Maria Montessori’s Cosmic Vision, Cosmic Plan, and Cosmic Education

by Camillo Grazzini

This classic position of the breadth of Cosmic Education begins with a way of seeing the human’s interaction with the world, continues on to the grandeur in scale of time and space of that vision, then brings the interdependency of life where each growing human becomes a participating adult. Mr. Grazzini confronts the laws of human nature in looking at the protection of offspring as they grow into the higher purposes of the cosmic plan. The world becomes the house for children or a household where everyone has a cosmic task.

Introduction

Some time ago I was saying how much I like the Congress letter paper, with its watermarked background of cities and dates in pale blue. Belonging to three different continents and linked to dates spanning a period of almost seventy years, these cities recall all the congresses held by our Montessori movement and they bear historical testimony to the work carried out on behalf of the child and in favor of peace, a work which began in 1907 with the founding of the very first Casa dei Bambini or Children’s House.

Over the last fifty years, this is the third time that we are publicly honoring Maria Montessori in this magnificent city of Paris. In 1953, the 10th International Congress was held here (the first to be held after Maria Montessori’s death); then, in 1970. UNESCO celebrated the centenary of Maria Montessori’s birth; now, thirty years on, the 24th International Montessori Congress is being held here, the first congress of the new millennium.

The theme of this congress is close to that of the first congress held in Paris: the theme then was “How to Help the Child to Adapt to Our Times”; this time it is “Education as an Aid to Life.” The close similarity of theme is significant because it demonstrates the continuity of our work, and the theme itself highlights Maria Montessori’s life work for the child, and encapsulates the aims and work of the Association Montessori Internationale, the organization founded by Maria Montessori herself in 1929.

Cosmic Vision, Plan, and Education

By 1935, Maria Montessori’s cosmic vision, her thinking in relation to a cosmic plan, her ideas of Cosmic Education, had all started to take on a definite form, had started to crystallize. But what about these three expressions that all share the great qualifier cosmic? In reality they all represent different aspects of a single mode of thinking.

The first aspect, that of “vision,” has to do with a way of seeing, a way of understanding the world; and Montessori’s own grandeur has to do with her way of looking at the world and at the human being.

The second aspect is that of the “cosmic plan.” Looking at the world with grandeur of vision, with a cosmic vision, we find order at the level of nature, at the level of creation. For such a cosmic order to exist, and for the upkeep and continuation of creation in general, we find many agents at work and among them we find human beings. Virtually all of these agents of creation, or cosmic agents, act and work unconsciously: Humanity alone has the potential to act consciously.

The third aspect, that of “cosmic education,” can be looked on as the operational aspect: becoming aware of the different kinds of cosmic work carried out by the various agents and of the interdependencies and interrelationships involved, and thereby developing one’s own cosmic vision; becoming conscious active participants ourselves and thereby participating more fully in the cosmic plan or cosmic organization of work.
Incidentally, at this point we can understand that, unlike what many people believe, cosmic in no way implies contestation or rebellion or breaking free of given patterns of behavior for the purpose of self-expression at all cost. It does not imply adopting transgression as a way of life. On the contrary, cosmic implies order, the world as universe and unity, the beauty of universal order as opposed to the disorder of chaos. This linking of order—unity—beauty lends depth of meaning to the expression chosen and used by Montessori herself.

Cosmic Vision

The Montessori vision of the world has a cosmic dimension because it is all-inclusive: Montessori looks at the world, sees the world on a very grand scale, that is, at the level of the universe with all of its interrelationships. There is the inorganic world which is ecologically linked in innumerable ways with the biosphere which, in turn, is linked with human beings or the psycho-sphere.

Montessori’s vision is also cosmic because she looks at the whole of humanity throughout time: she sees human beings as being guided by finality from the time of their appearance; she sees humanity as both adult and child; she sees the individual both in his unity or oneness and in his developmental differences during the diverse stages or “seasons of life.”

It is this vision of an indivisible unity made up of energy, of sky, of rocks, of water, of life, of humans as adults and humans as children, that lends a sense of the cosmic to Montessori’s thinking.

This cosmic sense pervades all of Montessori’s work, both her thinking and her educational approach for all of the different planes or stages of development of the human being: from birth without violence, to the infant community, to the Casa dei Bambini, to the elementary school, to the Erdkinder community for adolescents.

