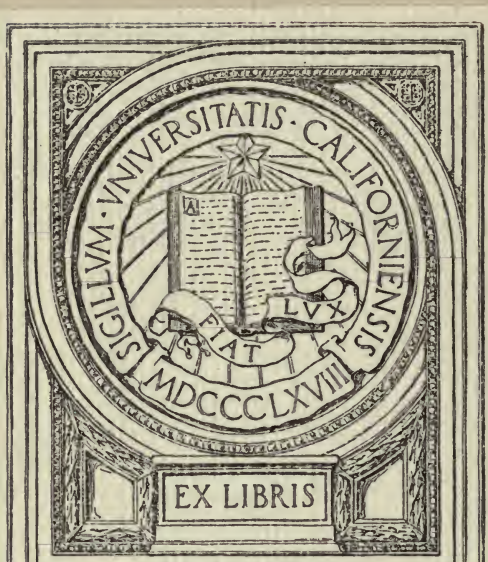
THE NEW CHILDREN

SHEILA RADICE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THE NEW CHILDREN

Maria Montessori

THE NEW CHILDREN

TALKS WITH DR. MARIA MONTESSORI

BY

SHEILA RADICE

(Mrs. A. Hutton Radice)

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TO

MY DEAR HUSBAND
AND CHILDREN

FOREWORD

THE articles on which this book is chiefly based appeared in *The Times Educational Supplement* during September, October, November and December, 1919. In December, before leaving for Italy, Dr. Montessori wrote the following letter to the Editor of *The Times Educational Supplement,* which is reproduced here by his permission:

"Al *The Times Educational Supplement,* il grande giornale che ha raccolto la mia idea per farne una difesa possente in nome dei bambini, e una luminosa illustrazione in nome della scienza, rivolgo con animo commosso di gratitudine il mio cordiale saluto di congedo.

"MARIA MONTESSORI."

PREFACE

In giving the following pages in book form to the public, in response to many requests, some explanation is needful as to their form. When Dr. Montessori arrived in England in September, 1919, I asked the permission of the Editor of the *Educational Supplement of The Times* (to whom I owe thanks for this and many other kindnesses, and for a great part of my own "continued education") to seek out Dr. Montessori and to try, with her help, to answer some of the queries and criticisms that assail all students of her work. My own knowledge of that work has been gained during the past six years by study of her books, by application of what I could learn of her methods, by visits to innumerable schools, Montessori and otherwise, and chiefly by learning from my own children.

I think most of the criticism is based on misconception for this reason, that though I knew a good deal about the method, I found, after a few meetings with Dr. Montessori that I knew very little. What the world had to learn from

Dr. Montessori is not only how to treat little children properly—it is a new philosophy of life. Of this philosophy she has as yet given her students but a fraction, from which they are endeavoring to build up the rest for themselves.

This is the secret of the stir that Dr. Montessori has made throughout the world. This is why she has disciples, where others have students of their work. Dr. Montessori knows so much: knows far more than she can tell. She knows so much about children that those who are about her are half afraid lest she should never succeed in saying it all. This is why they hedge her about with care; keep what check they can on her reckless energy; shield her from irrelevant criticism, and husband her powers.

She is, in a way, not very articulate. The language difficulty stands between her and the Anglo-Saxon nations in a way that cannot be overcome by the most faithful interpretation of her words. What England and America need for their enlightenment, if they wish it, is some one of her own standing, bilingual, who can rethink her thoughts for her, as Dr. Wildon Carr has done for M. Bergson, in English.

I think that probably almost no one in England knows how unerring is her sense of proportion, how inexhaustible her sense of humor. I think critics would not be at all pleased to hear

her running comments on what they write. For with all her tender mercy for the weakness of children, she is not very tolerant of the weaknesses of the adult; nor does she appreciate very well that *a priori* criticism, which a section of the Anglo-Saxon Press indulges in so freely, "inviting correspondence": which, as Mr. Cloudesley Brereton assures me, is a phenomenon not to be found in a Latin country. The Latin critic goes all the road with his subject before he turns upon him to bless or blast. Even then the Latin critic is constructive; says what he thinks the other person means; endeavors to present him whole, whether for good or evil; does not believe the province of criticism to be the picking of holes, the pulling out of a feather here and a feather there.

As a matter of fact, Dr. Montessori takes nearly all our criticism in this country for granted, because she has already met and answered it in America, over and over again. She finds practically the whole of our infant education still enfeoffed to the Teuton. The kindly thraldom of Froebel still binds our training-colleges, and until that begins to be shaken off we shall not be able to see any clearer light. Many, reading Froebel's books, see no reason why any further freedom should be claimed for the children than this. But the example of Germany,

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where Froebel's methods long flourished, and where those of Montessori found little sympathy, have given many erstwhile Froebelians "furiously to think."

In the pages that follow I have tried to sketch broadly the outline of what, to my own limited powers of vision, the Montessori teaching seems to imply for the world. Dr. Montessori has been most indulgent with what I myself feel to be an inadequate travesty of her thought. Her philosophy is based on knowledge, where mine is largely speculative. The secrets of not a few, but of thousands of growing souls have been open to her view, which was, to begin with, that of a professor of medicine. Signorina Maccheroni has told me something of those days when Dr. Montessori practiced as a doctor in the Roman slums. Dr. Montessori put that work behind her long ago, when the call came to her to attack at its source the infinite sufferings of the repressed child soul, of which education has not wrecked, for which medicine and even the enlightened medical psychology of to-day has hitherto been able to do so little. She speaks so little of that work, that people are apt to forget that she is a doctor, one of that hierarchy to whom we take our children in the last resort, trusting blindly that somehow they will put things right. Those who have known one good doctor respect the

doctor's attitude to life, and I came to Dr. Montessori predisposed to believe in her by a long period of faith in the unruffled wisdom of my own children's doctor, Dr. Ridley Mounsey, of Camberley, whose views I am conscious of reflecting in much of what I have written here.

Much of what I have written has not come direct from Dr. Montessori, although she has read it before publication. I have had to make up for lacunæ in my knowledge by calling in my own philosophy of life to eke out my interpretation. I have seen an extraordinary parallel, the existence of which has been confirmed for me by Dr. Crichton Miller and others, between the work of Dr. Montessori and the teaching of Bergson. After I had written this book Dr. Montessori met Bergson, and marveled greatly at his understanding of her aims. Almost all that Jung and the psycho-analysts are finding out, moreover, at one end is corroborated by Montessori at the other. These three living forces appear to me to be weaving a great strand of wisdom which may help us away from that slough of Germanism which we fought the war to abolish, out into a more rational and more Christian way of life.

I wish to thank the proprietors of *The Times* for permission given me to reprint that portion of this book which has already appeared in *The*

Times Educational Supplement, and the proprietors of *The Anglo-Italian Review* for allowing me to quote from an article written by me for them. I should like also to thank Dr. Montessori's organizer, Mr. C. A. Bang, for facilities given me to attend lectures.

Those of my friends whose words I have quoted from memory will forgive me if I have misrepresented their views in a book "strung together" somewhat hastily in the intervals of other and more urgent work.

SHEILA RADICE.

Camberley, Surrey.

CONTENTS

THE NEW CHILDREN

CHAPTER I

DR. MONTESSORI IN ENGLAND

If one looks at any collection of the works of "Great Educators," or any history of education, the titles and headings are all the names of men. Italy has had the honor of producing the first great woman to enter this field. Of all those who went before, every one was a bookman, and to some extent a theorist. In Montessori, for the first time in history, an educator has come into the scholastic world from another sphere. For she is a doctor, not of letters, but of medicine, a brain specialist and a child specialist. By tradition neither of family nor of profession has she any connection with the educational world.

When Maria Montessori, as a little girl of ten or eleven, first felt within herself the call to go out and do something in the world, there was in Italy only one profession for which women could prepare themselves. But this girl looked about her at the schoolmistresses that she knew, and

decided definitely that she would not be a schoolmistress. That was a futile, antipathetic, thankless task. She decided as a child of eleven that she must study engineering. It did not matter that there were no facilities in the whole of Italy for a woman to study engineering, or even mathematics: since she wished to take the diploma of "ingegnere," the facilities must be made. So to the boys' public school this little girl must go. One of her parents accompanied her to school every morning, and the other back from school every night. In class she sat alone, separated from the rest of the children; during the dinner hour and the recreation hour she was shut away in a room by herself, with a guard set upon the door. She did not mind, for her soul was set upon the mastery of mathematics, and the boys' school was the means to her end.

Later, as every one knows, she decided to be, not an engineer, but a doctor of medicine, and the same story of isolation was repeated in the medical schools. No woman had ever studied medicine in Italy, and she was, in fact, the first woman to take an Italian medical degree. Just as she had sat alone to study mathematics, so now she had to work alone for hours at night in the anatomical laboratory, a place of horror to many students even by day. The story of her subsequent work at the University of Rome and

at the orthophrenic clinic is in her book, *The Montessori Method,* and need not be repeated here.

After she had taken her medical degree, she felt the need of studying the problems of human existence from a standpoint other than the medical, and she went back to the University and took a four-years' course in philosophy. In those days, she has told me, she saw the "two camps" very plainly—the professors of the humanities sneering at science; and the scientists laughing at the philosophers, and she thought to herself that some day the teacher would come who would unite these two opposed interpretations of life in one. To what extent she is herself that teacher I have tried here to set forth.

The first lecture given by Dr. Montessori in this country was delivered before a crowded audience of teachers at St. Bride Foundation, Fleet street, on the first of September, 1919. The Rev. Cecil Grant, who was in the chair, said that this was the beginning of a new era for the children of England, and in a few words asked the blessing of God on the work. Dr. Montessori's friend, Miss Adelia McAlpin Pyle, a young American, who has devoted her life to Dr. Montessori's cause and has become to her as a daughter, had been delayed in Spain by passport formalities, and the first few lectures of the

training course were interpreted, sentence for sentence, by Mrs. Lily Hutchinson, whom Dr. Montessori has described as "the pioneer of my English students: she who, sent by the London County Council to Rome to report on the work of the Case dei Bambini, brought back with her that spirit of well-wishing that enabled the work to be started in the London County Council Schools."

Mrs. Hutchinson has spoken to me of those early days, when the Montessori Method was looked on, vaguely, as some "crank" system sprung up in foreign parts; and has told me, as innumerable other people have done, how they went with a more or less open mind, more or less prepared to condemn, and came away unable to do anything but bless. Mr. Bertram Hawker was on his way to Australia, and, stopping in Rome on the way, was taken to see the Case dei Bambini by the British Ambassador, Sir Rennell Rodd. He has often told how he missed ship after ship, stayed in Rome month after month, and finally did not go to Australia at all, but came back to England to spread the tidings of what Mr. Cecil Grant has called "the miracle of the Via Giusti."

