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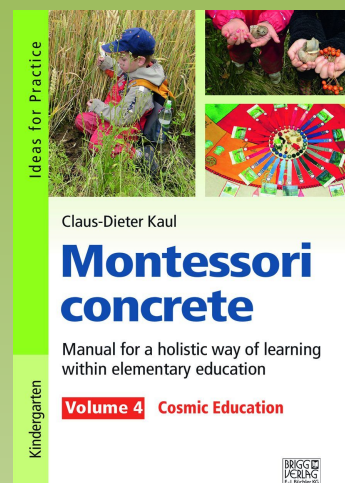
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## Auszug aus:

*Montessori concrete – Volume 4*

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# Foreword

Dear reader!

With this series of books we would like to invite and guide you to get to know Maria Montessori's comprehensive, pioneering pedagogy in concrete terms and to learn to apply it "step by step". This enables you to create a supportive atmosphere in kindergarten and at home, as well as learning situations in which your children can also develop well and optimally according to new standards.

In this fourth volume of the **MONTESSORI CONCRETE** series, it is once again particularly important to us to explain basic elements of Montessori pedagogy.

In the book "Erziehung zum Menschen" by Mario Montessori jun. Paula Polk Lillard says in the introduction something very central about Maria Montessori: *"Because of her revolutionary ideas, Montessori's philosophy and methods in history have not been easily understood or accepted, neither by her critics nor by her admirers."*

In recent years, the call for a new culture of education has been growing louder. Last but not least, various studies such as PISA or TIMS make us all aware that there is a lot to change in our education system. Certainly, one conclusion is the appearance of new educational plans for the elementary sector. The requirements here are intended to show educators a way to prepare children for the living conditions of today.

In conversations with course participants, we find again and again that many adults have few concrete ideas about how they can adapt to these challenges. They are still imprisoned with the expectations from their most diverse - in some cases long past - training, as well as with their own, not yet processed "parenting experiences" from their childhood.

It can be observed that Montessori-Pedagogy - in relation to the present time - offers many of these people great help in reflecting on a new job. Why is Montessori-Pedagogy particularly useful? Certainly, this is because this "pedagogy" emerged from the child's observation, and not based on any theoretical educational concept. Maria Montessori did not develop a method of education that fitted into a certain time-frame, but as a doctor she watched how the child learns and drew her conclusions from it. Her grandson Mario Montessori jun. summarized his grandmother's special abilities as follows: *"One of the most striking characteristics of Maria Montessori's personality was her deep respect for creative productivity."*

He wrote with admiration the following about his grandmother: *"One of the most fascinating features of Maria Montessori was her ability to relate today's life to that of the distant past. A simple occasion could move her to create a panoramic overview of human development up to the present, while irresistibly stimulating the imagination of her listeners. I remember that she once peeled potatoes and looked at them deeply, as if they could give her something important to recognize. She continued to work, thinking aloud how people may have originally discovered the value of the potato plant, which on the outside is only an herb with insignificant small flowers and nasty fruits. What motivated them to continue testing? By what cunning did they discover that their usefulness for their own purposes was not in the part of the plant that appeared above the surface of the earth, but in the root hidden beneath the earth? How could they have learned that this part is not toxic but edible? Potato plants appear to have come from the New World. How could they have been introduced, grown and taken all over Western Europe? The way she could talk about things like potatoes immediately took you to a higher level of thinking and a new perspective on reality, while still being attached to human life. It was a unique experience. It was related to a particular quality of her personality and a depth of her insight that was fundamental*

*to her success. Although she did not consciously make this connection herself, I do believe that her development of cosmic education grew out of this unusual ability to connect the present and the past through imaginative thinking.”<sup>1</sup>*

To show how closely linked Maria Montessori’s ideas are to the knowledge of neurophysiology and many modern psychological approaches, here are listed some important passages from the book by Mario Montessori jun. “Erziehung zum Menschen“:

*“The prepared environment must be such that the children can carry out their activities in their own way and at their own convenience. The environment should therefore not focus on a single function or skill, but should address the child’s overall personality. ...*

*The new aspects of child behaviour that emerged from Montessori’s work made it clear for the first time that children have an inner need to get to know themselves and their world, and finally through acquaintance with things, with their environment and with their own abilities, to be trusted to ultimately become independent. All of this takes place in a way that is natural to children and on their own initiative and should therefore be called a game.*

*They are confronted with the world as a whole from early childhood, and their “storage systems” resemble well-filled treasuries.*

*Children have special powers that enable them to find self-fulfilment through interaction with their environment.”<sup>2</sup>*

Mario Montessori jun. in this book looks at the work of Maria Montessori primarily from a psychoanalytic perspective.

From today’s point of view, what has to be examined in particular is the role of the educator. Our experience has shown that the implementation of Montessori-Pedagogy requires a large amount of self-reflection and ultimately results in a genuinely new educational culture which - as Jesper Juul describes - gives us the opportunity to assume responsibility from obedience.

Mario Montessori jun. calls for teachers to continually strive to build a positive relationship with the child, so that the children approach them confidently and take their authority for granted.

