

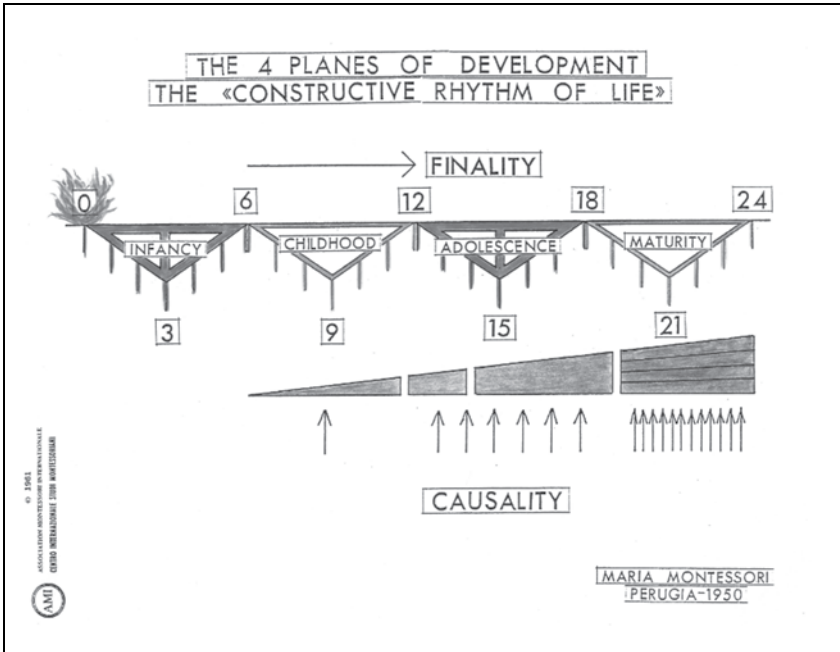
THE HUNGRY MIND: FROM THE CASA DEI BAMBINI TO COSMIC EDUCATION

by Baiba Krumins Grazzini

Baiba Krumins Grazzini has generously transformed her lecture, delivered at the AMI-USA Refresher Course in 2014, into a legacy article. This article establishes the role of storytelling in Cosmic Education while capturing both the whole and the detailed parts of Montessori Cosmic Education. Working from the early childhood transition into the elementary years, she frames the second plane as more than a successive stage of development but, more importantly, as a continuation of growth through the work of imagination. She has given the presentation “life, not theories” by adding her authentic perspective to the dynamics of the crowning movement of stages that is the first to second plane.

When it comes to development, Dr Montessori says that life can be regarded as a series of rebirths and that is really what we are seeing illustrated in this chart taken from “The Four Planes of Development” by Camillo Grazzini.

Baiba Krumins Grazzini is director of training at the International Centre for Montessori Studies Foundation in Bergamo, Italy. She has been involved with Bergamo’s AMI elementary training course since 1975, became an AMI elementary trainer in 1986, and joined Camillo Grazzini as co-director in 1992. Baiba Krumins Grazzini holds both a bachelor’s and a master’s degree in economics from the University of London (London School of Economics and Political Science) as well as the AMI 3-6 Diploma (London) and the AMI 6-12 Diploma (Bergamo). As the late Camillo Grazzini’s closest collaborator, Baiba Krumins Grazzini co-researched, and sometimes co-authored, papers and projects with respect to many aspects of Montessori elementary work; she has continued to publish in her own name. She became a member of the AMI Pedagogical Committee in 2004 and served until 2013 by which time it was the AMI Scientific Pedagogy Group. Today she is a leading Montessori expert on Montessori elementary education in the world as she continues the Bergamo research and elementary courses of study and implementation. This talk was presented at the NAMTA adolescent workshop titled From Childhood to Adolescence: Keys, Disciplines, Social Organization, and Life-Long Impact, at the AMI/USA Refresher Course, Houston, TX, February 14-17, 2014. © Baiba Krumins Grazzini 2016



The individual's actual birth as an infant is represented by the red flame around the zero and, after that, we see the individual's rebirths: around the age of six for the "birth" of the older child; around the age of twelve for the "birth" of the adolescent (who is nothing less than the newborn adult); and around the age of eighteen for the "birth" of the mature adult. Since each life, so to speak, lasts for a period of approximately six years, the constructive rhythm of the life of a human being leads to four planes or stages of development: infancy; childhood; adolescence; maturity. Each "life" must be lived to the full if Nature's goal of a healthy and happy mature adult is to be reached. This is an adult who can function independently in the context of an interdependent adult society based on reciprocal relations of exchange and interchange of many different kinds.