The story of the rise of the Montessori Method has been told many times. Dr. Montessori has described in her own books how she happened

upon the secrets of the springs of human life: after years of medical practice among children, normal and abnormal, years of university study, years of study of the development of human life from every possible standpoint, from that of the anthropologist, the physiologist, the psychologist, the philosopher. Dr. Wildon Carr told me that he, with many others, had shared the doubt as to whether a method evolved from the study of mental deficiency could be a legitimate method to apply to normal children, but that before Dr. Montessori had got half-way through the remarkable lecture that she gave, with the aid of Dr. Crichton Miller, before the British Psychological Society, he was convinced. In the course of that lecture Dr. Montessori thanked those who had come to listen to this defense or apology that she was about to give for her life's work. Her first psychological studies were studies in psychopathology from the doctor's point of view. All the work of her masters, Itard and Seguin, was directed to bringing the defectives, the "extra-social" beings, into society. The normal baby is also in a sense "extra-social," since he has not yet entered into the organized life of the community, and often appears for a time to have tendencies contrary to that organized life. Many of the methods that help abnormal beings to resemble normal social beings have helped normal

children to enter with greater vigor and fullness into social human life. Many people dislike this idea that proper treatment of normal children should originate in a study of abnormality. But all our physiological knowledge has come to us through pathology, and the laws of hygiene have been learnt in the combating of disease.

As to social training, Dr. Montessori pointed out that though a great deal has been talked about it in the schools, almost nothing practical has hitherto been done. The practical exercises by which the deficients were introduced to civilization, through care for the immediate environment, form the obvious method of inculcating social habits in all children. All these exercises give order to the motility—enchannel the disordered activity of the child. The old idea of the school, on the contrary, was to stop the children's activity.

Dr. Montessori further described the phenomenon of fixation of attention which has guided her in preparing her didactic material and the conditions of her schools. "This fixation," she said, "is never presented by the mentally defective child." The differential diagnosis is that the stimuli only produce temporary interest in the abnormal child, which in the normal child bring about a lengthy fixation. This power of fixation of interest is, we may say, the funda-

mental characteristic of normality. This is the basic phenomenon of the whole system, and it is from this that there come the psychic changes which constitute the education of the child.

Tests have been applied, and there is no fatigue after this fixation of interest. The children show a serenity and satisfaction which is definitely different from the noisy disorder of the children in ordinary schools in the breaks between work. The indication of psychic health is this calm joy, which must be seen to be understood. Dr. Kimmins, Chief Inspector of Schools under the London County Council, who took the chair at that lecture, said that he had made a careful study of the work of the "Montessori children" who had passed on into the upper schools, and had found these children far better prepared than those who had been taught by ordinary methods. As to the discipline obtained by this method, any unbeliever had only to go into a well-conducted Montessori school-room. This was not in any sense the old discipline imposed by authority: it was a discipline of the child for itself. The example of Germany had shown us the value of external discipline in a most tragic light. Very few people understood the full meaning of the Montessori apparatus. The child loves the apparatus and is persistent in applying it. Psycho-analysis was beginning to teach us some

of the great dangers accompanying our efforts at educating children. In the Montessori method these dangers were eliminated.

Dr. Percy Nunn, at the end of the same lecture, stood up and congratulated Dr. Montessori on the masculine logic with which she had stated her case. Were the English nation to know how closely in accord were Dr. Montessori's ideals with our own national traditions it would be quicker to take her methods up. He had never struck so severe and austere a disciplinarian as Dr. Montessori, who regarded the freedom of the individual as a means of obtaining that severest standard of discipline that comes from within. One had only to go into the class-room of one of the L.C.C. schools where the method was being applied to see what astonishing powers of self-control it enabled the children to acquire. Happy, quiet activity ruled in the Montessori schools.

Afterwards Dr. Ballard wrote to me that the meeting had been a great triumph for Dr. Montessori, who had produced an exceedingly favorable impression upon critics—doctors of medicine for the most part, and university professors of psychology and psychopathology—by no means easy to please. The connection between the remedy that Dr. Montessori is providing, and the unhealthy condition of society that the nerve-

specialist is revealing by means of psycho-analysis, was made very clear that night. Dr. Crichton Miller has said to me that it would be worth many men's time to devote themselves to working out that connection, with all that it implies.

Dr. Montessori's colleague, Signorina Anna Maccheroni, made the same point in a letter to *The Times Educational Supplement* of November 20:

"The science of psychology," she said, "has only now found its proper orientation and its true basis, with the discovery of the laws of liberty—the distinction between freedom and disorder, freedom and abandonment, freedom and indetermination. We are dealing with a science in its birth. It cannot therefore be a monopoly of the education psychologists of yesterday, unacquainted with the new conditions and facts, and hampered by experience of the old artificial school conditions with the artificial phenomena that they produced. It will be rather a body of research workers, university students, unfettered by present educational conditions and the limitations of a definite calling, who will carry on this science, cultivate it, possess it, and make of it a portion of the general culture of their time. The mind of the student is required for this work, free from professional bias and capable on that account of envisaging the new.

"Much is said to-day about the Montessori

method. It is looked on as something that has been done for little children; an apparatus of toys to distract the children and keep them quiet. Dr. Montessori's books do not, however, give this idea but rather present an outline, clear and precise, of the new direction which psychology must follow if it is to bear fruit. This new view of psychology cannot be confined forever to courses of lectures given to intending teachers—to audiences of persons already bound by professional bonds. In these courses the element has always been lacking of students who can follow the subject freely. Just as children have suffered for lack of a proper environment, so the proper environment of this new science is still lacking. None of the courses of lectures hitherto given by Dr. Montessori have gone further than to give a certain familiarity with her principles; to lighten in some degree the lot of the children suffering under the old *régime;* to create an enthusiasm in a certain number of teachers, and a desire in parents for more Montessori schools and for the extension of the method to the older children. All this flowering and fecundity has not, however, helped the new science, nor its protagonist, who remains practically alone—alone to give, alone to produce. In some of the American universities, where independent study and experimentation with this subject has been set on foot, it is called "the Montessorian pedagogy," but this pedagogical psychology is, in fact, a new and most vital branch of human culture. Its truths cannot be confined to teachers alone."

When Dr. Montessori first left the practice of medicine and went into the infant schools, a kind of parting salvo of maledictions was bestowed on her by her professional colleagues. What did she imagine she was going to achieve by this work of reforming the kindergarten? What a pity that such a brilliant intellect should run to waste! The same attitude towards her work still prevents the world from seeing its significance to-day. This is not merely a new way of amusing children—it is the beginning of a reorganization of the human mind.

CHAPTER II

TWO MONTESSORI SCHOOLS

I HAD the pleasure of watching one morning the demonstration class which was formed by permission of the London County Council in the Crampton Street school to illustrate the principles which Dr. Montessori was expounding in her lectures. The class had only been in existence for three days, and the twelve children, aged from two and a half to five, of which it was composed, were all new to the method and had never seen the didactic material before. The students were lined up two deep all round the room (an ordinary medium-sized classroom), and Signorina Maccheroni, who was directing the work, explained to me that this naturally made the children a little quiet and shy.

When I arrived some of the children were seated at the little tables working with the buttoning frames and with the cylinders. Signorina Maccheroni pointed out to me the dainty grace with which a little unkempt creature of two and a half, in an ill-washed frock, yellow hair stand-

ing oddly on end, and a hiatus (presently remedied) in the rear of her attire, was handling the cylinders, and how if any one rolled over on its side she seized it at once by the button and set it on end.

A tiny fellow, sadly myopic, was receiving initiation, with the fervor of a neophyte, into the art of washing hands, from the pouring out of the water to the final emptying of the slops and wiping of basin and washstand, each with its proper cloth. Other children who came to this exercise later were astonished at the lightness of the pretty little basins and jugs. One little girl would not try to lift the jug at all, arguing, I supposed, mentally, from the heaviness of all the jugs she had known. One of the students was called on to give a washing lesson, and chose the help of a handsome, rather spoilt little boy, who had been amusing himself earlier in the morning, when no one was looking, by dusting the tables and his companions' faces in turns. This little boy helped the student to carry the washstand and all its paraphernalia into the middle of the room and went through the mysteries with the shy politeness of a gentleman coöperating with a lady. At the end he ran back of his own accord and fetched the washstand mat and put it back in its place.

Sweeping and dusting are almost always a

passion, so Signorina Maccheroni tells me, with the children of the poor. Skill may as well be acquired in this way as in any other, and they are allowed to sweep and dust to their heart's content. Confetti are thrown on the floor for them, so that they may see what they are doing. The buttoning and building went on to a constant unobtrusive accompaniment of dustpan and broom. The little squinting boy was in at all the broomings, waiting eagerly, pan and brush in hand, to gather up the heap of confetti and run with it to the teacher—"Teacher! Look!" If all the dustpans were engaged, he was holding the teacher's hand, dancing with impatience from one foot to the other, till his turn should come again.

Signorina Maccheroni spent a long time teaching a child how to handle a rug, and showing it how if unrolled carelessly, or dragged about without rolling up again, tables and chairs, color-matchings and tower-buildings, and all the work of the little school, would be upset. The child afterwards spent a long time investigating the same matter for itself, and was able to find out all about it, since no one interfered with him or hurried him.

Such are some of the "profound problems"—profound to a child-expert like Signorina Maccheroni—in which the children in the Montessori

schools engross themselves, oblivious to the grown-up people who come in to look on.

Another day I was with Dr. Montessori at the L.C.C. elementary school in Hornsey Road, where Mrs. Hutchinson and her assistants have been applying the Montessori method for several years. A students' demonstration of the advanced apparatus was being held in the infants' Montessori room, and the babies were therefore having a morning off. In another room a newly-formed class of a dozen children, from seven to eleven years of age, was at work with the advanced material.

Dr. Montessori, answering the questions of a group of students, called on me to help her. What she wished to tell them was this: that it is not necessary for the teacher, in this method, to devise problems for the children to solve. When they have grasped the possibilities of the apparatus their intelligence should be allowed to run free; the teacher need not stage-manage situations to catch their interests. Afterwards she turned to me and asked, laughingly, if it was not remarkable how men tended to make difficulties for themselves. There is almost a suspicion of the Montessori method on the part of teachers, because the teacher's share in it is too simple, and because there is no preparation of the next day's teaching, and no correction of

what has gone before. As Dr. Montessori said one day at St. Bride's, school work should make and remake itself all day long, like the waves of the sea. A child playing with script letters spells a word wrong, leaving out, perhaps, the "i" in the word "their." Another child passing by, reads out the mistake: "THER! THER!" Both children laugh, and the word is corrected. The letters are mixed up, and the sins of the speller are forgiven, instead of being saved up in an exercise book, marked with a bad mark, and held in remembrance long after the child has been spelling "their" correctly for many weeks. On the other hand, child and teacher must learn the habit of mind commended by the Stoic emperor, of the man who having done a good thing straightway passes on to another, not raising a shout, "like the vine that bears cluster, and having borne its proper fruit seeks no further recompense." There are waste-paper baskets, but no samplers, or show specimens of handwriting or brush-work, in the Montessori schools.

This group of foreign ladies at home in a London County Council building, took my mind back to Rome and that traditional spot between the Cœlian and the Palatine whence Gregory the Great, having seen two English slave-children in the market-place, impulsively packed off a Saint to see what could be done for these little creat-

ures, obviously so ill-used. The country which produced Donatello, and Filippino Lippi, and Gherardo della Notte and the Della Robbia, is giving forth in this century a new and saving philosophy, based on the understanding of the child. Children have never been segregated in Italy. Boarding schools are the exception. The children—less to their own good, no doubt, than to that of the grown-ups—are all over the place. The temperamentally neuter, who cannot stand the racket, retreat into official celibacy, and do not propagate their kind. Even in the churches *putti* lurk in every corner, pervade the heavenly apotheoses, and surreptitiously support the throne of God. The psychology of the unconscious has an explanation of these phenomena, but I think they show simply that the Italian interpretation of life never gets very far away from fresh young life itself.