*“The children themselves should serve as guides. Our success will depend on their reactions. If you work with pleasure and concentration, we have found the connection to the inner strength that guides their development. If their minds are not affected, they will give in to our calls to work; but the psychological importance of their work will be limited to more or less mechanical learning processes or techniques. However, this process does not involve the entire personality and therefore has little formative meaning.”<sup>3</sup>*

We both had to find out that this was a very intensive process of our own, because even in our training courses on Montessori-Pedagogy we still experienced that in theory there was talk of personal responsibility and self-activity - but the way of dealing with us adults was still predominantly characterized by a culture of obedience. Thus it is not a surprise for us that in many Montessori facilities where all Montessori materials are to hand, the attitude of the educators however is still strongly characterized by the “old educational culture“ and not - as Maria Montessori named it – a “Labour of Love”.

<sup>1</sup> Mario Montessori jun.: Erziehung zum Menschen, Frankfurt/Main 1984, S. 131 ff.

<sup>2</sup> Mario Montessori jun.: Erziehung zum Menschen, Frankfurt/Main 1984, S. 41 ff.

<sup>3</sup> Mario Montessori jun.: Erziehung zum Menschen, Frankfurt/Main 1984, S. 80

# Maria and Mario Montessori's Concept of Cosmic Education

In this chapter we want to give a brief historical overview of when, how and where this particular aspect of Montessori pedagogy developed. Even in her very early writings there are always statements that clearly indicate that Maria Montessori was concerned with a holistic approach right from the start and not just a special "method". So, she said back in 1909: *"But today education is not so much interested in science as in humanity and civilization, which has only one fatherland: the world."*<sup>4</sup>

In 1935 she gave a lecture in London on "The Position of Man in Creation", which was only published in German in 1979 in the book "Tension Field Children - Society - World". From 1939 to 1946 she lived and worked - mostly with her son Mario Montessori - in India.



During this time, the concept of cosmic education became more and more concrete, which was formulated more clearly in a lecture that she gave in India in 1945 - however, it was only available in German for the first time in 1979.

Here are some excerpts:

*"In order to give an idea of what we mean by "cosmic education", the background of this question must be briefly touched, i.e. "Cosmic Theory". This recognizes a unified plan in all of creation, on which not only the various forms of living beings but also the development of the earth itself depends.*

*Although this idea includes the basis of the theory of evolution, it differs from it in terms of causes and finality of progressive change of species. Life advances according to a cosmic*

*plan, and the purpose of life is not to achieve perfection on an unlimited path of progress, but to exert an influence on the environment and achieve a specific goal in it. For a long time, geology has shown the close relationship between life and the earth and has considered the life that envelops the entire surface of the earth as the "biosphere" to be necessary for the construction of the earth."*<sup>5</sup>

Maria Montessori demands a universal curriculum that unites the mind and conscience of people - that is what she means by cosmic education. It brings together all disciplines: astronomy, geography, geology, biology, physics, chemistry. They are all details of a whole.

"The new generations have to understand that everyone is dependent on other people and everyone has to contribute to the existence of all. We no longer depend directly on nature, but on everything that man produces in different parts of the world and which is available to everyone through mutual exchange ... Everything we learn today depends on individual discoveries, no matter how big or small they were ... The alphabet, writing, mathematics, the printing-press and

<sup>4</sup> Maria Montessori: The Discovery of the Child, Ballantine 1967, Page 3

<sup>5</sup> Maria Montessori: Spannungsfeld Kind – Gesellschaft – Welt, Freiburg 1979, S. 132ff.

everything that constitutes the means of our culture goes back to a series of efforts by individuals whose names have been forgotten in the majority of cases."<sup>6</sup>

She is convinced that with the approach of "cosmic education" every step in the field of education creates a feeling of gratitude and love. Between 1939 and 1946 she developed a corresponding didactic-methodical program in India - together with her son and other employees - for six to twelve-year-old children.

These children with their questions about what, why and where of all things have to be offered a wide field of education. The teachers should provide the child with a vision of the entire universe, which means that they must be well prepared.

Maria Montessori observed that children of this age have a special ability to constantly use their imagination. *"The vision through imagination is very different from the mere perception of an object, because it has no limits. The phantasy can travel not only through infinite space, but also through infinite time; we can go back through the ages and see the image of the earth as it was and with all the creatures that inhabited it. To determine whether a child understood or not, we would have to see whether it can form an idea in its mind, whether it has gone beyond the level of understanding. The secret of good teaching is to consider the child's intelligence as a fertile field that may grow under the blazing warmth of phantasy. We try to sow life in the child rather than theories and to help it with its mental, emotional as well as physical development. Educators generally agree that phantasy is important. But they want to form phantasy separately from intelligence. They are the vivisectionists of human personality. At school, they want the children to learn the dry facts of reality while their phantasy is cultivated through fairy tales."*<sup>7</sup>

As already mentioned, these ideas were only made available to a wider public in German in 1979. Now I - Claus-Dieter Kaul - was lucky enough to receive the "Advanced Montessori Training" of the Association Montessori International (A.M.I.) in Washington D.C. for a year-long visit, just a couple of years later (1981).