The rebirth that we are interested in now is the one around the age of six; the passage, in other words, from the plane of infancy to that of childhood. A rebirth always signals change, and the changes will be both physical and psychological at this new time of life. There

will be changes involving the mind or the intellect and, in correspondence with these changes, the child will also change from the social, moral and, indeed, emotional points of view. To appreciate what this first rebirth means, we need to consider the child before the age of six as well as the child after the age of six.

As we know, the first plane, that of infancy, has to do with psychic creation: the creation of the individual human being who also belongs to a particular human group (and to understand this work of creation it is enough to compare the apparent psychic nothingness of a newborn baby to the child of five or six years of age). However the first plane, infancy, also involves a physical transformation: the dramatic transformation of the body. The body of a child of six is different from that of the newborn or young infant, and the most striking difference has to do with the proportions of the body. Whilst the young child's head is enormous in relation to the body and the legs seem quite short, the six-year-old child's body has not only lengthened but also the bodily proportions have changed to ones that are much more familiar to us, since they resemble those of the adult more closely. I like to think of this physical transformation as symbolizing the change that has taken place on the spiritual or psychic plane: from the very special mental powers of the little child (the absorbent mind), at work in the reality of the immediate environment, to the very different mentality of the older child, at work in what Maria Montessori calls the open environment.

Thinking of his own physical growth and that of other children, a young boy once said to me that children seem to stretch like a wire spring that you can pull out and lengthen. How true this is! Thus the body becomes thinner and less rounded, and the legs become long and strong when compared to those of the little child. The six-year-old child has lost his baby fat and where the dimples of the hand used to be, only knuckles can now be seen.

We do not speak of a sensitive period for order for the older child; but the older children discover universal laws and a cosmic order. The little child looks for relationships between things whilst the older child finds relationships and interrelatedness, interconnectedness and interdependence of how things function.

Then there are the changes in the teeth, as Montessori points out. At around the age of six years, the pearly little milk teeth start to fall out and it will take about another six years for the permanent set of teeth to completely replace the first set. When the permanent teeth start to come in they look really large in relation to the face and this, Montessori says, makes the boy or girl look more like a horse than a child (*Creative Development in the Child*). And what about the hair? If before it was soft and curly, now it is coarser, darker, thicker and straighter. If we interpret this in a symbolic way, the coarser hair and the big strong teeth indicate a new toughness, not to say roughness, in this new individual. This is so true that one of the nicknames Dr Montessori gives to the second plane of development is “the age of rudeness”.

The second plane of development is not a creative plane and the physical growth that takes place during this plane is not one of transformation. Indeed, Maria Montessori describes the second plane as a calm phase of uniform growth. Thus, for example, the teeth will keep growing in during the whole of the plane, and the body will gradually lengthen without any great change in bodily proportions. The second plane is a time of health, strength and stability; unlike the little child on the one hand or the adolescent on the other hand, this child is not prone to illness.

The second plane, in other words, is usually a very happy and healthy period of developing life and, for that very reason, constitutes an ideal time for “the acquisition of culture”, an ideal time for the acquisition of knowledge and the kind of understanding that genuine knowledge brings. This is what Dr Montessori says:

Our experience with children in elementary schools has shown us that the age between 6 and 12 years is a period of life during which the elements of all sciences should be given. It is a period which psychologically is especially sensitive and might be called the “sensitive period of culture” during which the abstract plane of the human mind is organized (*From Childhood to Adolescence*).