The conditions of the average English elementary school have no parallel in Italy. The prevailing Italian system may be rigid, and many schools backward, but the model primary school in Italy is immeasurably in advance of anything here. The Municipality of Naples is making a clean sweep of the old system and re-establishing its schools on Montessori lines, but the reform will not need to be one-tenth so drastic as a reform of the same kind would have to be in

England. The children, for instance, do not come dirty to school, or sit in school with wet clothes and muddy boots. There are baths in the elementary schools, and the children use them. "Practical subjects" are absorbed by Italians with their mother's milk, and the needle or pencil drill, by word of command, that often passes with us for the teaching of sewing or drawing, could not survive. The Italian ideal of mobility obviates that inertia of mind and body to which a vast proportion of our school children succumb. There is some life, inevitably, both in the teaching and in the learning. The same intelligent vigor that one may see in the Montessori children on the "films" actuates the laboring classes of Italy, and can be seen any day in the movements of a Bersagliere battalion on parade. The fact that idealism has not become divorced from application is driving Italy ahead once more to-day as in the days of Imperial Rome.

Dr. Montessori politely says nothing of what she sees in England, but what I have here outlined bears on the suggestion, which is, I am told, being impressed upon some teachers by their associations, that the Montessori system grew up as a reform of some primitive antiquated educational system still surviving "in foreign parts."

The material for the older children, as described in *The Advanced Montessori Method,*

has scarcely been obtainable during the war, and is still very hard to get. There is much more of this advanced material than of the beginning material, and it is finer and more complicated, corresponding to the child's advanced needs. It calls for more skillful handling in use and more care in putting away, and in this class was certainly getting it. The children knew what to do with everything, just as the little ones, who do not attend to verbal explanation, know what to do with colors, cylinders, and cubes. One boy of eight was making geometrical drawings with the aid of a metal disc and segments, verifying each step with foot-rule and compass. In order to fetch each piece of material and put away the last he made a journey to a drawer on the far side of the room, jumping and dancing as he went.

A psycho-analyst, visiting this class, would find word-association of an untrammeled type going on. The geometrical boy, after filling his drawing-book, packed everything neatly away, and got out a collection of nouns and adjectives. Several other children came to help him, and there was some discussion as to whether you could combine "doctor" and "box." Could you, for instance, say "doctor box"? The teacher's verdict was that without modification you could not, and "doctor" was then combined

with a selection of adjectives, including "good," "fat," "grumbling." Some of these were afterwards taken away and paired with other nouns, but I did not see what finally remained. The conjunction of "pretty" with "snake" sent a boy flying across the room to fetch the teacher for a lesson on reptiles.

Two boys seated at one table with bead frames before them were engaged in an animated conversation, with gesticulation and grins. I went close to them, but they did not take any notice of me. One of them was saying to the other that he bet he could not add two million five hundred thousand and four to eight million six thousand and forty-seven. Before he had finished speaking the other boy had done the operation with the aid of the abacus without turning a hair. Then they both wrote down the result and continued the discussion. A girl was squaring numbers with colored beads and writing down her discoveries, and several were sitting about engaged in "silent reading." The teacher was here and there incessantly in her capacity of referee. Dr. Montessori and Signorina Maccheroni were standing in the middle of the room for some time, laughing heartily over an amusing discussion which they afterwards repeated to me with more amusing additions, but the children

were not at all interested or distracted. This appeared to me a sufficient comment on the ritualistic, semi-religious interpretation of the method that one sometimes sees.

Since the advanced material has been lacking, "Montessori children" have in most schools had to pass on into the ordinary classes when they have grown out of the early material. Some of the children in Mrs. Hutchinson's experimental class have gone on without a break, but others have had a diversion of several years to an ordinary school.

The work in the Hornsey Road classes is good, but no class at present existing in this country can, for the reasons I have given above, be considered as typical. Dr. Montessori hopes that many Montessori schools of one kind and another will continue to grow up all over the country, and do their best under existing conditions. But teachers will do harm if they let such schools be considered as exemplary. Dr. Montessori does not think that educators, coming to look at them, need be reminded of a certain well-known scientific error about a "missing link." Scientific monographs were written about this little creature, and learned controversy waxed hot over its remains. Then a live specimen was put into a tank, under favorable con-

ditions, and not only throve, but, disastrously for the theorists, began to grow. The new animal was a larva. When it grew up it became something quite different, and all the monographs had to be put into the fire.

CHAPTER III

THE MONTESSORI APPARATUS

Speaking at a meeting of the Montessori Society at University College, the late Dr. Dowson, who for two years gave such unflagging support to the Montessori Society, expressed his immense admiration for "that wonderful Montessori apparatus, which is such a bugbear to so many teachers before they are able to understand it." When I suggested to Dr. Montessori that she might give me an answer to the many questions that have been put to me about the material, she only laughed and told me this: that one might also conceive a system of violin instruction in which it was not necessary for the pupil to handle the instrument. Does she insist on the use of her standardized apparatus? *"Macchè! Insistere!"* She has said again and again that if she were Minister of Education in any country she would never enforce the use of even the most perfect system until there was a demand for it. If teachers want to get the same results that she has had, they will do as she has

done; if they do not want to, they will not. One thing she objects to, and that is that teachers should make variations on her method and ascribe the results to her.

Many of the people who have difficulty in accepting the Montessori material are professors of education who have considered education in its objective, "mass," aspects, to the forgetting of their own nursery days. They forget the cry of the children, "I wish I had something to do!" They forget the child's small radius and the child's poverty, and that it literally cannot, even if it knew how to, supplement its needs. Even when the means of action are wrung from the grown-up, the story may be dull; the pencil may be an HH and insufficiently sharpened; the scissors blunt; the writing-paper thin, with nothing to put under it; the Chinese white in the tube in the paint-box dried to a stick, and the best colors all used up. When the scullery cat is going to have kittens cook finds a basket for it and a little hay, and a warm, quiet, dark place under the stairs. But the new faculties that are incessantly being born to every child in every family have in ninety-nine cases out of a hundred to take their chance of survival or starvation in a careless world. In the Montessori schools all that has been changed. The teachers have ceased to prance before their ill-fed battalions and have

gone down to the base where they devote themselves to keeping the lines of communication clear and pushing up the advancing army's equipment, munitions, and supplies.

Mrs. Hutchinson, in a lecture to the Montessori students at St. Bride's, described several "explosions into writing" that she had "had the good fortune to witness." In the earlier of these the English children were driven back on themselves and discouraged by the lack of properly differentiated material. A child, who had not written before, suddenly ran to the blackboard one day and wrote *wun, tu, thri.* The teacher took the chalk and wrote "one." The child was disappointed, and his interest in writing immediately flagged. The moment for the "burst into writing" had come, and was lost. But when the English material was perfected, giving "phonograms" for the exceptional spellings, the impulses worked themselves out normally, as in Italy, though not so fast. Dr. Montessori asked her students the other day at St. Bride's what would become of a sudden great artistic inspiration if the artist had to prepare all his material and learn all his technique before he could carry the inspiration out. By means of the didactic material the mechanism of expression is prepared, ready for that moment when the child wants to express. When the moment comes it goes ahead.

The discipline of the school is founded on the material and on the interest which the child takes in it. When the attention begins to fix itself, new phases of character appear, and it is this that makes free work possible. The children who before would have disturbed the others now "stick to their job." All those phenomena that we are accustomed to call silliness and naughtiness disappear. The child pulls itself together and begins to organize itself. If teachers expect to bring about this same self-organization on the part of the child by means of oral lessons and set tasks, they will not succeed. There are only two alternatives: either the provision of sufficient concrete interests for the child, which will bring about self-discipline through attention, or else a formal imposed discipline by word of command. For nobody wants a chaotic school in which nothing is being done, and the abstractions which might suffice to keep grown-up people happy and occupied do not grip young children at all.

I said to Dr. Montessori that I had never seen a grown-up person pass by the "solid insets" without taking all the little graded cylinders and dropping them into their respective holes. "Yes, I know," she said, "you will do it once, out of an instinctive sense of putting things in their places, but it will not fill your existence from

horizon to zenith as it does that of the baby." A part of the training course consists in the handling by the students of the "didactic apparatus," so that they may learn to approximate their standpoint to that of the child.

"Do not imagine," says Dr. Montessori, "that the children will be content to pass it over, as you would, with a perfunctory glance. They verify everything, counting all the beads of the arithmetical material one by one. Something of our hitherto lacking sense of the child's attitude may dawn on us when we see it spending weeks, day by day, over an operation which we were used to dismiss, by the old method, in a quarter of an hour. By degrees we may begin to realize what an immense work is entailed in the maturing of the powers of calculation. We should not want to count the 'thousand chain,' but the children will be possessed for weeks with the craze of counting it. They will leave off today at 347 and start again to-morrow—'348, 349.'"

Miss Newman, who studied in Rome and has had much experience since, has answered the question for me about home-made material. She says that, in her experience, if the material is not "up to standard" the children are apt to be put off by it because it makes the accompanying problems a little too complicated or obscure. The development of the material and its psycho-

logical bases were explained by Dr. Montessori in a lecture at St. Bride's.

"We have first of all to realize," she said, "that the object which attracts the child is not the object which attracts the older person. Things are difficult for us which are easy for the child. We must not think that the material of education will always consist of pieces of wood. As the mind grows we need to multiply the forms infinitely, till little by little the stimuli take on the shape of the ordinary means of human culture. People seem to be afraid that the child will spend its whole life over the early material. But how can we interest him if not on the basis of what he has already acquired?

"The material has formed itself, not arbitrarily, but according to the natural reactions of the child. The child's reactions, at each stage, have indicated what new material was required. I have "scrapped" incalculable quantities of material which eliminated itself as not corresponding to the child's needs. How did I know what to retain? The psychology of the child taught me. *La psicologia è il padrone.*

"If this delicate instrument, the didactic material, is lacking, the indicative reactions will not occur. If the children had not these colors to their hand, we could not learn about their color-sense; if they had not the things that lead up to writing and reading, we could not know at what age it is normal to read and write. If he had not this simple, accessible, arithmetical

material, we should never have suspected the child of eight of being so passionate an arithmetician. If, in short, we did not give the children the means for orderly development, that orderly development would not take place, but a haphazard growth by fits and starts.

