MONTESSORI PRACTICE AND THOMIST PRINCIPLES

THE Montessori Method of Education may be said to be based on the twin principles of "Freedom" and "Prepared Environment." This is an inadequate definition, but it will suffice for our present purpose.

It is now over twenty years since the first "Casa dei Bambini" was opened in Rome, and hundreds of visitors came from every quarter of the globe to observe the behaviour of those small slum children from the tenement houses. During this time the Method has spread to the most distant corners of the world—not only amongst Europeans, but also amongst Indians, Chinese, Africans, South Sea Islanders and many others. The results have been always the same, and can be summed up in a sentence. The Montessori Method has proved beyond a doubt that the child loves work.

The child that Shakespeare knew—who "crept like snail unwillingly to school"—has gone. "The shining morning face" has remained, but it now shines in the schoolroom as well as on the way to it. If work was the curse of Adam it is none to these children. They share Elizabeth Browning's view:

Dear work! If they wert made God's curse

Dear work! if thou wert made God's curse, What must His blessing be!

And it is important to note that this applies even to quite small children. Montessori urges parents to send their children to the Infants' Class not later than three and a half, and even these tiny tots reveal a power of intense spontaneous mental concentration which would be incredible to those who have not witnessed it. It is no wonder that observers in different countries have hit upon the same phrase to describe the effect of this method. They say it has revealed a "New Child"—a child orderly, obedient, docile, generous, self-disciplined, above all a child who loves work for its own sake, and continues to work hour after hour, day after day, year after year, without the incentives of rewards or punishments. And the simple explanation of the "New

Child" is that this method has revealed qualities and capacities in childhood hitherto not commonly realized.

The primary cause of this revelation is not the "Freedom of Choice" given to the child, nor the "Prepared Environment" in which it is exercised, though both these are necessary conditions. It is due to an understanding of the needs and processes of the Human Intellect, and an effort to meet these needs and processes. In practice that effort has resulted in the most cogent confirmation of St. Thomas's teaching that "the natural inclination of Man is towards knowing" and that "a faculty of itself does not err concerning its own proper object under normal conditions. The intellect has been created to know truth; and if a thing is made for a certain purpose it would be a contradiction in terms to say that it could not reach its object."

The phrase "under normal conditions" is the most important point as far as the present discussion is concerned. If the Montessori child reveals an altogether unsuspected capacity for spontaneous intellectual concentration, it cannot be because its intellect is any stronger than that of the child in the ordinary school; it must be because the conditions are more favourable, for, as St. Thomas observes, "if a faculty fails it fails per accidens."

As is well known, Dr. Montessori began her educational work amongst defective children. "While everyone was wondering," she remarked, "at the success of my poor defectives—who had done as well as many of the normal children of the same age—I was wondering what could be the reasons why the normal children were so far behind." The principal reason is to be found in the conditions under which the Montessori child works, and it is these conditions that we must investigate so as to elucidate in greater detail the principles which underlie them. To begin with the "Prepared Environment," any appreciation of the principles which have guided Dr. Montessori in preparing the child's environment involves the attempt to picture the nature of the mental world in which the very small child lives and has his being. Compared with ours it is a world in which sensations and mental images predominate, a world full of change,

a kaleidoscopic procession of impressions many of which are new and bewildering. The child may be compared to an explorer setting out in a small barque on an unbounded and unknown ocean, "his business everything and his intent everywhere." The barque has five sails, the five senses, and the captain is the intellect; but the latter has had no training nor experience, has not even a chart of his own to steer by. To drop the metaphor, we may say that it is the high function of the intellect to bring stability out of this flux and confusion of sensations and images, to give form to what is formless, to discover permanence in what seems evanescent, in a word, to bring order out of chaos.

The main purpose of the Prepared Environment (which of course includes the teacher) is to help the intellect in this tremendous task, for the child of three—to quote one of Dr. Montessori's striking aphorisms—"still carries within him a heavy chaos." No one but the child himself can create this inner order; but we can greatly assist him in doing so by placing him in a special environment where everything is already ordered, an environment, too, from which all that is unrelated and irrelevant has been removed.. In training her teachers Dr. Montessori is tireless in repeating the following advice, in one form or another: "You must see to it that there prevails everywhere and always a perfect order in the child's environment. Everything must have its place to which it must be returned after use. You must be unceasingly vigilant to see that every part of the Didactic Material is in perfect working order. For you cannot teach order to the child directly; but it will become reflected into his soul from the environment. No better maxim could be found for the Montessori Directress than that of St. Augustine, 'Serva ordinem et ordo servabit te.' "

So the Montessori child is placed in a well-ordered Lilliputian world, where everything which surrounds him is created in proportion to his needs; little tables, diminutive chairs, low cupboards, small wash basins, and so on, which correspond to his physical needs, as the Didactic Material corresponds to his mental needs. After having lived in a world where everything has been cut to adult measurements

the immediate effect is a sense of physical well-being and comfort, somewhat similar to that experienced by a soldier returning from the trenches to the amenities of civilized life. But this sense of comfort for the child is incidental. The most fundamental object of this environment is to offer the child a sphere of Action proportionate to his needs. "Agire! agire! agire!" is the Dottoressa's motto. But what kind of action? Mere animal movement, or scope for curiosity such as is possessed by the higher apes? Much more than this. The aim—first, last, and all the time—is to develop intelligent action, action, that is, directed by an intelligent purpose, consciously known and freely chosen. Everyone knows that in the Montessori school there is a sound sensorial basis for all that the child learns; but it is not so commonly realized that this appeal to action is for Dr. Montessori something even more fundamental, especially in the child's earliest years.