And she also says this:

At this age it is possible for the child to take in an enormous amount of culture. (...) We have found by experience

that, during this period, the syllabus must be enlarged, containing not only things taught in the primary period, but many things taught in the succeeding secondary school period" (*Creative Development in the Child*).

Perhaps the most interesting physical change of all, from the symbolic point of view, is the change in the legs and feet, a change which indicates the need to go out, to move out into, and to explore, the wider environment. These big feet and long legs can also symbolize the need for the mind to go out: Montessori says that the intelligence now becomes extroverted; it is thrown outward to the world, outward to the universe. Thus we can think of those long strong legs as representing the child's newfound desire and drive to explore a very new and even a vast environment.

The little child's environment is a limited one: for a newborn baby we can think of it as starting with the mother's arms, arms that represent safety, security, the warmth of love; and the little child is happy in the closed environment of his home. Montessori symbolizes all of this with a particular painting, Raphael's *Madonna of the Chair*.



The environment that the older child seeks could not be more different: he seeks the open environment, the wide environment, an environment as vast as the world, the universe, the cosmos. To symbolize this, I want to show you a picture which a student made in order to represent Cosmic Education (Bo Mynett, 2011/12 Bergamo Course).



Bo Mynett, 2011/12 Bergamo Course

Going out in this vast environment means going out with the mind, with the eyes of the mind; that is to say, with the imagination, the one and only vehicle available for travelling through infinite space and endless time. Only the power of imagination can help this child break the barriers of distance and time in order to develop the knowledge and understanding that he desires, needs and seeks.

All the human faculties and powers that the young child created, integrated and perfected during the years from birth to six, can now be used to satisfy the older child's developmental needs. But how can we help this child to satisfy his hunger for knowledge, his need to understand both the world and humanity? How does the

world function in all its various aspects? And what about human society, how does that function?

The child himself develops the ability to see a world that the eyes of the body cannot see; he develops the ability to picture a reality that is out of his physical reach; he develops the ability to experience what is inaccessible to the senses. It is always reality that the child seeks but the only way to see, picture and experience reality on the grand scale of the world and the universe, is through the imagination. If before, when he was little, the child could explore his immediate environment through movement and the senses; now he has to explore through imagination and a more abstract kind of reasoning. Only in this way can he develop a sense of belonging to the universe and thus become a citizen of the world; only in this way can he develop a sense of belonging to one great nation or society of humanity and thus become a citizen of *La Nazione Unica*, to use Montessori's own expression.

This is a very different kind of environment, a very different kind of reality, from the one that the young child absorbed, but it is a reality nonetheless. It is a reality that the child pictures in the mind; one that he creates in the mind; a reality that the child experiences on a mental plane; one to which he adapts. Mario Montessori calls this kind of adaptation, the second phase of adaptation. He says:

What gave great joy to the children was to realise clearly how the world functioned in its physical phenomena (distribution of heat, air currents, sea currents, rain, erosion, deposition, etc.); how different plants and animals distributed themselves according to conditions and how humanity fitted in this complex. The vision on a higher level of this far larger environment and the possibility, following their present tendencies, to absorb it – as in the previous years, 0-6, when they had been able to absorb the more restricted and immediate environment – formed a second phase in the process the human individual undergoes to achieve adaptation

Here we have the miracle of the second plane of development: the miracle of the child who assimilates and adapts to an environment and a reality that he can only imagine. Although the second plane is not a plane of creation, the knowledge and understanding

acquired during this plane can change and transform the individual. We can recognize the people that have successfully lived through the second phase of adaptation, to use Mario Montessori's expression, and the ones that have not. Those who remain within the first phase of adaptation have a closed kind of mentality that corresponds to the closed environment of the first plane; those who achieve the second phase of adaptation have a broader outlook and a more open kind of mentality that corresponds to the open environment of the second plane.