"It is difficult to speak on this subject without over-simplifying it, for it is as complex as life itself. The teacher must not imagine that with each piece of apparatus she can press a button and open a compartment in the child's mind. All the material, and all the train of psychological development which the use of each piece of material involves, are connected and interconnected. The differentiation of dimensions may be the first thing the baby reaches out after; in working out his impulse on these he comes to the beginning of arithmetical functions, for the exercise of which the material, unknown to him, is already waiting. From the simple dimensional material he will pass on in another direction to the geometrical material which, sufficient in itself, yet prepares the faculties for writing and drawing. The drawing is at the same time being heralded by the early discrimination of color. When the writing comes about, so easily and naturally, it sums up in itself all the hand-exercises that the child has done with the rough and smooth materials, the dimensions, and the weights. The writing eventually branches into reading and dramatic interpretation, but dramatic art has also been prepared, by the graduated ear-training that began long ago with the

baby's rattling of the sound-boxes. Each impulse of the child is translated into action by means of the material, and, working itself off in repeated spontaneous exercises, trains aptitudes which will combine with other aptitudes to form new activities later on, till finally we come to the highest and most complex human activities—literature, art, craft, science, music, dancing, drama. It is all a web of phenomena—*un intreccio di cose.*"

Dr. Montessori is often asked if this material is all-sufficient for the needs of the growing child. "No," she says, "it is not sufficient. I have given by means of it those things that were most difficult to establish. Many more things can enter into the scope of the child, and many more things should and must enter." Every activity of man has an infantile stage, and if all the roots of all our culture went back into babyhood we and it would be far more perfect. We see that this is so in the case of foreign languages, but it is equally true, though we may not see it, of everything else.

Many failures to interest the children come from presenting the material at the wrong age. It is just as difficult for the mind to hark back to an earlier stage as to strain forward to one that is too advanced. It is one of the basic principles of the Montessorian psychology that there

is to everything a season, and a time to every purpose under heaven. If the child misses the psychological moment for doing a thing, he will never again be so interested in that particular exercise, never sound its heights and depths, never work himself up to the perfection in it that he might have attained.

Some of the older teachers, set and formed in the Froebelian idealistic mold, cannot see that there is in this material any "scope for creative effort." They are thinking of the so-called "free work" of the kindergarten, which is for the most part imitative. Scientists, who by a lifetime's effort sometimes succeed in adding one small stone to the sum of an edifice, do not talk so loosely as do other people about original work. As for "giving rein to the imagination," all this sure mastery of material is destined to that and to nothing else. It must not be thought, however, that the early work is merely preparatory. The baby is truly creating when it forms new combinations of the material. In providing it with the potentialities of combination we are not providing it with the combinations themselves. Moreover, it is only to us, not to the discovering, exploring child, that these combinations appear predetermined. The angels may look upon our most original activities in the same way that we do upon the child's. "Creative ac-

tivity," says Dr. Montessori, "takes place at that point where consciousness is most luminous at the moment."

Above all, teachers must cure themselves of looking down patronizingly on the child's doings. Because it likes things concrete, it is not therefore materialistic. It creates with simple things where we create with syntheses. In fact, Dr. Montessori constantly puzzles her students by referring to the child's achievements with solid objects as evidence of spiritual development, which they undoubtedly are. When we understand the value of the child's work, as Dr. Montessori said at the reception given for her at St. George's, Harpenden, we shall be united with the children—*affratellati con i bambini come esseri uguali nella creazione*—coöperating harmoniously with the coming generation for the progress of all.

CHAPTER IV

DR. MONTESSORI HERSELF

THERE is a proverb in Dr. Montessori's country to the effect that all the world cannot be put into one basket, and it has been too frequently assumed that she is endeavoring, in establishing her method, to reduce the whole macrocosm to a microcosm containing nothing but the child and the "didactic apparatus." No one can continue to nurse such an absurdity who meets this clever, sensible woman-doctor and woman of the world face to face, who has listened to her terse summings-up and trenchant criticisms, and noted her kindly, sympathetic, assured manner and the occasional deprecatingly humorous glance of her dark, far-seeing eyes. What she is aiming at, in standardizing school environment, is to ensure that education shall be, to some degree at least, universally effective; that the development of the child shall be really, and not only apparently, shielded and assisted by the school, and no longer at the mercy of local conditions and of individual teachers. How much she relies on the influences

of daily life and on the parent's and teacher's common sense can be read in any of her published works, and seen by assisting at any of her school inspections. Nothing annoys her more, though at the same time it sometimes makes her laugh, than the unintelligent swallowing of doctrine. Mothers come to her asking in all good faith whether they are to allow their children liberty to the extent of putting their feet on the table at meals. *"Per carità!* Get up at once!" she has exclaimed before now to a conscientious teacher found disheveled on the ground with a class of little Bolshevists sitting on top of her.

Signorina Maccheroni has told me something of Dr. Montessori's life and of her people. Of a good Italian family, her father and mother, "beautiful old people" (*cortesi, signorili*), were with her constantly, devoted to her and she to them. Their interest in her work was intense. "The Casa dei Bambini is the hub of the work," Dr. Montessori's mother constantly reminded her. "Whatever it develops into, always let it revolve on those first conditions of the tenement-schools." Dr. Montessori's mother lived to see the first International Montessori Course in Rome, a pilgrimage and concourse from all parts of the earth, with all the accompaniments of a pilgrimage—faith, fervor. Strangers gathered about Dr. Montessori, hoping for some lesson

from her, scarcely as yet knowing what. Her house was at the service of multitudes—a *"va e vieni"* all day long. A lady from America once waited seven hours to see her, forgotten by the maidservant and waiting on patiently, uncomplainingly, while the hours went on and the room grew dark. In those days many of the elementary school teachers of Italy went to the authorities and said that they could not go on teaching on the old lines.

I have also been told by more than one person of the earlier days, when she was practicing as a doctor: of her extreme thoroughness, which must eventually in any case have made it impossible to continue practicing. If a mortally sick child needed to be given a bath and put in a clean bed, Dr. Montessori knew that it was no use prescribing such things to a poor mother in a Roman slum, but would send to her own house for the wherewithal and carry out the whole process herself, trebling the parts of physician, nurse, and benefactor. This she did again and again. She is still sending "comforts" to old patients to whom she was once impelled to prescribe them. If a patient was in need of work for his soul's health, and there was no obvious work that he could do, she would invent a job for him at her own expense. To her, to see a wrong has always been to supply the remedy.

As with the children in her schools, so with herself, impression and action have always had to combine in a single arc.

One can see from these indications how strong must be her aversion to that old science of education which Signorina Maccheroni has called the *"pedagogia delle chiacchere,"* which philosophized much and did very little. Herbart and others are to Dr. Montessori, "all talk"; Pestalozzi and Froebel are also mostly theory, though of a pleasanter kind. All educators have always said that the children must be good, must be industrious. But if the children preferred not to be industrious, but to throw paper pellets at one another or carve their names upon their desks, the teachers had no means but punishment to make the children sit still and listen. Dr. Montessori took up the position that it was best, before leading the horse to the water, to find out what it was that the horse would be willing to drink. For with her sound practical sense she could not bear a school where every one was getting on every one else's nerves and wasting every one else's time. *"Le povere maestre,"* she has said to me, *"che si fanno tisiche per far i bambini gobbi!"* Her own life one continuous series of achievements, she grieved with all her heart for the children who had to sit still and be bored.

Professor Foster Watson has spoken to me of

this forced sitting of the children in rows as of a sheer senseless "cruelty to animals." Dr. Montessori is so sorry for the children, so disgusted with our misunderstanding of them, that she goes about the world, spending time on propaganda that she would gladly be giving to research. Herself a worker, she has found in the children all that same joy in work that she has herself. But she knows also that for good work certain conditions are necessary—sufficient material; free choice; freedom from interruption; time for that preliminary looking about that is a part of every cycle of action; time for that quiet satisfaction that follows work well done; time for the gauging of values and the preservation of balance. Froebel, with all his love for children, never made sufficient provision for this.

Dr. Montessori lives intuitively. I have heard her say that, just as the children follow, unconsciously, the path that will lead them to speaking, to writing, to reading, so she herself acts, not knowing whither her actions tend. Bergson's doctrine of creative evolution is to her the simple, obvious law of life. When she has passed through a phase of her existence, I am told that she puts it behind her finally, and passes on to the next. In this she is unlike a lady, a disciple of Froebel, of whom Dr. Ballard told me, who was unable to accept Dr. Montessori's teaching

because "it would mean giving up everything that she had said for the last thirty years." Dr. Ballard said to the lady in return, as he has said to many others, that he did not think that that would matter at all.

CHAPTER V

DR. MONTESSORI AS A LECTURER

MANY foreign speakers complain—though Dr. Montessori, in her extreme reticence, shyness, and modesty, does not—of our apparent ruminative irresponsiveness. When we go forth to sit under a speaker we seem to wish to have something to take away with us, something solidly doctrinal that we can quarrel with and get our teeth into. The conditions for a popular lecture, always a thing of ephemeral value, are greatly lacking in a British audience—namely, the response of personality to personality, the power of picking up from momentary sympathetic contact with the teacher some clue to the quality of what is being taught. We are not very easily fired by mob oratory, and that is probably a good thing. But on the other hand, when great people do us the kindness to come and speak to us, we are apt to observe a critical and grudging reticence till the fleeting opportunity is past. We fear to let ourselves go, even for the moment, and so we do not get

all the instructive and suggestive things said to us that we probably should if we were more eager to receive them. For it takes lecturer and audience to make a lecture, as it takes two to make a quarrel.

Dr. Montessori's first public meeting in England, at the Central Hall, Westminster, was, by all ordinary standards, a great success. A Dutch gentleman rose at the end of it and begged Dr. Montessori to remember what a short distance it was from London to Amsterdam, and that there were thousands of fathers and mothers and teachers in Holland who had studied her work and had wished for years to meet her. The same week there was a meeting at University College, with an array of "distinguished guests" anxious to see Dr. Montessori and through her own words to catch some light upon the work. This was obviously a more propitious environment. But Dr. Montessori is pledged to many more public utterances, and the thought of them hangs over her like a cloud. "Only think for a minute," she said to me, "of the state of mind of a minister of the Christian religion who had to explain *everything* in half an hour to a congregation who knew nothing about it—theology, the Christian doctrine, the evolution of religion, the rise of Christianity, the history of the Church. He would say, 'No, I will take one point and ex-

plain that, and the rest must be inferred.' But if I do the same in explaining this system of child-psychology—which is new and implies a totally new orientation of the adult mind—people who come to the one lecture expecting to be enlightened will take the one point I have dealt with for the whole of what I have to say. 'Good gracious,' they will say, 'is *that* all there is in the Montessori method?' " What she said made me laugh, because that, of course, is exactly what they do.

The report of the meeting in *The Times* occasioned, I am told, a great deal of amusement. It was considered indicative of something very ridiculous in the Montessori method that the fastening and unfastening of one row of buttons a hundred times over should be held to constitute useful work, worthy of ranking with other serious activities in the school. It would be a waste of time for you or me to spend the morning buttoning. So, by analogy, it must be a waste of time for the three-year-old child. How the child is to acquire the speed and skill that in later life will save it from slatternliness and unpunctuality, except by devotion of itself at some time to the mastery of detail, the critics do not suggest. Nor do they suggest what we should give the school infant to do instead of this interminable buttoning and unbuttoning

which keeps him happy and good. His horizon is not our horizon, and at that stage of his development rapid buttoning is his passion, his ambition, the ideal that draws him on to something farther, as Merlin was lured by the Gleam. If we are not predisposed to see that, it is plainly impossible for Dr. Montessori, in half an hour, to enable us to do so.