In a striking phrase she characterizes the underlying reason for the child's imperious need for intelligently directed action at this early period. The new-born child, she says, is "incompletely incarnated." Unlike most animals which are born with a marvellously complete, but instinctive, power of carrying out complicated actions (directed to instinctive ends) the "neonato" is comparatively helpless. He has very limited powers of muscular co-ordination.

This apparent inferiority is however really the mark of the child's superiority. For—and this is the fundamental point on which Dr. Montessori insists and upon which all her practice is based—man's nature consists in the perfect union of body and soul: not the soul of the animal completely dependent on the matter of its body, but an immaterial, rational, super-sensitive soul. Her observations on very small children, even before they can talk or walk, have led her to believe that the very small child is often at a disadvantage because adults do not realize that it is a being who possesses knowing and willing faculties great out of all proportion to its power of expression. His "exterior semblance doth belie his soul's immensity." Therefore it is the duty of parent and teacher not only to foster the physical growth of the child, and help it to acquire ordered experi-

ence, but also to enable it to perfect the relation between soul and body, so that the latter becomes the apt instrument and means of expression of the former. This is the reason why Dr. Montessori has introduced into the Babies' Class those original "Exercises in Practical Life" so often misunderstood by outsiders, but so beloved by the children themselves. They are many and various; they include, for example, one series of actions directed to the care of the person, as washing hands, doing one's hair, cleaning shoes, etc.; another, directed to the care of the environment, as dusting, sweeping, scrubbing; a third, to the "Lessons in Grace and Courtesy"; and many others of a similar kind.

Of deep significance in connexion with these is the teacher's duty in presenting to the children what Dr. Montessori aptly describes as The Logical Analysis of Movements. In every complicated action, such as opening and shutting a door, there is a logical sequence of subsidiary actions which collectively make the whole; and this sequence cannot be neglected without confusion and loss of grace; for example, it is no use pulling the door towards you until you have finished turning the handle. The principle in this analysis is always the same. The light of reason is brought to bear on these actions, transfusing them with an intelligence which relates all the parts in logical order. These distinctions may seem trivial to us, but are not so to a child of three or four, who finds a deep interest in them causing him to repeat the actions again and again, ever more perfectly, with a sense of increasing power. In this way the child's motor-forces are gathered together and co-ordinated towards reasonable ends, and order replaces disorder.

In the choice of the Sensory Didactic Material itself the same principle is employed. Many visitors to the Infants' Class observing the children to be occupied with the Colour Tablets, Sound Boxes, Pink Tower, Long Stair and so forth, come to the conclusion that this is a method which aims at training the senses. It is certainly true that the sense perceptions are trained and refined by means of these occupations, but that is not their main purpose. Their aim is not to supply the child with new sensations, but rather to give

order to those sensations and mental images he has already experienced. Short as his little life has been, it is certain that at some time or other he has seen objects of the same length as each of the rods which compose the Long Stair. But never before has he seen them altogether, and arranged in such a way as to reveal their relationship to one another and the whole. And what is equally important, he has never had the opportunity of moving them about himself, arranging and comparing them. The same may be said of the gradations of colours, sounds, cubes, cylinders and so on. In all these sensory occupations the child is busy composing and decomposing groups of objects which form carefully graded or contrasting series, and as he arranges and rearranges them his mind forms ever more clear notions with regard to such ideas as length, breadth, colour, tone, geometric forms, and the like. Herein is to be remarked a practical application of St. Thomas's oft-repeated dictum that the human mind knows "by composition and division." It is important to realize that the child's mind is as active, during these operations, as his hands.

The clearly defined images (or "phantasms") which the children derive from these graded sensory materials become to them as "keys which open up new realms in the world around them." Thus a child of four years, who had been doing the colour gradations, remarked to a visitor: "Your dress is exactly the same shade of blue as a flower in the next room." A Cardinal who visited a school in Rome brought the children a gift of some biscuits, which happened to be made in various geometric shapes. To his surprise the children quite forgot to eat the biscuits in their delight at recognizing the different forms they had learned by means of the Sensorial Geometrical Material. The clearly defined images, formed in this way, constitute the "phantasms" from which the child's intellect derives corresponding ideas, equally clear.