Quite clearly then, this cosmic vision belongs by right to the whole of the Montessori movement: It is indeed the key which gives us all a shared direction and common goal in our work. In stark contrast to this, there is Cosmic Education which is for the second plane of development: for example, using the imagination to understand reality, realities beyond the reach of the physical senses; striving for mental and moral independence; exploring the vastness of culture; forming a particular kind of society; and so on.

In her book, What You Should Know about Your Child (a book which was first published in Sri Lanka, in 1948), Montessori herself speaks about the cosmic plan as follows:

There is a plan to which the whole universe is subject. All things, animate and inanimate, are subordinated to that plan. There are also patterns for all species of living and non-living things. These patterns fall in line with the universal plan.

Everything in nature, according to its own laws of development, approximates to the pattern of perfection applicable to itself. There is an urge in every individual of every species to fit into the appropriate pattern. There is also an inevitableness with which all patterns fit into the great plan.

From the seed to the full-grown tree, from the egg to the adult hen, from the embryo to the man of maturity, the striving to embody a pattern is perceptible. It wants a loftier vision to understand and appreciate how all creatures and all things evolve into infinite varieties of patterns with a magnificent impulse to subordinate themselves to the central plan of the universe.

It is certain that the urge to protect the offspring and to conserve the species is among the strongest urges of all nature. But there is a purpose higher than the protection of the offspring or the preservation of the species. This purpose is something beyond mere growing according to a pattern or living according to instincts. This higher purpose is to conform to a master plan towards which all things are moving.

This “higher purpose” can be understood more clearly if we think of the world as a great household, a cosmic household, where all the jobs involved in running the household have been divided up and shared. Understood in this way, expressed in this way, the cosmic plan actually consists of an integrated structure or cosmic organization where all that exist have tasks to fulfill, their cosmic work to accomplish.

Examining the cosmic workers at the very grandest scale, we see inorganic agents such as the Sun (the prime source of energy), the Land (but
also the rocks and the earth or soil), the Water and the Air, all of which act and “work” according to the cosmic laws of their being, that is, according to their inherent nature. (Incidentally, in the thinking of Empedocles, these would constitute the roots of sources of all and everything.) Then there are the great organic cosmic agents, plants and animals who, with their sensitivities and instincts, also act and “work” according to their cosmic laws or inherent nature. Lastly, there is the human being, always in his two manifestations: the adult and the child, the child and the adult.

Cosmic Agents

All around us there are cosmic agents, of whom we also form part, and these constitute the living and non-living world.

There is energy, the Sun’s light and heat. There is the lithosphere: the very ground on which we stand and where we build our homes; the Earth or soil with which we dirty our hands, in which the seeds of plants can take root, and to which, on dying, we return; the Land which is also the great vessel or container for the seas and oceans. There is Water, the hydrosphere: the great constituent or element of the surface of our planet and also of our own bodies; the very source of life. There is the atmosphere, Air: the very breath of life.

Then too, there is the sphere of life: plants, animals, and human beings—the cosmic agents in organic form, those that make up the biosphere. Then, with mankind and with mankind alone, do we have the psychosphere, for “something new came into the world with man, a psychic energy of life, different from any that had yet been expressed,” a “new cosmic energy.”

Montessori says all cosmic agents are guided by a universal intelligence which uses the home, that impulse, urge, or drive, albeit unconscious, toward evolution, self-functioning, and full self-realization. If this is so, then the Montessori idea of finality and syntropic phenomena (where we see a process leading from what is simple, from the homogenous, to the complex and differentiated and therefore to what is ever more highly ordered) also involves the non-living world. And all this reminds me, in a certain way, of yet another outstanding individual; it reminds me of Teilhard de Chardin’s powerful vision of the world.

Cosmic Task and Cosmic Work

Each agent, great and small, has its own mandate or mission to carry out. This constitutes its own particular function in the cosmic plan, its specific cosmic task that has to be carried out uninterruptedly and unceasingly. However, the possibility of doing this depends also on the work of other agents. In other words, there is a cosmic organization of work which necessarily involves specialization or division of labor, a collaboration amongst all the workers or agents, and therefore innumerable relationships of interdependency.