Many teachers, lovers, and students of childhood thought that Dr. Montessori seemed to give them no credit for what they had done. I think that she was speaking rather to the general public than to teachers. The general public still believes in that kind, steady, resistless Prussianism which keeps many well-ordered nurseries "up to the mark." Medical psychology, quite independently of Dr. Montessori, is bringing ugly and unsuspected things that happen in babyhood to light. The psycho-analysts, investigating dispassionately and impartially, have found that the living spirit embodied in little children almost never gets a sporting chance. Exceptionally strong and original personalities pull through by a "survival of the fittest." But the majority of human lives appear a mere blind working out of infantile complexes, a helpless following of orientations that the all-powerful, dominating adults of our babyhood, sometimes in love and sometimes in indifference, create.

Psycho-analysis wrings its hands over the things that it discovers, but has not yet attacked the cause. "Our knowledge of the finer mental processes of the child," said Dr. Jung, speaking in America in 1909, "is so meager that we are not yet in a position to say where the trouble chiefly lies."

There are still some who think back to the usual upbringing of a former generation—"a word and a blow"—and think it was good, in that it enabled men to endure the hardness of existence. Dr. Montessori's answer on that point is classic by now—that in order to combat disease we do not inoculate the baby's body with all diseases from the beginning, but rather nurse it to that health and strength and perfection that create resistance. The hardness of human existence is greatly due to the prevailing selfish callousness of the existing generation. If education aims at producing insensibility, who shall deliver us from the body of this death? "In order eventually to die like a hero," Dr. Montessori said to me the other day, "it is not really necessary, is it, to spend one's whole life practicing death. What do you think?" Another standpoint is that of the person who wishes every one else to drink of the same cup that he has been made to drink of. A fifteen-year-old friend of mine, after eight years of reluctant elementary

schooling, says that "she has had to go through it and she doesn't see why other children shouldn't do the same." But the chief hindrance of all is national and professional self-complacency and individual self-satisfaction. If we have gone through the mill and are what we are, there is nothing much wrong with it.

A lady of the great educational world, who knows what Dr. Montessori has at heart and knows also that it is what all have at heart who love children, went to the Central Hall meeting and afterwards told me what she thought. The fact is, she said, that Dr. Montessori is too good ever to "go down" as a popular lecturer. She is too modest and reticent, and has too much respect for the sanctity of her subject. She wants to bring the holiness and intimacy of motherhood into school life, but you cannot demonstrate holiness in a public lecture hall with chalk upon a blackboard. She sees humanity with its eyes shut to the light, but at the same time she cannot use those clap-trap methods that would make it jump and open them. The understanding of what Dr. Montessori has to say involves a return to the same simplicity and humility that Christ aimed at when "He took a little child and set him in the midst of them." But humanity does not know how far away it is from that ideal. How to make it see? Dr. Mon-

tessori does not know. It is a work of the conscience for itself, she says, an *"opera di virtù."* Her object in lecturing is to sow seed here and there, but there is no key to her method except the application of it. *"La cosa andrà avanti da se."* In so far as it is founded on truth it must prevail.

My father, who went with me once to see Dr. Montessori, wrote to me afterwards to tell her that she must ignore all the opposition. "It is the price of genius—Christ paid it in cash—but already He has received some two thousand years of dividends in every imaginable currency. . . . Let her take heart and march bravely along the *via crucis.*"

CHAPTER VI

THE ETHICAL BASIS

"WORDS, words, words!" So sighs Dr. Montessori, laying down one or other of the innumerable existing commentaries and dissertations on the implications and tendencies of her method.

"Let us leave aside, for the moment, these questions of historical comparison and of philosophical abstraction," she and her disciples will say, again and again, in the course of discussion, "and let us get back to the living child." For the great point that Dr. Montessori wishes to enforce is that life is ever new, and that in dealing with developing life we must see it as it is, with the naked eye, and not through the distorting lenses of theory and preconception. She will watch little children's doings interminably and listen interminably to their conversation. She will listen to mothers' and fathers' and nurses' and teachers' accounts of children's sayings and doings. But, because she is an expert, she does not want to hear generalizations about education. The trains of to-day do not run by

the time-tables of last year, and we cannot deal with the child's difficulties in the light of what former generations have thought about them, because it is only recently that any one has really begun to think about the child at all.

Doctors of medicine are often the truest respecters of children, and Dr. Montessori, it cannot too often be emphasized to those who distrust her point of view, is both. She has cared for children all her life, to the point of giving all her youth to them. Among the most patient of all patients, she has learnt, after many years, to know the child as it really is—to appreciate its helplessness and inarticulateness in the face of trouble, its lack of criteria by which to judge the ills that are inflicted on it whether by man or destiny, and its almost fatal habit of accepting all that happens as its lot. All teachers, she has told me, ought to gain their first experience with babies or with abnormal children, because of the normal child's fatal adaptability.

The children had been taken out of the mill of industry, in which they were being injured, only to be put into the scholastic mill, which Dr. Montessori, with a trained physician's eye and a great deal of Latin common sense, saw to be injuring them, both mentally and physically, almost as much. Claparède suggested, a few years ago, that the physicians' rule, *"Primum*

non nocere," could not apply to education because education was bound to injure until a serum could be discovered against fatigue. Somebody, obviously, had to stand up and speak out for the children, and Dr. Montessori has done it. Because the grown-ups were working so hard and doing it all so much "for the children's best" it was hard for a kindly, sympathetic physician of bodies and souls, with a feeling both for teachers and taught, to stand up and tell the teachers that they were wasting their time. Therefore she has given her life to devising a means by which they may gain their ends without harming the children physically or mentally, and it has proved far more effective than she ever, at the beginning, guessed.

Dr. Montessori is no sophist. The end of her method is the same end that the teachers were pursuing—the inculcation of human knowledge and of the means of self-expression, with the ideal of a self-respecting and god-fearing life. "To pass from social act to social act, remembering God," was an intelligible creed to Marcus Aurelius, needing no comment as to what constituted either duty or God. There is never really any doubt about conduct in the straightforward world of kings and of children. Children in a Montessori school are told: "This is blue: this

is red"; they are also told, as occasion crops up, "This is right; this is wrong."

Dr. Montessori may not have emphasized this point sufficiently for an Anglo-Saxon public. To most members of a Latin civilization an order of things would be unthinkable in which the ordinary canons of human behavior were not a matter of course. Certainly few Latin mothers would send their children to a school in which they were not going to be taught to read, and write, and cipher, and "behave properly." In her early writings and lectures she did not emphasize the point at all, because it had never struck her for a moment that it would be necessary. It seems curious to her even now to have to dot her *i*'s and cross her *t*'s upon this matter to the extent that she has to do in any country outside of France and Spain and Italy. If she were less balanced in herself, and had less faith in the workings of the Almighty, it would grieve her to see the lengths to which enthusiasts have gone, snatching at her ideas and neglecting the lifelong, step-by-step investigation and experimentation on which they are founded. Never for a moment has she envisaged the taking of the growing child out of its century, or the adapting of it to any state of civilization except that to which it is born. Nor does she narrow its environment, except temporarily with the object

of eventually broadening it. She wishes man to have everything that the world contains, both spiritual and material, and the best of all. In her school at Barcelona she has specialists from outside to teach their own subjects, playing fields and an instructor to organize the games, and the best singing masters and dancing masters and drawing masters the town can produce. She does not dwell on these points in her lectures because she does not conceive of a system of education without them. She regulates the manner in which and the moment at which they are taught, in order that the child may really, and not only apparently, have the benefit of them.

In the same way the child is introduced to all the golden rules of conduct one by one. It is given time and quiet in which to learn them, only that it may practice them more perfectly. Few who split hairs on the ethical tendencies of her method realize how simply she has founded it on the familiar ideals of Latin culture, on the Lord's Prayer and the Ten Commandments. A little patience is asked of the grown-ups in the beginning in order that child and grown-up may coöperate in the end.

CHAPTER VII

THE PSYCHOLOGICAL BASIS

WHEN it was first suggested that Dr. Montessori should allow certain criticisms of her method to be answered in the Press, the reply was that she did not usually care to come into the arena of educational polemics. Educators are already, according to her, far too much given over to talk! Moreover, she is not an educator, in the empiric sense in which that term has hitherto been understood, but rather a scientist who has devoted her time to children. Her contribution to science is an exact investigation of childhood and adolescence. Her educational system has grown up by the way, from the necessity of providing an environment in which the child can be "itself" (and incidentally as unlike the old "school-child" as the public panther in the Zoo cage is unlike the panther in the jungle).

In conversation with Dr. Montessori I put the question to her, which had been put, with others, before me, whether her method tended to bring about an abnormal and possibly harmful pre-

cocity, as evidenced by the early "explosion" into reading and writing of the children in the Montessori schools. What I have written here is a summary of the conversation that followed and includes the gist of what was said on both sides.

"Your correspondent is not a doctor," Dr. Montessori said. "In practice we do not find that this happens, and in experimental science, as you know, we do not work by logic but by experiment. Children," she continued, "as a matter of actual experience are not susceptible to mental intoxication in the way that your correspondent has suggested. If given unsuitable food, a normal child will be sick. If given too much of such interests and amusements as please adults (and this is constantly happening to nearly all the children in the world), the child tends first to become irritable and inattentive, and then to go to sleep. Life has far more power of safeguarding its own development than the average person is apt to believe."

"Is it not possible, then, to injure the child by our treatment of it?" "Yes. Work without interest—forced labor—is extremely exhausting, and so is idleness. Either of these conditions creates a state of boredom, and boredom is physiologically identical with exhaustion. In Italy, where there is no capital punishment, criminals

condemned to solitary confinement without occupation show the physiological signs of extreme fatigue. Although sufficiently fed and kept in what might be thought a state of perfect rest, they become exhausted and emaciated."

The children in the Montessori schools, it must be remembered, do not have stimuli purposefully and arbitrarily applied to them, as is the case under any other method of education, and in the elementary schools in most countries from the age of five years on. We cannot go into any elementary school or kindergarten where the whole force of the school machinery is not being devoted to stimulation of young children. "Look!" "Listen!" "Wake up!" "Bustle up!" Books, pictures, demonstration, instruction, are poured in on the child in an incessant stream for hours upon hours. This is all stimulation. If educators approve of it the inference is that they know very well that the child will not be crammed, be bustled; that the meshes are so large that the child slips through. But if this is the case, the teacher is wasting his time. "The mysterious and magnetic objects," Dr. Montessori said, "with which people accuse me of hypnotizing the children are all in the cupboard, and if a child wants one he has to go and get it for himself." If, on the other hand, the children do not want to work, but only to look

on, or to meditate, or to gaze out of the window, or lie down, or swing on the parallel bars, they are perfectly free to do so. Since they return to work sooner or later, without pressure, the aim of the school is eventually attained. If it is not to be attained, why have any schools? But no one forces the child to work.

