Introduction to Control and Coordination of Movement

... To perfect any given activity, movement will be needed as the last stage of the cycle. In other words, a higher spirituality can only be reached through action. 

*The Absorbent Mind*, p. 140

Montessori tells us that the development of movement is "duplex": there are two lines to its development, both of which are dependent upon the muscles. One line is connected to the inner life and accomplishes the development of the hand which works. The other line is biologically driven and accomplishes the coordinations of walking and balance. (*The Absorbent Mind*, p. 153). This section of the Practical Life area offers many opportunities to coordinate and refine those movements related to *locomotion* and to *equilibrium* while moving through the space. They also offer opportunities to build on these coordinations by bringing the movement of the whole body under the control of the emergent *Will*; and by supporting the spontaneous development of *Social Cohesion* in the group.

The coordination of movement under the control of one’s own mind or will is self-mastery; Montessori clearly states the importance of self-mastery, writing that

*the fundamental problem of human life and hence of education is that the ego should be able to animate and master its own instruments of motion, in order that in its actions it should be guided by something higher than material objects or the functions of vegetative life, something which is generally clothed in instinct, but which in man is openly a creative spirit, clothed with intelligence. If the ego cannot attain this essential condition, its unity will be shattered. It will be as though an instinct were to go about the world separated from the body it should animate.*

(*The Secret of Childhood* p. 98)

The activities of this section are organized into two categories: Walking on the Line and the Silence Game.

**Walking on the Line**

*... man’s legs, which are his natural means of transport, carry him to the places where he can work, but his work he does with his hands* 

(*The Absorbent Mind*, p. 153)

We have constant, everyday evidence of children’s spontaneous activity towards mastery of this ‘natural means of transport’. For example:

A young child, walking along an urban sidewalk, arrives at a section with a curb raised several inches above it: the child spontaneously steps up onto this curb and walks along its straight and narrow course; When it abruptly ends, she stops and hops back down. Suddenly, there is a network of cracks in the surface of the sidewalk: with many footsteps the child meticulously follows their meandering course; A fallen log parallels a forest trail – the child finds this, too, an irresistible challenge, perhaps seeking an adult hand to help her climb to the top of its rough curved surface, then struggling for balance to walk its bumpy length unaided. At the front of my old house, there is a staircase of 14 cement steps. On one side is a railing offering a secure hand hold; on the other a cement strip separates the steps from a planted slope. This strip rises in a straight line at the angle of the staircase. I have never seen a child capable of walking unaided up stairs, who one day didn't turn her back on the security of the railing, and step off the treads of the staircase to walk this smooth steep ascent to the house.

With these examples we see that it is not the shortest distance between two points which lures the young child, nor the conservation of energy in traversing space. If there are tiles creating right-angled corners, her
feet will trace their pattern; if a low wall surrounds a fountain in a perfect circle, she will follow its circuit perfectly. Whatever a natural, fortuitous or precarious path suddenly presents itself, she will always choose it in preference to that invisible straight line which guides an adult succinctly from Point A to Point B. And if walking that path should prove too easy, the child will run it, exuberantly. And so the coordinations of locomotion are perfected, the muscles of equilibrium are nurtured, and physics is absorbed.

In the Casa, we capture this natural interest of the child in the pursuit of self-development, and offer it the novel and challenging progress of the Ellipse. Not a straight line which proceeds unchanged and then stops abruptly. Not a meandering path with random, discontinuous change; nor the straight lines of a square or rectangle requiring exact, precise, but identical adjustment at each corner. Nor the perfect circle, which the child may follow round and round and round in one constant position without any bodily adjustment at all.

The ellipse describes a gradual curve, with a constant rate of change requiring a gradual yet constant adjustment of the muscles in order to walk its path accurately. There is no radical stopping, adjusting, then moving on in another position or direction; just a fairly uniform, somewhat predictable fluidity which is both physically rhythmical and psychologically calming. The child’s attention is constantly engaged to coordinate the movements so that her feet can successfully follow this curve, yet in a way that is psychically meditative and centering: energies are gathered and focused, rather than dissipated; and a fluid precision and control is refined over time through a progression of exercises. Montessori specifically references the advantage of an ellipse for these exercises in The Discovery of the Child, ‘Education in Movement – The Line’ p. 103. If other lines are available indoors and outdoors, they may also be ellipses or offer other shapes to follow.

In more contemporary terms, the exercises of Walking on the Line focus the child’s attention on ‘proprioception’ – an awareness of the position of the body in space.