With Montessori’s cosmic fable, “God Who Has No Hands,” we see the coming of the great inorganic, nonliving, cosmic agents as well as the laws of their being. In the work and activities that follow on from the fable, we see how these agents interact and function together in all their possible combinations and relationships, from the Sun with its energy and the planet Earth as a whole, to the cycle or game played out by Water with the help of the Sun, Air, and Land. The endless activity and
The unceasing toil of these agents explain so many of the phenomena with which we are familiar: day and night, summer and winter, rain and wind, snow and ice. But their work and toil also explain the seemingly changeless features of our globe where all, in reality, is endless change: where wind and water and ice constantly carve and sculpt the land; where the land is worn down and built up only to be worn down again, in endless cycles; and where the frontiers of land and water are ever changing. And in all of this unceasing toil, these agents behave, can only behave, according to their nature, according to their cosmic laws, the laws they were given. To express it in terms of Montessori’s first cosmic fable, it is as though these agents respond to the call of God, God who has no hands, and each one, Sun, Air, Land, and Water, whispers: “I hear my Lord, Thy will be done. I obey.”

With Montessori’s second cosmic fable, “The Story of Life,” we see the coming of Life which has its own laws. We see how Life appears to save and preserve the order and harmony of the world since, left to themselves, the nonliving agents cannot maintain cosmic order and threaten to bring about chaos.

Montessori regards the sphere of life, the biosphere, as an intimate part of the Earth’s body; and Life’s function is to grow with the Earth, to work not just for itself but also for Earth’s upkeep and transformation. Thus Life too is one of the creative forces of the world, an energy with its own special laws.

The great agent of Life includes, of course, many many beings, both plant and animal, and Montessori refers to these living agents as “engines of God,” for such they are.

Take for example the diatoms. These microscopic (unicellular or colonial) algae extract silica from the water to build their “shells.” The layer of glass-like silica deposited on the cell wall forms sculptured designs that vary from one species to another; and there are thousands and thousands of these species! Minute as they are, these shells of silica are found in layers, hundreds of feet thick, on lands formerly covered by shallow seas, and vast deposits from diatom oozes covering large parts of the ocean bed.

The globe is a source of profound interest and is the starting point for great spontaneous activity in the study of geography, Gwalior, India. Courtesy of Paolia Trabalzini

Take, for example, the corals. These extract calcium carbonate from the water and, tiny as they are, they build up new land and they also protect mainlands from the sea. How much calcium carbonate was extracted by this army of tiny workers to build the Great Barrier Reef (of Australia) which stretches for about 2000 kilometers (1250 miles)?

And what about the green plants that constantly purify the air we breathe through their endless work of photosynthesis?

The cow, says Montessori, is one of the most important land animals, for its one duty in the cosmic plan is the maintenance of grasslands and meadows in good condition, and this it does: cutting the grass, pressing down the ground and fertilizing it, all at the same time.

And what about the vultures? Faithful to their function of cleaning the earth of things dangerous to other beings, they eat carrion and corpses in putrefaction.
And what about the earthworm? It sinks into the earth and works away as “God’s little plough” (to use Darwin’s expression), aerating the soil and also leaving it more fertile.

We could go on, and on, and on. But enough has been said to understand what Montessori means when she says: “All things in nature have a pattern to which they conform and all of them adhere to a plan into which they weave themselves to form a universe in equilibrium. They function for the preservation of the whole according to a plan and for the preservation of the species according to a pattern: thus are brought about order and harmony in nature.”

**Cosmic Task of Human Beings**

When it comes to human beings, the prime spiritual agent, and the Cosmic Task of human beings, Montessori distinguishes between the adult and the child since their tasks are very different and consequently, so is their work.

The child’s Cosmic Task is to construct the human being itself, construct a man who will build peace, a man who is adapted to the world in which he lives. The greatest onus of this task lies on the child of the earliest years; and the greatest work ever accomplished during any lifetime is that which takes the human being from the helpless state of the newborn babe to the child who not only manifests the characteristics of his species but clearly belongs to his own human group, and is also his own individual self.