During this course year, it quickly became clear to me how system-compliant I had been during my Montessori-work practice and what challenges awaited me if I would only be back in Germany after the course.

It was good to hear that this was a special "method" where it was not about following an imposed curriculum - rather, the task of the teacher was to follow the children's spiritual needs and not to prescribe them. The point is not to choose what to teach, but to provide the child with everything to satisfy his or her mental desire.

This misunderstanding between child and teacher is expressed very clearly by Professor Dr. Wolfgang Masnak from the University of Music and Drama in Munich:

*"I was already a little difficult at preschool age. So I annoyed everyone in my surroundings with the question whether red would be the same for all people or green for some and blue for others, so we are talking about varying things that we only think are the same. The adults didn't know what I wanted, and I longed for school. I thought I could find a temple of knowledge and was quite disappointed with the educational Eldorado."*<sup>8</sup>

So during our school and study time, we were only ever confronted with detailed studies that were taught in separate subjects such as biology, history, geography, physics, chemistry, etc. - with the main goal, a lot of "stuff" , allegedly selected to suit a certain stage of development, to learn by heart and to re-play it as literally as possible. In the "Advanced Montessori Training" I learned for the first time how different phenomena are connected and how thrilling and exciting

<sup>6</sup> Maria Montessori: Spannungsfeld Kind – Gesellschaft – Welt, Freiburg 1979, S. 132 ff.

<sup>7</sup> Maria Montessori: Kosmische Erziehung, Freiburg 1988

<sup>8</sup> Quoted from Lotte Ingrisich: Die neue Schmetterlingsschule, München 2006, S. 222

learning suddenly became for me too. I realized that *“Our future does not depend on education, but on imagination”*<sup>9</sup>

When I returned to Germany, I knew that I had to pass on this holistic approach to learning not only to children, but also to adults - at least in “Montessori circles”.

Of course, it was clear that all of these people were also shaped by their teacher training - especially after the so-called “Sputnik shock“ in the 1970s, a certain natural science euphoria dominated teacher training. Children’s interest in nature was literally stifled by a downright mathematization of natural phenomena and the demand for exact, verifiable instruction. In primary schools, the focus was limited to simple content and most of the scientific and cultural subjects were assigned to secondary school level.

The integration of “anthropomorphisms” was particularly rejected here. i.e. the transfer of human characteristics and behaviour to non-human things or beings, for example to phenomena of animate and inanimate nature such as e.g. atoms that stretch out their arms to connect to other atoms. These can be found in almost all “Cosmic Tales“ by Maria and Mario Montessori and also in many images.

While in the 1960s, many of these materials were naturally accessible to children to make natural phenomena clear, e.g. “Stories from the Root Children” or “Karius and Baktus” etc., so-called animisms were largely rejected in the 1970s. The term animism means the soul of the inanimate nature. But it is this aspect that characterizes the essential approach of cosmic education.

Today, the soul of inanimate nature is gradually returning to the mediation process, because it can be observed that young children in particular gain an initial understanding of the relationships between nature and culture. In his developmental psychology, Rolf Oerter even assumes that *“the attachment to animism is there for a lifetime and is only gradually being replaced or supplemented by an increase in expertise. It can be assumed that there is animistic-magical thinking in all ages.”*<sup>10</sup>

We can confirm this view of Oerter from our many years of practice, where we can experience how small children, adolescents and adults can be amazed in the same way when they are told the “cosmic stories” and the corresponding pictures are shown.

We are also grateful for the statements by Gisela Lück, Professor of Chemistry Didactics at Bielefeld University, who confirms many of Maria and Mario Montessori’s basic ideas about cosmic education in her work “Handbuch der Naturwissenschaftliche Bildung”: *“Scientific language alone does not allow an affective relation to nature. Refraining from animisms would reduce affective access to natural phenomena, contribute to a demeanour that makes the child an innocent party to nature, alienates him from nature. Last but not least, stories in which natural phenomenon is embedded also form a bridge between animistic and scientifically precise access.”*<sup>11</sup>

It is interesting that since 2005, cosmic education has also found its way into German-speaking Montessori circles - both in Montessori education and in working with children between 6 and 12 years at Montessori schools.

Thanks to the knowledge I had already acquired in 1981, I have since been able to experience and confirm this holistic work with children of all ages. It is interesting that experiences that Gisela Lück describes with disabled children are completely identical to my many years of experience. I always had the impression that especially children with special-needs have a very special approach to the cosmic phenomena because they are not primarily looking for a cognitive approach, but an affective one. So, I could also experience with these children that learning

<sup>9</sup> Lotte Ingrisch: Die neue Schmetterlingsschule, München 2006, S. 117

<sup>10</sup> Rolf Oerter: Moderne Entwicklungspsychologie, Donauwörth 1974, S. 313

<sup>11</sup> Gisela Lück: Handbuch der naturwissenschaftlichen Bildung, Freiburg 2003, S. 83

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