**Walking on the Line as a Group Activity**

All of the exercises of Walking on the Line are offered as group or collective lessons. Children of different developmental levels and experience participate at their respective levels at the same time. The maximum size of a group is determined partly by the size of the ellipse, but also by the logistics of the room and the experience level of the participants. During presentations as well as during guided exercises, children may alternately participate and observe, thereby accommodating many children but allowing a comfortable and variable limit to the number of children on the line at any one time.

The teacher should have a clear idea as to the organization of these group activities, particularly as to initiating the work and dismissing children at the end of a cycle. All procedures should be simple, clear, and consistently followed. Many principles of group lessons are applicable. Walking on the Line can be organizationally challenging in that individual children pursue the same activity simultaneously but according to the developmental capacities of each. The teacher must be responsive both to the dynamic of the group and to the observed needs of each participant. She must also be aware that a communal achievement is underway, concomitant with individual levels of accomplishment.

The comments and reflections of Montessori’s colleague, Mrs. Rosie Joosten-Chotzen, are particularly relevant to these collective activities of Walking on the Line:

*Those who give lessons ... should never forget that their real value is proved by the way they appeal to the interest, the imagination and the creative spirit of the individual or the group who enjoy what then*
becomes the privilege of receiving a lesson... A lesson will have the greater constructive value the more it evokes life and interest and functions as a 'key' to individual or collective activity and elaboration.

She continues, noting the necessary "natural rhythm of the work":

By rhythm of work we understand the way in which stimuli given by adults and subsequent activities of the children overlap and develop. There must be left a great measure of elasticity... A time-table would go against the manifestation of spontaneous inner needs. A period of activity (also called an 'activity wave') with its initial growth of intensity and extension, with its culminating period and its point of saturation and gradual decline must follow a natural pattern. If not, we cannot appreciate and classify it as a spontaneous phenomenon which opens our eyes and our minds to unknown potentialities.


This image of "elasticity" is particularly helpful to characterize the teacher’s attitude as she confidently guides the children's activities of Walking on the Line, while with patience and humility awaiting her own enlightenment through the revelation of "unknown potentialities".

Walking on the Line is neither optional nor extraneous to the other assistance we give to the coordination of movement or to the life of the spirit which animates that movement. These exercises are essential to the life of a child at this stage of development. To ignore or neglect them is to remove a fundamental assistance to individual development. They are equally important to the life of the Casa in general and to the achievement of normalization in the Casa community: to the degree that they are lacking or misapplied, a fundamental piece in the creation of the Children's House community is also eliminated.

Ideally the Line should be available for use at all times, with few obstacles to move out of the way. Its placement is one of the first considerations to be made in preparing the environment, along with the arrangement of shelves, tables and chairs, rug spaces, and areas for gathering. Children need to be able to walk it with both arms outstretched. In this light – that the line is a motivation for movement – it is clear that the line is not itself a place for immobile gathering. The teacher can establish and support helpful limits that the line is not for sitting and that floor rugs and tables can be placed beside but not on the line.

These arrangements can be a creative challenge for the Guide, but one well worth solution. As collective exercises, some aspect of Walking on the Line should be offered frequently – on a daily basis, sometimes even several times in a day, and at a minimum several times a week. The fewer physical and logistical obstacles to its access the more likely it is that a teacher will do so.

**Walking on the Line as an Individual Activity**

As children become familiar with activity on the line, this work can be available at any time for individual, independent choice as well. For this it is essential that no furniture straddles the line, and children place floor rugs so as not to touch it. When first establishing Walking on the Line as an individual activity, a system can be created for one child to choose the line as his work, perhaps indicated by wearing a designated necklace; once a choice is indicated (as with any other material) the line is not available to anyone else until that child had finished. As the group matures, this limit can expand, until any number of children can spontaneously initiate activities suitable for the line – with, of course, the typical caveat that their activity does not disturb the concentrated work of others. The advantages of this arrangement and the unequivocal benefits it offers to the community of the children over time, are doorways to appreciation and understanding of the importance of Walking on the Line – both for the coordination of individual movement and for the emergence of social cohesion and group independence.
The Silence Game

.... self-control – as mastery over self – is one of the ingredients of concentration, of meditation, of objectivity, of detachment. As regard to person, it leads to claremindedness and to serenity. Towards others it leads to cooperation and tolerance. Self-control is included in all what (sic) I mentioned, but this includes only a few elements because self-control has a vastness few consider. It starts from the earthly and reaches the mystic, by expanding successive spheres: the physical, the mental, and the spiritual. Each is separate as successive steps of a ladder and each can be separately attained through will, effort and repetition. However, once self-control has been acquired at any level, the exercise of will, of effort and repetition is no longer necessary. Self-control has become so much part of one as if it had been innate.