It is interesting, indeed fascinating, to find parallels between the first and the second plane of development; in other words, between the two planes of childhood. Let us take order as an example. The little child has, as we know, a sensitive period for order and it is this that gives us the saying: "A place for everything and everything in its place". An external order of this kind helped the little child to orientate himself and gave him a sense of inner security thereby freeing him to explore with confidence and courage. We do not speak of a sensitive period for order for the older child; but the older children discover universal laws and a cosmic order. The little child looks for relationships between things whilst the older child finds relationships and interrelatedness, interconnectedness and interdependence of how things function.

As long as order is maintained in the immediate environment, the little child finds his orientation and can explore that environment. The older child, on the other hand, has to look for order on a grander scale and also on a more hidden level, and he needs help to find his orientation in a world that is so huge and that, so often, can only be grasped mentally. Cosmic Education provides that help. When it comes to orientation, above all it is the cosmic fables or cosmic tales that help the child to find his way in the vast and grand reality of the whole world.

The little child with his acute senses loves his world, a visible, audible, tangible world. The world provides him with the most vivid sensations and he loves his immediate environment whether it is the natural environment or the human environment. Given the opportunity and the right conditions, he will love all that nature offers: sun, land, sea and sky, wind and rain, snow and ice, sunrise

and sunset, moon and stars; the world by day and the world by night, the heat of summer and the cold of winter, the majesty of mountains, the smooth feel of water, the ever-changing clouds, the greenness of the living world, the movements and sounds of animals. Given the opportunity and the right conditions, the little child will love the world that his human group provides: a warm house, lighted windows, delicious smells of cooking, the vivid taste sensation of each kind of food whether cooked or raw, but also poetry, music and dance and all the special seasonal celebrations with their associated traditions (special food and drink, special songs, etc.). When the little child experiences all of this, that love of his world will forever fuel all those interests in the second plane. Thus we pass from the feel of a breeze or the wind, be it warm, cool or biting, to thinking about what causes the wind. Where does it come from? Where does it go? What work does it do? It is the love the child feels and experiences during the first plane that underlies and drives interest during the second plane. If the world and the life of the first plane have been lived well, the child feels that love and interest for the environment that provides such a strong foundation for the child's exploration and work during the second plane.

We can also compare what happens with language during the two planes. As we know, during the years three to six, language development continues such that the child accumulates a wealth of words whilst enhancing his understanding through exactness of meaning. The child will gradually pass from a literal understanding to a more metaphorical understanding of language and this will ultimately lead to the possibility of a sense of humour and word play with language. I do not have the time to consider all the important aspects of language during the second plane of development and will limit myself to mentioning storytelling. The stories that we tell the second plane children open up new worlds of reality for their exploration because now language allies itself with the creative imagination.

Montessori's approach for the second plane child is called Cosmic Education and it answers the sensitivities of the second plane child. These are: the sensitivity for culture, which is always a quest for knowledge and understanding; the sensitivity for the imagination, which permits the child to explore and conquer the

new realities that he is interested in, from the vast environment of the cosmos to the invisible cells of life; and the sensitivity for morality, which outwardly reveals itself in his social relationships and interactions, and inwardly reveals itself as the voice of conscience. Cosmic Education constitutes a guide and orientation for the child from every point of view and in various ways. With this approach, we start from the whole because this permits all knowledge to find its place and interconnections. The child can find intellectual and emotional satisfaction through the order and clarity that is reached; every detail, every tiniest fragment of knowledge, can find its place and can contribute to the understanding of the whole.

With the approach of Cosmic Education the children are also helped from the moral point of view. The children are helped to become consciously aware of the value and importance of all the different forms of work undertaken by all the forces of nature, by all forms of life, by mankind past and present. The children are helped to become consciously aware of the value and importance of collaboration in work. The children are helped to become consciously aware of the value and importance of work undertaken for the greater good, that is, cosmic work. In this way, the elementary children can develop what I would call a cosmic morality which involves respect for, and gratitude to, nature, life, mankind; respect and gratitude which are most certainly needed at the present time. (See also Krumins Grazzini.)