Such an enormous work of creation and construction, one which is beyond the power of any other age, is only possible with the power of what Montessori calls the *absorbent mind*; with the guidance of those irresistible attractions of limited duration, that Montessori calls the *sensitive periods*; and with the drive of incredible creative energy. Using his hands, that marvelous human gift, the child explores his world, develops his mental powers, and constructs his very self and, ultimately, the adult human being. We are each one, as Montessori says, “the child of the child” that we once were; a variation, if you like, of Wordsworth’s line of verse: “The child is father of the Man.”

The adult, on the other hand, whose Cosmic Task is one of contributing to the upkeep and development of the Earth, of creation, modifies and transforms the environment, building a new world which is always new, “a supranature, a civilized environment” which goes above and beyond primordial nature. In other words, the adults build a civilization which is in constant evolution and which involves a continual modification and enrichment of their “spiritual territory.”

Thus, in some—as yet unpublished—lectures that Montessori gave in 1950 she writes this:

Man’s arrival has created a psychosphere on Earth. What is his task in it? For we must understand that mankind, too, has a task with regard to the Earth on which it lives. The coming of mankind meant a new force, whose function it is to further the progress of evolution. We notice that man possesses certain capacities which may stimulate progress on Earth. His scientific work gradually discloses the secrets of Nature and, moreover, makes use of them, thus creating new possibilities. His technical skill has harnessed the forces of nature in order to build the most complicated machinery. Man’s toil has developed agricultural products which were unknown in primitive nature. Obviously, man too has an active task on Earth.

And she continues by saying,

So far, however, man has failed to see that there is a field to be explored in mankind itself. We have now arrived at a stage where we must cultivate human energy. Until now we have devoted our attention chiefly to the inventions of mankind and their workings.

Now we have once more to connect these things with man, who invented. Man must take a central place in life.

Montessori concludes with the importance of the child and the child’s education for the advancement of humanity and the evolution of civilization:

This we can effect through the child. But the child cannot do it by himself, he can only acquire a higher form of character with adult assistance. The child has no fixed form of behavior, and therefore he needs a guide so that he will not go astray.

But now it is no longer enough to consider the only child of the earliest years, we must also take into consideration the older child, the six-to-twelve-year-old child who is in the second plan of his development. And this is what Montessori says:
We can make the human race better by assisting the child in building his character and acquiring his moral freedom.

One of the means to this end is a cosmic education, which gives the child an orientation and guidance in life. For this education wants to prepare the growing child for the task awaiting him in adult life, so that he will feel at ease in his own environment, in which he will later have to live as an independent being.

**Cosmic Education**

All that I have said so far, about a cosmic vision; about the cosmic plan or cosmic organization; about the cosmic agents with their variety and diversity of tasks and work, all of which lead to a cosmic order; and about man’s special place and role in the cosmos for creation; all of this is involved in Cosmic Education. Very gradually, and without any need or direct teaching and preaching, the children are led to see, to understand, and to appreciate much of what I have already discussed, and much more besides.

Cosmic Education has many aspects and facets and (also for reasons of time) I shall limit myself to indicating and highlighting some of these.

Cosmic Education helps the children to acquire a cosmic vision of the world, a vision of the unity and finality of the world, a vision which gives a sense of meaning and purpose. This vision encompasses both space and time; in other words, the children learn to understand the world both in its evolutionary development and in its ecological functioning.

Cosmic Education gives the children the opportunity and the freedom to explore, study, and acquire knowledge of the universe not only in its globality, but also in its complexity; and they learn to appreciate how the various cosmic forces, following the laws of nature, work and interact such that our universe is one of structure and order. In other words, the children are helped to become aware of what is only too often taken for granted and not seen: the natural or cosmic laws that bring about the order and harmony in nature, a cosmic order and harmony.

Cosmic Education enables the children to discover many kinds of interrelationships that exist in the world and that explain how our world functions. These are sometimes relationships of dependency but, above all, they embody interdependency: be this the interdependency of various cosmic forces or the interdependencies within the context of a single force. With these kinds of discoveries, the children come to understand and appreciate the importance of collaboration at a cosmic level.