At the end of a year of school work in Rome some of the recognized fatigue-tests were applied by a number of outside specialists who asked to be allowed to do so. Dr. Montessori has no very great faith in psychological tests, but she was glad to hear what was already obvious to her, that there was no evidence of fatigue. She deduces from this and much other evidence a fact which she considers to be of incalculable social importance, as indicating the eventual solution of the problems of labor—that work, spontaneously chosen and rightly undertaken, does not tire. Rest, both mental and physical, appears to consist not in inaction but in work *plus* interest. In establishing this principle for children she has, one may notice, helped to put on a scientific basis a rule of thumb which has been successfully applied by "mind-healers" in all ages, and the promulgators of many popular methods of self-education and self-help. It has been established beyond a doubt by medical investigators in this country of the phenomena of industrial

fatigue. Nor does there seem to be ground for thinking that work which does not tire the children at the time can have any deleterious effect upon them in their future lives. Not from such causes do neurotic complexes—the bruises and cicatrices of the mentality—spring.

Rather than overdo the child in the matter of stimulation, Dr. Montessori has aimed at simplifying its environment by analyzing the great mass of stimuli, with which the child in daily life is constantly surrounded, into its component parts. An intelligent child is constantly intellectually stimulated by everything that it sees, and touches, and hears, and tastes, and smells. The day of the little slum child is a kaleidoscopic jumble of stimuli from morning till night. If the simple geometrical figures that are given the baby to play with are not good for it, how shall we frame an environment for the child in which there will be no geometric forms to interest him? The window he looks out of is a rectangle, the plate he eats off is a circle. The father is trying to write, and the child plays about him, meddling with the round inkwell, the rectangular paperweight, and the rectangular writing-pad. Life is a tussle between the baby and its parents for objects for which they both have uses, and which it is impossible for both to use at the same time. The child is starving for shapes and sizes to

handle, and why, Dr. Montessori thinks, should we not provide him with them, instead of driving him to grab them for himself? The didactic cylinder is merely a more convenient form of stimulus than the inkwell. A lady who wrote to us on this point showed some lack of "imagination." "Would not the inkwell," she said (I quote from memory), "be a *better* stimulus, as something that father, mother, teacher uses?" Perhaps Nurse could describe what happens when two-years-old gets the inkwell down from the nursery mantelpiece. For the seven-year-old the inkwell is a legitimate stimulus. But I am afraid practical family politics will make him wait until then.

As to the phenomenon of "early writing," Dr. Montessori says that the study of this question of children's writing is still in a most fragmentary state. So far, indeed, it has scarcely been seriously touched upon by any one but herself. Books remain to be written on the subject and lifetimes of study given to it. So far as she can see, there is an average age at which writing is as inevitable an occurrence (given favorable circumstances) as dentition or walking or speaking. This early writing is, however, scarcely if at all connected with the expression of ideas. Probably all mothers who watch their children's development are aware of this. The child plays

about with written language for months and years before it attempts to express ideas in writing. It ought no more to be checked in doing so than we prevent the tiny baby from making interminable series of vowel and consonant sounds by which it does not mean, or even wish to mean, anything at all. Much later, when the wish for expression comes, the means will be there, ready and perfected. That the writing is done for the fun of writing was proved by a distinguished inspector of the Montessori schools in Rome, who found the children as enthusiastic in writing sheer gibberish when dictated to them as in writing "mamma" or "zucchero" or anything else.

Further, when the child begins to read (about five and a half or six) it does not read "for sense" as the grown-up person does, but for mere pleasure in the legible word. A mistress in a Montessori school in America saw a little boy, at the grammar stage, poring passionately over a tale of ancient Greece and thought she had found a budding classical scholar. The little student looked up at her with a beaming smile: "I have found twenty-six adjectives," he said, "in one page." The parents of the children in the early Montessori schools of the slums of Rome complained to Dr. Montessori of the tiresomeness of the children on the customary Sunday family outings. The children would not come along, but

insisted on stopping everywhere to read. They read aloud the posters on the hoardings and the names on the shops, the municipal exhortations to decorum, and the destinations on the fronts of the trams. The parents were bored because, being themselves for the most part illiterate, such things did not interest them at all. The directress, for reading matter, gave these children anything that occurred to her: lists of towns and lists of rivers, tram tickets or handbills, or a page torn from the price list of a drapery store. Much later the idea would dawn on a child that there was an intelligence behind the printed matter, endeavoring by means of it to convey something to him. Then the directress had to run from place to place: "Signorina! this one says (so-and-so)," "Signorina! this other one says (something else)."

Dr. Montessori dwells on all this because she wants educators to understand that this matter of the development of children's activities has never yet been fully investigated. She does not dogmatize. She recognizes that the whole question as regards children is perpetually open. Life is ever new, and no two children are alike. She has invented her system of education, as I have said above, largely for the sake of securing an atmosphere in which they may "be themselves," so that now we are permitted to discover

something about them. The child, she maintains, has never yet been observed in its own congenial habitat, which habitat must include sufficient sympathy and affection and common sense on the part of its investigators. A formal child psychology on logical principles is not enough. Prof. Foster Watson has said of the experimental psychology of to-day, that he would like to prohibit the study of it for teachers and send all the teachers out into the country to live on farms, and let the farmers teach them what farm-folk know about the conditions of growth and what the experimental psychologists do not. The child has been considered empirically and not scientifically—in the light of what we imagine about him and not as he really is. The grown-up is so much engaged in theorizing on what is about him, that he ends by not seeing anything at all.

CHAPTER VIII

WHAT IS PSYCHOLOGY?

A CERTAIN amount of opposition to Dr. Montessori's views arises from the fact that they do not fit in with much that is believed to have been conclusively proved in the psychological laboratory. I took her recently a book in which her doctrines were proved by the writer, with chapter and verse, to be psychologically heretical.

"All one can reply to such a one," she said, "is to suggest that he should open his eyes. I cannot help it if things which he states to be impossible continually happen. After all whether transfer of training takes place or not, we are all, every day of our lives, meeting new combinations of circumstances and overcoming them by means of aptitudes already developed elsewhere. If the ways of the Almighty are not humanly logical, it is not the fault of the Almighty but of the limitations of human logic. It is fortunate, I think, that nature is not bounded by human reason and by laboratory work and experimentation, for by the laws of

pure reason and by microscopic investigation it might easily have been proved, long before this, that children could not be born. And yet, if it did not happen constantly, the rationalizer would not be there to rationalize! *Non ci sarebbero uomini e non ci sarebbe un mondo.* The whole thing would be finished, and we should not need to bother about it at all!"

Dr. Montessori remembers an occasion when a distinguished woman scientist from Vienna rose up in the midst of a congress of scientists who had conclusively proved by a series of investigations into the waste of phosphorus (the medical catchword of the day), the incompatibility of brainwork and the functions of motherhood. "My friends and colleagues," said the woman scientist, "please disprove my nine children." In the same way Dr. Montessori thinks it is up to such experimental psychologists as disagree with her findings to come and observe her children and disprove the things that they do. On the results of what she has seen happen, not once, but again and again, she has based the theory in her books. All her theory is a synthesis of constantly observed facts. If it is (as has been maintained) "too ecstatic to be scientific," that is because science hitherto has put on its spectacles and observed children as if they were so many little anatomical preparations.

But the whole child includes that part of the child which tells the truth and which loves its mother—and which thinks the scientist an uninteresting fellow and incredibly old; but to that (very excusably) the scientist turns a blind eye!

No one, in all this world, will ever have been so liberally educated that he will be safe in dogmatizing about psychology. For in psychology the *argumentum ad personam* is always valid, and often the only clue to the investigator's mistakes. Some of the innumerable points of view which are essential to the understanding of fundamental questions are almost certain to get left out. In everything that you say about human nature you "give away" your own condition, and you are never safe in saying that you know when it may be patent to your neighbor by a hundred indications that you do not.

Dr. Montessori knows perfectly well that her refusal to accept much current psychological theory is put down to ignorance on her part of what has been done in this matter. Many American experimental psychologists decided that, as she does not read English, she did not know what they had been doing. The truth of the matter is that she sees in the current experimental psychology, both of Italy and America, the German stigmata of arbitrariness and myopia. As a young medical student her soul revolted against

the interminable measurement of skulls, empty boxes out of which the life had fled. Later, when she saw eminent psychiatrists substantiating their hypotheses by experiments on vivisected animals, she knew that there was no possible analogy between the life of these maimed creatures and the child that she could hear outside, laughing and skipping down the street. What light could these ugly minutiæ throw on the psychology of a beloved friend, of a Socrates, of an Antoninus, of a Gautama? She does not undervalue investigation. Everything must be tested and scrutinized and examined, and the psychology of the laboratory may prove many things, but it does not throw even so much light as do conscience and common sense on the problems of daily life. Investigation must be alive, and she has founded her schools largely for the purpose of facilitating live investigation. Investigation, further, must be undertaken with the intention not of being clever, but of finding out. Love and faith and humility are the prime needs for the student of human nature. Christ is the true psychologist, not Freud.

In the book to which I have referred exception is taken to the "education of the senses." There is enough education for the senses, the author thinks, in the ordinary run of the child's life; any further training of the senses will tend

to fade, and such sensorial training is of no more educational value than the old unpleasant lesson *qua* mental discipline. Dr. Montessori's reply is that we must recognize in every child at least the potentiality of music, the arts, and craftsmanship. Thought, speech, and writing are not the final and only means of human expression. This era, already, is beginning to find them inadequate. Reason lags behind reality, and the birth of new modes of apprehension must be prepared. Craftsmen know that there are things, such as difference of texture and difference of timbre, which are not, and never will be, in the books. The Montessori children "sense" things that there is not, and never will be, any means of defining in words. They do this gladly in the early stages when no other form of apprehension is open to them. Babies of two sort out velvets and silks in twos and twos, and red tablets and blue tablets in pairs again. They are given such things to work on because the senses are awake at two and reasoning powers are not. So the suspicionable sense-training resolves itself into an exercise of the power of fine discrimination before the child has had imposed upon it the more indiscriminate culture that is based in words.

Dr. Montessori explained to her students at St. Bride's these uses of her material.

"The fine differentiation," she said, "that the child learns through the use of the material changes the face of nature for the child. All objects henceforth describe themselves to the child. All objects seems to say to the child, 'I am like this—I am like that.' The child follows them in a kind of ecstasy. So it discovers the world, and the world, which is infinitely richer and more logical than this material, completes its education."

Dr. Montessori had thought, at one time, that it was only necessary to demonstrate the application of common sense to psychology in order that students of psychology would gladly embrace it, but she has come now to believe that common sense is not so very common after all. *"Buon senso raro"* would perhaps be a better term than *"buon senso commune"!* The old path of error has to be followed till the student, convinced of its futility, turns back of his own accord, just as the child can only find by making mistakes the way to do things right. She used to be impatient, but now she is content to wait for humanity to explode one by one into common sense, just as children arrive of their own accord, by degrees, at every form of human activity that is put within their reach. Whether it happens this century or next she does not, as a scientist, mind. Many scientists have died long

before science accepted their discoveries. Nevertheless, she cannot help trying to hurry things up, because she knows that the sooner the truth is understood about children, the happier children will be allowed to be.