Children who develop a cosmic morality will come to feel that deeper responsibility that Montessori speaks about when she says:

[Man] is conscious of his own intellectual and physical needs, and of the claims on him of society and civilization. He believes in fighting for himself, his family and nation, but has yet to become conscious of his far deeper responsibilities to a cosmic task, his collaboration with others and work for his environment, for the whole universe. (*To Educate the Human Potential*)

But each child also lives each day as part of a community of children who learn through daily concrete experiences to live and work together in new relationships of sharing work and ideas. Dr Montessori points out how association of this kind brings new

strength and stimulates new energies; and it helps with the process of thinking and understanding as well as with action and physical work. In this way children educate themselves not only intellectually but also morally and socially. The children of the second plane build what we can call a “practice” society because the children bond not only through affection and respect but also through shared work and shared rules for communal living (for living together). Obviously this is not an adult society, which is something that the adolescents want to experience.

I said earlier that with Cosmic Education we present the whole, and the way we do this is through the cosmic tales, fables, great stories, call them what you will. These grand stories of truth are just as fantastic and magical as fairy tales, but being stories of truth they illuminate reality. How did the universe begin? How did life begin and evolve? What about human beings? The alphabet? Numbers? Everything that comes into existence has a story to tell. These stories appeal to the children, both to the imagination and emotions; they help children who are so eager to know about the how and the why of the world in which they live. These stories provide the seeds of great living truths that grow within and with the children, and that help them in their mental and moral development.

If the children lived the world of the first plane of development well and then live the second plane of development well, they will become learners for life, learners who will never tire of the infinite things to be discovered in this wonderful cosmos. They will never be limited to what one person, the teacher, knows; they will never be imprisoned by curricula or a few textbooks; and the second plane will give a fundamental and essential contribution to creating an adult who is fully alive mentally, sensitive and open morally and socially, responsible in his relationships with the Earth and mankind.

The role of the adult in this second plane is very different to that of the traditional teacher. In Dr Montessori’s own words:

The secret of good teaching is to regard the child’s intelligence as a fertile field in which seeds may be sown, to grow under the heat of flaming imagination. Our aim therefore is not merely to make the child understand, and still less to force him to memorise, but so to touch his imagina-

tion as to enthuse him to his inmost core. We do not want complacent pupils, but eager ones; we seek to sow life in the child rather than theories, to help him in his growth, mental and emotional as well as physical, and for that we must offer grand and lofty ideas to the human mind, which we find ever ready to receive them ... (*To Educate the Human Potential* 11)

To be able to do all of this, the teacher has to find the world fascinating. As Maria Montessori tells us, now it is not enough to love the child, the teacher must also love the world, the same world that the elementary child longs to understand. And in connection with this, the teacher has to become a storyteller of the truth, not only the truth of the great and grand stories that are the cosmic tales but also the truth of lesser stories that nonetheless inspire and plant their own seeds. (For example: the story of the star, the story of three relationships of lines, the story of the ropestretcher's triangle, the story of the noble family of the quadrilaterals, the story of pi, the story of the multitude, the story of the piece of paper that sees and speaks, the story of a race, the stories of the symbols, the story of spoken language, the story of powers, the story of the three kings, the story of the fraction line, the story of Egyptian numbers or any other historical number system, the stories of functions for the parts of plants. And what about all the stories for geography and history?)

In this way and, of course, in other ways as well, the Montessori teacher of the elementary child gives her own contribution to helping children in their individual and social development such that they can become adults who work for the good of humanity and can participate in humanity's cosmic mission on this Earth.

BIBLIOGRAPHY

Grazzini, Camillo. "The Four Planes of Development." *AMI Communications Special Edition* (2010): 123-125.

Krumins Grazzini, Baiba. "Work: A Vital Instinct." *AMI Communications* 4 (2005): 23-31.

Montessori, Maria. *Creative Development in the Child*. 1939. Vol 1. Chennai, India: Kalakshetra, 2007.

---. *From Childhood to Adolescence*. Appendix C. 1948. Oxford: Clio, 2004.

---. *To Educate the Human Potential*. 1948. Oxford: Clio, 1989.

Montessori, Mario. "Keys to the World." *AMI Communications* 4 (1998): 6-14.