Those conversant with Thomist psychology will recognize, in these examples of Montessori method, a familiar principle: Nihil est in intellectu quod prius non fuerit in sensu; or, as St. Thomas expands the notion: "There are three

degrees of the cognitive faculty. There is first the act of the corporeal organ, i.e. the sense, which knows particulars; secondly, the power, which is neither the act of the bodily organ nor conjoined with corporeal matter, and such is the intellect of angels, the object of which is form as it exists without matter; and thirdly, there is the human intellect, which stands midway between the other two, which is the form of a body, although not the act of a bodily organ. . . . We must therefore admit that our intellect knows material things by abstractions from phantasms; and that by material things so considered it becomes in some manner able to understand immaterial things." No words could better describe the mental processes which, to the observer, appear to be taking place in the minds of the children as they work spontaneously with the various didactic materials in the Montessori school. There are indeed moments of sudden intellectual expansion in the lives of these tiny scholars when one can almost see the "intellectus agens" abstracting the "species intelligibilis" from the "phantasmata" which the children have gained through contact with the material; and they are to the children moments of pure joy (to the teacher no less so). It is the joy which accompanies the right use of a faculty. St. Thomas remarks somewhere that what we learn with pleasure we learn better than what we learn without pleasure.

Many of these sudden and joyous illuminations (they are called "Montessori Explosions" by the teachers) are the result of intellectual discoveries of numerical or other relationships. They are indeed "truths that wake to perish never," which burst like new planets into their ken. Space forbids the multiplication of examples; what we wish to emphasize here is that spontaneity is one of their striking and essential features. Indeed the whole Montessori Method is based, and based successfully, on the spontaneous activity of the human intellect. Hence its value as against other system; for as St. Thomas says: "There are two ways of acquiring knowledge, (I) by inventio or finding out, and (2) by disciplina or learning. Inventio is the higher mode and disciplina stands second."

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Of course direct teaching is necessary too, and finds its due place in the Montessori school. Very significant, for instance, are the lessons in "naming" which are given in connexion with the Sensorial Material, after the child has become familiar with it by use (e.g., "This is long": "this is short," as applied to the first and last of the rods in the Long Stair). It is not possible, in this brief resumé, even to touch on the profound psychological insight behind these simple lessons, nor to describe the equally profound effect they have on the child's mental development just at the stage when it begins to be vaguely conscious of the mysterious relationship between words and ideas. Suffice it to say that, while the previous work with the material has assisted in giving birth to ideas in the child's mind, these lessons (given with an almost liturgical solemnity) correspond in a striking way to the formation of logical judgments. Later on (for the children are still only about four years old) will come the age of reason and the fully developed syllogism.

One of the reasons why Dr. Montessori has been so extraordinarily successful in teaching by "Auto-education" (or "Invention") arises from the clearness with which she has grasped, and the originality with which she has applied, the principle which she calls "The Analysis and Separation of Difficulties." She says, in effect, that when we present a truth to be perceived by the immature mind, and we find it beyond the power of that mind to assimilate, it is no use fretting, or coercing, or persisting in presenting that truth; we must set about analyzing it into simpler elements, and then present each of these separately. This is the method of St. Thomas too: the truth is to be broken up until something is reached which the mind sees, i.e. until it sees a logical connexion between subject and predicate. I remember a small boy of four and a half coming up to me—a perfect stranger in his class-carrying a number rod nearly as long as himself. With an air of portentous solemnity he said: "This is seven." Having vented this oracular statement he quietly returned to continue his work.

A nun, who teaches in the Junior Form at a London convent where the Montessori Method has been in use for

over fifteen years, remarked of the children who come up to her from the Montessori class that "what they know they know thoroughly; they know nothing vaguely." An important factor which contributes to this clarity of knowledge is the circumstance that the children's minds are not hurried in this process of making abstractions. Each child works at his own pace and for as long as he wishes; so the more dull-witted child is free to remain in contact with the concrete material longer than the more intelligent, who more quickly leaves it behind. The activity of the mind in forming abstractions, says Dr. Montessori, can be compared to the flight of an aeroplane. In order to rise up into the air it is necessary for the machine to run first for a certain distance along the ground. In a similar way the child's intellect needs to work for a while in contact with the concrete and the material; but at the right moment it will "take off" and sail up into the region of the abstract.

One of the commonest objections levelled at the Montessori System is that it is too intellectual and does not sufficiently develop the imagination. We do not think this criticism will bear close examination. Yet there is this much truth in it, namely that the System regards the intellect as a higher and more important faculty than the imagination. Dr. Montessori realizes, more clearly than most modern pedagogues, the dangers, both psychological and religious, which attend any over-development of the imagination undisciplined by reality. We touch here on what is perhaps the most fundamental difference between the Froebel and Montessori Systems (and it is not without significance, perhaps, that Froebel and most of his interpreters have been Pantheists, while Dr. Montessori is a Catholic). Here, as in so many other points, she is in line with Thomistic psychological teaching, which rightly regards the intellect as the highest natural human faculty, while it looks upon the imagination as a good servant but a bad master. Acceptance of this principle is at the root of the Montessori method and goes far to explain its remarkable success.

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