CHAPTER IX

THE PSYCHOLOGY OF THE NEW-BORN

At a meeting of the Norland Institute—the first reunion of members that has taken place since the war—Dr. Montessori indicated the direction that her activities are likely to take in the next few years. "In a city of Spain," she said, facilities have been put at her disposal for any line of research that she may consider most valuable. The Jesuits thought that if they could have the child from birth till seven it would grow up as they wished. Dr. Montessori believes that if we can keep the hands of the adult generation off the child from birth till seven it will have a good chance of growing up as Nature intends. What Dr. Montessori has asked of the Catalan Government is the foundation of what Dr. Eric Pritchard at the same meeting stated to be lacking in this country, although the nursery colleges have done work in this direction—"an institute of puericulture." Among hundreds of tiny foundlings she hopes now to sit at the feet of life in a form that has hitherto had practically no

bearing on the training of the teacher—the life of the baby.

No doubt certain of her critics will take this as evidence of further intention on her part to lay hands upon human nature and mold it to given ends—to make of it by subtle means something other than that which God intended it to be. To such she can only repeat the assurance that life is not of its nature susceptible to human meddling. It can be stunted, and has been persistently stunted. But the determination of its course, the diversion or transformation of what is within, is not within the power of any kind of education. "Our inner governing self," says Marcus Aurelius, "is that which is self-excited and self-swayed, which makes itself just what it wills to be." If we stand aside and do not confuse them with dark counsels, God will lead his children aright. What education has to learn is chiefly how to stand aside.

Dr. Montessori said to the Norland nurses: "I have for many years interested myself in the study of children from three years upwards. Many have urged me to continue my studies on the same lines with older children. But what I have felt to be most vital is the need for more careful and particularized study of the tiny child. In the first three years of life the foundations of physical and also of psychic health are laid. In

these years the child not only increases in size but passes through great transformations. This is the age in which language and movement develop. The child must be safeguarded in order that these activities may develop freely. The psychic life of the child is already old by the time it comes into the teacher's ken. The teacher needs for his guidance the detailed history, the enlightened understanding of these first three years of life.

When I was invited in a city of Spain to continue my studies I proposed to begin studying the child from birth. There is in Barcelona a hospice where all the foundling children of the city and district are brought up together. In this hospice, which can take 600 children, some of the inmates stay till they are grown up. These girls, I thought, who necessarily come into contact with the new-born babies that are brought in, might be taught to lavish on their little companions the same kind of care that is given to the children of the better classes. Later these girls can go out into life as children's nurses. I chose a group of girls of fifteen with the idea of training them till they are eighteen. These girls later will go out with a vocation in life. Meanwhile the little children in the institution receive far better care than ever before. Thus this institution will become a center of child

study, and no doubt eventually a center for the teaching of teachers. Some day doubtless it will be impossible to imagine a teacher who has not gone through this preliminary grounding. I shall hope eventually to see the teachers in my own schools prepared in this way for their work. Girls of independent means will also come and pass through this training, so that some day there will be no mother who has not undergone this kind of preparation for the responsibilities that she undertakes. We cannot progress in the care of humanity unless we lay this firm foundation, which all of you here are spending your lives in laying—the understanding and care of the baby."

I have seen the program for the work of this great nursery, which is to be not only an infant-welfare center, but also a laboratory where perhaps we may analyze the "trailing clouds of glory" sufficiently to be able in some degree to fix them. There is no reason at all, according to Dr. Montessori, why, to use a simile, kittens that are so beautiful should often grow up into unattractive cats. Very certain she is that there are things known to babes and sucklings which are hidden from us when we grow up. The solution, then, is to learn to grow differently—to grow in stature without losing wisdom and grace. To some degree Dr. Montessori has answered the

insistent demand of psycho-analysis on this point. In the course of the next few years she hopes to have far more to say. Already, although she has never been married, never had children of her own, I know that she knows far more about new-born children than do most human mothers—about their reaction to light, to color, to sound, to the unexpressed emotions of the people about them, about their powers of communication with their mothers at a distance —things which, if mothers know, they do not say, for fear of being laughed at—at least in this rough Anglo-Saxon world where baby and mother are always to some extent a joke.

Those who have worked with Dr. Montessori know that the crown of it has been to universalize motherhood, to bring into all dealing with children something of that respect for the child as a "gift of God," all the implications of which only parents know. "I can assure you," Signorina Maccheroni has said to me, "that after having been shut up with children, under this method, for fourteen years, I know that this is nothing arbitrary or artificial that we are inventing, but that we are merely coming on the springs and sources of life as it really is." Things that have been hidden from many are becoming clear. As I have said, there are mothers—and others—who have known these

things always and not voiced them. Dr. Montessori is to these as a clear voice explaining their own instinctive knowledge. They cannot see necessity for opposition for what is to them as obvious as the day. They accept it freely because they have no stake in any existing and different system of education. A woman (a Chinese) wrote from the interior of China soon after Dr. Montessori's first book was published. "These are truths," she said, "which I have been repeating all my life to the people about me, but they have only thought me sentimental or perhaps insane!" The master sometimes considers the parent "sloshy about his beastly boy." Seldom do he and the parent see eye to eye. Only the mother, after all, can repeat the Magnificat—only she knows, though others may speculate, how little the child is of her own fashioning and how much of God's. Many parents, in their innermost hearts, would be glad to keep the heavy hand of education as it now is off their children. But in the school of the future the child will be even freer and happier and more "itself" than at home.

CHAPTER X

WHAT IS SUGGESTION?

Dr. Montessori, in one of her lectures at St. Bride's Institute, explained to her students in detail the character of the stimulus that the young child receives from his exercises with her "material." All these exercises are accompanied by movement. Left to itself the child naturally combines thought and action. In the ordinary schools the child is kept motionless for a period while intellectual stimuli are applied to it, then it may be allowed or ordered to move. First we say "Sit still," and then we cause the child to move for the sake of moving. By so doing we dissociate in the child's personality a fundamental psychological unity. All thought that is of any value consists of a cycle of thought and action. The child must be launched into fields of activity in connection with all his thoughts, and must gain the habit of acquiring knowledge only through his own activity. Otherwise, as an adult, he will become prone to think rather than to act, to dissociate mental life from experience, to ac-

cept secondhand evidence, to enter on trains of reasoning that do not correspond with fact. The adult, thus trained, enters into a realm of illusion without knowing it.

Dr. Montessori's next lecture-period was devoted to a demonstration of how the initial lessons in the use of the material are given. In Tuesday's lecture she explained the cycle of natural development that precedes the act of writing. Some one asked one of the children, "Who taught you to write?" "Who taught me?" replied the child, puzzled. "Nobody taught me; I learnt." Another child expressed doubt as to whether the teacher was able to write. *"Chi sa se la maestra sa scrivere!"* At any rate it was a matter for speculation. He had never seen her do it himself.

The promulgation of a great deal of common error regarding Dr. Montessori's aims would be avoided if her critics, besides knowing a little more about the actual working of her method, were better aware of the kind of person that she is. It is one of her criteria of the accuracy of her deductions that criticism of them reaches her from people who "do not know." Such medical colleagues of hers as go to the pains of observing for a sufficient length of time what happens in Dr. Montessori's schools ascribe to her a sound, thorough, and intimate knowledge of the

principles of child-hygiene. But the majority of people take one look and go away and write books about the fallacies they have inferred.

I asked her once if I might try to clear up the question of how much "suggestion" was involved in the results attained in her schools. She said that I should probably find that no two of her critics understood the same thing by the word. Nor do many people realize the scrupulous care that a physician bestows upon all dealings with the human organism, and especially with that of children, nor the existence of that definite (if undefinable) ideal of normality that the physician is constantly working up to. The unity of aim and of principle to which she has been accustomed all her life in her own profession has made it difficult for Dr. Montessori to realize the diversity of opinion, even on fundamentals, that exists in the world outside of it. Every experienced physician carries about with him a mental concept of working normality—a vision of the middle line along which (allowing for the deviations of genius—"right, left, and middle again") man in order to be sane and to dwell among his fellow-creatures must walk. Every man must state his normality in his own terms. The old medicine dealt in standards unrelated to action or function—and fell. The new admits no standard except capacity for action,

i.e. health. The constant factor of all normality is mental integrity—the capacity for not being led or over-persuaded: for keeping the individuality aloof at will from the community, the judgment free.

The doctor, moreover, cannot continue to be a doctor unless he knows what he is about. *Primum non nocere.* Centuries of holding the keys of life and death have made him careful. Unless he can be sure of the benefit of intervention between man and his Maker he does not intervene. He is too busy to meddle for meddling's sake. The length of his tradition precludes opportunism. Münsterberg admits, for instance, that the principles underlying "Christian Science" may produce immediate beneficial results for the neurotic individual. But he cannot countenance Eddyism, because the accompanying blind acceptance of an undigested metaphysic would be an intellectual injury to his greater patient, the human race.

Déjérine goes a step farther than Münsterberg in holding the same view with regard to hypnosis and even suggestion.

"What the physician has done," he says, "in practicing hypnotism, is to develop the power of the psychological automatism and to diminish the value and intensity of intellectual control. . . . The most ridiculous ideas . . . in a subject thus

educated . . . will tend to be admitted without discussion by him as real and demonstrable phenomena. What would one think of a physician who, in order to diminish some symptom, . . . would order such medicine as would at the same time . . . diminish the resistance of the patient to the infection?"

Modern psychotherapy appears to be coming to the view that the psychotherapist must be an upright man, and that, given this, he need not be fettered as to the means he uses. I do not think, however, that Dr. Montessori will agree. Direct suggestion is out of Déjérine's therapeutic armory on far-reaching social grounds, and Dr. Montessori's views on this matter may best be summed up in the statement that she is of the school of Déjérine, however old-fashioned the psychotherapists may think it. In treatment by suggestion, says Déjérine:

"One deliberately directs one's attention to the symptom, and completely neglects the underlying mental stratum. By direct suggestion one weakens instead of strengthens the patient's critical power."

The upshot of Déjérine's researches comes to this, that in order to be perfectly healthy it is necessary for a man to be walking upon his own feet and following "an ethical or a philosophical

or a religious ideal." He holds the function of the doctor to be "to awaken and exercise the power of recall over those superior psychological functions which emotion and life have rendered diffuse and which are, so to speak, thrown off their center."

Dr. Montessori looks forward confidently to a time when the education of the educator will run to a certain point on the same lines as that of the doctor. Then educators will look back on what Dr. Montessori is now doing and see that it was good, and for that day she is content to wait. Whether medicine is synonymous with "materialism" those familiar with the ideals of modern medicine may judge for themselves.

"As we have a physical hygiene," says Déjérine, "should we not have a mental hygiene, whose care it is to prevent diseases of the psychism just as physical hygiene tries to prevent diseases of the body? Why, if the physician is interested in treating diseases of the morals and the deviations which occur between the psychophysical relations, should he leave the work of correcting and avoiding defects . . . to the exclusive care of spiritual directors and pedagogues? That certain great educators . . . have been able to lay down precepts which will, empirically at least, help one to realize moral hygiene and health, is a fact which we should be the last to discredit. . . . This does not prevent us, however,

from seeing that, if we want to find definite cause of this extraordinary modern increase in neuropathic manifestations, we cannot attribute it to anything else but the modern lack of moral education. The *rôle* that others have not filled satisfactorily or have left unnoticed the physician has the right to adopt."

