitate to. With experience the problems and solutions will become apparent more quickly and therefore sooner, hopefully before one errs. The opportunity to grow with children arises out of this process.
References


Brandeis-McGunigle, Gayle. (1991). Childhood and ritual in Bali. Each stage of Balinese life is honored with ritual. Lavish offerings, decorations, and feasts are prepared; elaborate costumes are donned; and music and laughter shimmer through the air. In Mothering, Fall 1991 p. 38-41.


Liedloff, J. (1991). Normal neurotics like us. It became clear that the immeasureable harm caused by even the most loving and devoted parents in Western culture was the consequence of a long-standing and profound incomprehension of the eminently respectable nature of our species. In *Mothering*, Fall 1991 p. 33-37.