Mario Montessori, "Meditation on Silence" (AMI Communications, 1967 #4, p. 20)

Silence in the Montessori Casa consists of several preliminary exercises and the Silence Game. These are prepared through other activities of Practical Life; and are cumulative in nature, one exercise leading to and preparing the next. The mechanics of these exercises are very simple and straightforward: children, as a group, are led in successive stages to create silence through willed immobility. This willed immobility is an experience which is offered to the children, and which is accomplished by them. It is not a command imposed upon or coerced from them.


An excellent source is also found in the collection The Child, Society and the World, pp. 50-58 – ‘The Lesson of Silence’, from the 1938 Course Lecture in Laren, The Netherlands. Here, Montessori refers to this lesson as one of two lessons in the method which have become very well known (the other being the Three Period Lesson). There are, in addition, articles related to the theory and practice of the Silence exercises by Mr. Joosten; C. A. Claremont; Dr. Mary Black Verschuur; as well as Mario Montessori’s “Meditation on Silence”. Mr. Joosten particularly tells us that

... in the history of the revelations of the children in the first ‘Casa dei Bambini’, the silence lesson came much later than other fundamental and guiding revelations"

‘The Silence Lesson’, p. 27

Silence in a Montessori Context

In Chapter 14 of The Discovery of the Child (pp. 184-185), Dr. Montessori uses the example of the Silence Game to illustrate a significant and profound difference between our method and more typical methods of education. In the traditional school, silence defines the normal working order of the group, necessary for the master to give a lesson. This state, which is externally compelled, tends frequently to disintegrate into disorder, noise and restlessness, disturbing the working order which must then be re-established by an energetic call for “silence”, an energetic call which is intended to bring affairs back into their normal condition.
In the Casa, however, the normal order is very different, since it results from the individual labors of the pupils. The normal working order necessarily involves activity, movement, voices, and sound; and this normal working order ... is a point of departure for climbing to a higher level. Montessori elaborates:

... the silence of immobility suspends the normal life, suspends useful work and has no practical aim. All its importance, all its fascination, springs from the fact that by suspending the communal life it raises the individual to a higher level where utility does not exist but where it is the conquest of self which calls him.

Mary Black Verschuur provides a wonderful summation of the Montessori concept of Silence as

... a state of calmness and stillness willed by the individual and arrived at through self-direction and out of spontaneous interest.

"The Nature and Theory of Silence Activities in the Children’s House"

Elsewhere, Dr. Montessori writes that

... silence means the suspension of every movement... The Discovery of the Child, p. 111

and that

... this exercise called for an inhibition of impulse as well as for the control of movement. Absorbent Mind, p. 262

Silence: A Collective Achievement

In his essay, ‘Meditation on Silence’ (AMI Communications, 1967 #4, p. 23), Mario Montessori highlights the importance of the Silence lesson as “one of the most precious items of the Montessori approach”; and concludes: “Ways to prepare the children for it should ever be present in the minds of those who guide the children in the fulfillment of their potentialities”.

He is reminding us that – since we cannot and do not command silence – we have to prepare and lead the children towards this experience as a spontaneous and self-directed achievement.

In her 1938 Lecture, Montessori is quite specific on this as well, saying,

... if we want silence, we should teach it. And before we teach it ... we have to demonstrate it and allow the children to become familiar with it. ... it really needs an explanation and a preparation of the surroundings. The Child, Society and the World p. 52; p. 55

To support this preparation, all other activity is temporarily put aside. We must assure the consent of each member of the group to this activity of silence, for it cannot happen unless everyone present agrees: “the entire class must want to be silent”. There are no observers for this activity – everyone present in the environment must voluntarily suspend all movement for complete silence to be achieved. Silence then is a profound experience of social cohesion – of each child willingly suspending their own immediate desires for the sake of a communal achievement.

To support this, silence is never externally compelled or ordered by the adults in the environment. Mr. Joosten (among others) is adamant on this point, and elaborates it succinctly:

The silence lesson is never to be used by the teacher as a disciplinary imposition, i.e., the silence lesson may never be given in order to reduce the community to silence when it is rowdy. If the activities of the children should be accompanied by excessive noise, its reason should be discovered and dealt with (usually lack of real interest and concentration). The silence lesson presupposes a high capacity of concentration and inner discipline and can therefore never serve as a means to remedy the lack of them. Silence is a point of arrival not a point of departure.

‘The Silence Lesson’, AMI Communications, 1967 #4, p. 27