Cosmic Education helps the children to become aware of cosmic tasks and cosmic work, be these carried out consciously or unconsciously (as is usually the case). In this way, the children reach a deeper understanding of the full functioning and role of each of the cosmic agents, living or nonliving. Consequently, the children become more and more aware, not only of the importance of work, but also of the importance of work that benefits others, that contributes to the well-being of others, and they come to see how much they too have received and continue to receive. Mario Montessori recounts how, once they became conscious of cosmic work: “The children sought eagerly the cosmic task of whatever came under their observation and, penetrating into these tasks, they came to acquire a feeling of gratitude towards God for the nature he had provided, and towards mankind for having created, starting from natural conditions, a supranatural world in which each individual could perform his own task and provide himself with all he needed from what had been produced by the work of other men.”

Cosmic Education results in creative attempts to lead a new and different kind of human life, with responsible participation in all natural and human phenomena. Let me illustrate this with one small but telling example. When Maria and Mario Montessori were in India, some of the children in the school heard about a great problem of adult illiteracy there. Quite spontaneously, they decided to play their part in alleviating this problem and, with permission, they borrowed some materials from the school and taught some such adults in a nearby village, to read and write. What an example for all of us!

Cosmic Education also means a very different kind of approach to culture. With this approach, we pass from the whole to the detail; each detail is, or could be, referred to the whole; the whole is made up of ordered parts; and lastly, specialization of knowledge and interdisciplinary, developing simultaneously, integrate and complete one another. “In the cosmic plan of culture,” wrote Montessori in 1949,
“all sciences (branches of learning) can be linked like rays springing from a single brilliant centre of interest which clarifies, facilitates, and furthers all knowledge.” And one year later, she says:

Thus the way leads from the whole via the parts back to the whole. In this way the child learns to appreciate the unity and regularity of cosmic events. When this vision is opened up he will be fascinated to such an extent that he will value the cosmic laws and their correlation more than any simple fact. Thus the child will develop a kind of philosophy, which teaches him the unity of the universe. This the very thing to organize his intelligence and to give him a better insight into his own place and task in the world, at the same time presenting a chance for the development of his creative energy.

La Nazione Unica Dell’umanità

I could stop here for I have examined all the three aspects of Montessori’s thinking that I was asked to address. However, I should like to take a little more time to examine further that very special agent of creation, humanity, that has its own glorious, as well as inglorious, history. Throughout their history, human beings have always organized themselves into different human groups, and the
contact between groups has varied from peaceful trade and exchange right through to open conflict and warfare. What does Montessori have to say when it comes to the future of humanity?

In her lectures of 1950, she says this:

Every human group has a form of its own. Now we find that these groups have a tendency to unite; not because the individual members have grown to love each other—for how can one love such a huge number of people that one does not even know—but because obviously the next step in evolution is the unity of mankind. In the psychosphere there should now only be one civilization.

Even earlier, in 1937, Montessori was saying: “All mankind forms a single organism . . . a single, indivisible unit—a single nature.” For Montessori, in other words, a single nature of humanity already existed decades and decades ago.

There are others who have expressed similar, though not identical, ideas: for example, Marshall McLuhan with his “global village;” and Gorbachev with his “common home” when speaking of Europe.

In any case, sixty-five years ago, when the League of Nations was still in existence and the United Nations still lay in the future, Maria Montessori had widened the limited concept of a “nation” (meaning, for example, “an ethnic unity conscious of its cultural distinctness and autonomy”) and extended it to embrace the whole of humanity. Ethnic unity, then, is determined by all of Earth’s human inhabitants belonging equally to the human species and, as for the different human groups, Montessori says: “A single interest unites them and causes them to function as a single living organism. No phenomenon can affect one human group without affecting others as a consequence. To put it a better way, the interest of any one group is the interest of all.”

Universal union, says Montessori, already exists, and therefore all that is needed is that we should become aware of this reality and “replace the idea of the necessity of bringing about union among men, by the recognition of the real and profound existence of these bonds of interdependence and social solidarity among the peoples of the whole world.”

And also: “This solidarity between human beings, which projects itself into the future and is sunk in the remotest ages of the past … is a wonderful thing.”

“The living idea of the solidarity of all men … closely united by so many bonds, generates a warm feeling of sharing in something great which even surpasses the one’s feeling for one’s country.”

We can note in passing that Montessori’s idea of La Nazione Unica, in the guise of world unity, was also shared by H.G. Wells and by Julian Huxley.

This idea of human solidarity throughout time and space, and therefore the concept of a single nation of humanity, also forms part of Montessori’s Cosmic Education; and the children come to grasp these ideas, not through mere words and little sermons, but through the exploration and study of humanity, both past and present.

We have seen, however briefly, that Montessori’s education is education as a help to life and an education for peace; it is an integral part of an anthropological
Conclusion

During the two years following Montessori’s return to Europe after her second Indian sojourn and the San Remo Congress, that is, during the years 1950 and 1951, Maria Montessori became involved with UNESCO.

She was a member of the Italian delegation to the UNESCO General Assembly, held in Florence, in May 1950; during the same month, at UNESCO in Paris, she was welcomed “as one of the founders and inspirers of that revolutionary movement known by the name of the New Education.” On this same occasion, when she was asked by UNESCO’s Department of Education to give “her vision of how to reach a better international understanding,” Dr. Montessori listed six points and one of these centered on Cosmic Education.

Lastly, in December 1951, on the occasion of the third anniversary of the Universal Declaration of Human Rights, UNESCO invited Montessori “to send a message to the world in order to emphasize the highly idealistic value of the event.” This is how Dr. Montessori came to write “The Forgotten Citizen,” her last important contribution, for she died four months later.

Relations with UNESCO have been maintained to the present day, since the Association Montessori Internationale, under whose auspices this congress has been organized, is an NGO, or Non-Governmental Organization, in operational relations with UNESCO.

“To contribute to the maintenance of peace by means of education” is the main aim of the organization hosting our congress. Therefore, I should like to conclude by recalling how, in 1950 in Florence, the poet Jaime Torres Bodet, who was the Director General of UNESCO at the time, welcomed Maria Montessori by saying: “In our midst we have someone who has become the symbol of our great expectations for education and world peace.”

After fifty years, education and world peace still remain humanity’s great hope.

I wish to thank Baiba Krumins Grazzini for her help in preparing this contribution.

Endnotes

1. Cosmic comes from the Greek kosmos meaning order, world, universe; and the etymological meaning has nothing to do with hair, despite what was said by other speakers during the Congress. Comet, on the other hand, comes from the Greek kometes meaning long-haired (and this in turn comes from kome which is the Greek word for hair). Etymologically speaking, therefore, a comet is a long-haired star. Obviously cosmic or cosmos on the one hand, and comet on the other, are totally different concepts and must not be confused.


4. Horme comes from the Greek horme meaning impulse, and this is related to the Greek hormao which means to excite. The dictionary meaning of horme is “vital energy as an urge to purposive activity” and this is how Montessori uses the term in The Absorbent Mind (Adyar, Madras: The Theosophical Publishing House, 1st edition, 1949). The term was first suggested (though apparently not adopted) by C. G. Jung and developed and used by Sir Percy Nunn, whom Montessori cites in her book. (Nunn, Percy, Education: Its Data and First Principles (London: Edward Arnold Publishers Ltd., 3rd edition, 1945, reprinted 1970).

5. Wordsworth, William (English romantic poet, 1770-1850), see 7th line (The Child is father of the Man) in “My Heart Leaps Up When I Behold” in Poems in Two Volumes, 1807.


9. This lecture was given on December 29, 1937 at the *Internationale School voor Wijsbegeerte* [International School of Philosophy], Amersfoort, the Netherlands and published in Education and Peace, transl. Helen R. Lane (Chicago, IL: Henry Regnery Company, 1st English edition, 1972).


Camillo Grazzini had a long association with the Montessori movement having worked under the guidance of Mr. Mario Montessori, the director of studies at the Bergamo Centre, from the founding of the centre in 1961 until Mr. Montessori’s death in 1982. Mr. Grazzini was one of the original members of the Pedagogical/Material Committee. As a researcher his knowledge of every detail of our work was outstanding, whether it was of the materials, the history of the movement, and of course Cosmic Education. Camillo Grazzini worked for the Bergamo Centre as lecturer, AMI trainer, and director of training, until his death in January 2004. Camillo Grazzini inspired over forty generations of Bergamo students in their Montessori work for and with elementary children. Reprinted from AMI Communications, Special Issue 2010, pages 44-54. Reprinted by permission of Baiba Krummins Grazzini.