Dr. Montessori says that before she can answer the general public's criticisms about "Montessorism and suggestion" the general public must decide for itself what "suggestion" means. If we begin to stigmatize everything as "suggestion" we shall be driven to shut up every child in an inaccessible tower. Every reaction upon man of his environment is in some measure suggestion, just as there are bacteria in everything we eat. Dr. Montessori's incessant aim has been to minimize direct adult suggestion, because she wanted to see what the child would do by itself. She sees the child like an infant Atlas, bowing its shoulders under a weight of inertia—erudition, injunction, custom, ceremonial, form. She has aimed at lightening the burden so that the growing mentality may stand up and stretch itself and breathe free. But she does not visualize —what sane person would?—a universe in which the parental attitude towards the child is to "let it rip." The existence of any form of education postulates the need for action in some form of

the adult generation on the generation to come. Dr. Montessori does not preclude future possibilities. Perhaps some day human development will stop, and babies be born as preëducated as those of insects, with whom (being posthumous) parental suggestion has nothing to do! But for the present she does not see any indications of such a development, and, suggestion or no suggestion, the immature human faculty is likely to go on being assisted to maturity by the more mature. When at Berkeley, California, the National Education Association convened a meeting to discuss this very question she found that without giving those there assembled a prolonged course of highly specialized explanation there was very little that she could say. One remark she vouchsafed. *"L'ipnotismo fa dormire,"* she said. *"Noi vogliamo risvegliare."*

CHAPTER XI

WHAT IS MUSIC?

AFTER listening to Signorina Maccheroni's lecture at the Mortimer Hall on what Dr. Yorke-Trotter, who took the chair, called "the musical method adopted by Dr. Montessori," I sought her out to congratulate her, and found her distressed that the time had passed so quickly and that she had managed to say so little. "I am not a great musician," she said. "Some one ought to take up this germ of a method and develop it." In fact, a well-known musician, a woman, came to me after these words had been published and asked to be put in touch with Signorina Maccheroni, for the things that she had said as to the nature of music and the natural human attitude towards music, were things that she felt to be vaguely beginning to stir in that realm apart, "the musical world." In the course of the lecture, Signorina Maccheroni said that people were often kind enough to ascribe the musical work in the Montessori method to her, and that in return she could only say that she had been studying music for a long time be-

fore she met Dr. Montessori, but that it had never occurred to her to approach music in this way. She thanked the public, therefore, but would ask them to render unto Cæsar the things that were Cæsar's.

In nothing more than in this approach to the study of music do I, personally, see the identity of the Montessori movement with modern intuitive philosophy. Music, by the old standards, was an aid to religion, a recreation, sometimes only a mathematical game. By the new standards it is a means of expression, a means of communication. In his subtle, unerring, cut-and-thrust way Bergson constantly attacks and undermines the language scaffolding of human thought. With the help of language the human being has become a social being: at the same time his mentality has grown on to that scaffolding like a crust of barnacles.

"We commit ourselves," says Bergson, "to a confusion which arises from language, and which is due to the fact that language is not meant to convey all the delicate shades of inner states."

The useful artifice of speech gradually pervades life, all metaphysics, and makes living and thinking rigid and artificial:

"How could the self, which distinguishes external objects so sharply and represents them

so easily by means of symbols, withstand the temptation to introduce the same distinctions into its own life and to replace the interpenetration of its psychic states by a numerical plurality of terms which are distinguished from one another, set side by side, and expressed by means of words? In place of a heterogeneous duration whose moments permeate one another, we thus get a homogeneous time whose moments are strung on a spatial line. In place of an inner life whose successive phases, each unique in its kind, cannot be expressed in the fixed terms of language, we get a self which can be artificially reconstructed, and simple psychic states which can be added to and taken from each other just like the letters of the alphabet in forming words. . . . Our psychic states, separating from each other, get solidified; between our ideas, thus crystallized, and our external movements we shall witness permanent associations being formed; and little by little automatism will cover over freedom."

"We have reached this result through deduction," says Bergson, characteristically, at the end of one of his most brilliant chapters on "Laughter," "but I imagine that clowns have long had an intuition of the fact." In the same way, musicians and painters have long had the intuition of what Bergson, with his astonishing mastery of the mechanism of thought and speech, has been able, now first among men, to put into

print. A refrain runs constantly through the writings of those who are writers and thinkers second and artists and craftsmen first—

"Je suis las des mots, je suis las d'entendre ce qui peut mentir."

Browning, with the Persian poets, agrees that however much doctor and saint may argue it does not matter, because the singer *knows*.

"Let the Sufi flout:
Of my base Metal may be forged a Key
That shall unlock the Door he howls without."

The intuitive standpoint is neglected in the educational world; but artists almost everywhere understand not only Dr. Montessori's music method but her whole conception of human development, from the simple concrete baby-beginnings—the touching one by one of the notes of life—up to the highest known syntheses, themselves the embryological beginnings of something else.

Is music the speech of the future? Only the future can answer. The woman musician of whom I have spoken said that she did not see why so many people should have given up their lives so blindly to developing it if something more were not to come of it than has come yet. M. Jaques-Dalcroze has emphasized to me the fact that it is far more than the ear and the audi-

tory center that hears. He has said to me that it is the whole body that hears, but is willing to admit that the 'unconscious' of the psycho-analysts may include all that which is voiced by music. He thinks that psycho-analysis is on the track of more things than it as yet guesses at.

In Italy music is already a great deal nearer to being a common means of communication than it is here. Year after year the "Fiera di Piedigrotta" brings to light a hundred wild-bird songs in which the illiterate fishermen of Naples tell their *innamorate* a million things that no school teaching could ever teach them to say. The vinesmen on the slopes above Sorrento improvise the *canto a figliola* as in the days when the Roman fleet lay off Misenum, to the antiphonal answer of some maiden in the fields beyond. I knew myself very well a Tuscan peasant woman, illiterate, a daughter of generations of the sculptors of Volterra, who as she went about her cooking and housework would sing from end to end, overture, intermezzi, and all, an opera of Verdi or Donizetti that once by some stroke of good fortune she had been taken to hear. Dr. Montessori said to me once that every nation is always glad to acknowledge its past debts to other nations, but that no nation is ever willing to recognize that now, at this present moment, it has anything to learn from any other. So that if

one wished the intuitive attitude towards music to prevail it would be well not to say that we are to sit at the feet of Italy; and yet this is so.

Signorina Maccheroni's approach to music is not through the notation (as she assures me is the case in many schools in Italy, as well as here). Although, as I know, she has not studied Bergson, she has arrived by another road at the same conception of the musical phrase which Bergson uses to illustrate the succession of conscious states. "The notes succeed one another," he says, "yet we perceive them in one another, and their totality may be compared to that of a living being whose parts, though distinct, permeate one another just because they are so closely connected." Interruption causes a qualitative change in the whole of the musical phrase. I was astonished the other day to hear Dr. Montessori, who has worked and thought in total independence of Bergson, use, in describing her conception of a musical phrase, the same analogy that is used by Bergson of the strokes of a clock melting into one another before it has occurred to us to count them, and yet giving when we think back over them the impression that the clock has struck two or three.

It was also interesting to see Signorina Maccheroni take the chalk and draw on the blackboard her conception of dance music as a series

of curves, the recurring crises of which will call forth rhythmical movements in the children if they are left to interpret freely, and to follow or not as they please. I have talked to Signorina Maccheroni on this subject, and her insistence that "counting" on the part of the music-teacher or the children is death to the music is all one with Bergson's statement that we cannot count ideas which permeate one another, unless we represent them by homogeneous units which occupy separate positions in space and consequently no longer permeate one another. Signorina Maccheroni shakes her head at metaphysical explanations. *"Non lo so,"* she says, "but I know that it is quite wrong to mix up music and counting. If the teacher is going to drill the children's movements by heavily accenting all the first notes of all the bars, she will do better to shut up the piano and say 'One, two; one, two.' " M. Dalcroze, in a discussion with Signorina Maccheroni and myself, said exactly the same thing, illustrating his conception of musical rhythm by a series of curves drawn in the air with his hands. Dr. Montessori ascribes a good deal of the prevalent mechanization of living functions to the fact that we are living in an era of machinery, and the force of the movement which she represents to the fact that we are beginning to find out that machinery is not everything after all, just as the

Germans had to find out that the German social order was not everything. Life existed before the invention of machinery, and music existed before the organization of music into semibreves, minims and crotchets, quavers, semiquavers, and demisemiquavers.

As Signorina Maccheroni said the other day in her lecture, in dealing with music for children we are only dealing with the embryology of music, with its simple elements, which children can grasp. But in no music method before this have the children been given the actual elements to do what they like with. The tiniest children in the Montessori schools have the simple notes to play with and listen to, just as they have the colors blue or yellow or red. The instruments fix the note for the child and enables it to do all the exercises with sounds that are done with colors—matching, pairing, grading. None of this could be done if the only means of producing a sound was to sing. The bells represent the alphabet of sound. Dr. Yorke-Trotter thinks that any instrument which gives a single note gives so impure a note that this may raise difficulties, but the children seem to recognize the sound that is intended. No doubt the instruments are susceptible of improvement. A child of three will take one of the resonant bells, and strike it again and again, listening to the fading

vibrations to the end. Then it will strike another and listen to that. Nobody interferes with it or makes it pair the notes, or combine them, or make successions of them, or write them down on paper, till it wishes to. Thus it can explore for itself at leisure, at the age when such things please it, the mysteries of quality and pitch, which so many grown-up musicians do not understand. The attitude towards pitch of the Montessori school is exemplified by the care that is taken to make a set of bells used by the children of precisely the same size. Scales are formed by the children for themselves with an apparatus of single notes which can be mixed up and sorted out again and placed in any order the children wish. Thus the conception of pitch is not affected by any fixed succession visible to the eye. The best comment is again in the words of Bergson:

"I grant," he says, "that a sharper sound calls up the picture of a higher position in space. But does it follow from this that the notes of the scale, as auditory sensations, differ otherwise than in quality? Forget what you have learnt from physics, examine carefully your idea of a higher or lower note, and see whether you do not think simply of the greater or less effort which the tensor muscle of your vocal chords has to make in order to produce the note? As the effort by which your voice passes from one note to another

is discontinuous, you picture to yourself these successive notes as points in space; this is why you establish intervals between the notes of the scale. Now, why is the line along which we dispose them vertical rather than horizontal, and why do we say that the sound ascends in some cases and descends in others? . . . The sound would remain a pure quality if we did not bring in the muscular effort which produces it or the vibrations which explain it."

All children who are not deaf have an ear for distinction of sounds. Whether they will become musicians or not is another matter. At all events, says Signorina Maccheroni, we ought to give them the chance.

The *a priori* attitude of a section of the English Press, "inviting correspondence," was shown up recently on this very question of music. An article was announced on the subject "Montessori and Music," by a writer who knew nothing at firsthand of Dr. Montessori's methods and aims. It was suggested to him that he might wish to hear more before writing. He did not, however, care to approach the subject more closely, but stated that what had already been said was sufficient to convince him that there was nothing of any value to be learnt. I am told that the article which finally appeared was definitely hostile to Dr. Montessori, and overlooked the

point that Dr. Montessori is not approaching music as a "subject," with a history, and a literature, but simply as a natural faculty of the human child and, so far as she has at present gone, of the very small child, almost the baby. The older children in the school at Barcelona are taught on the Dalcroze method. M. Dalcroze tells me that the Montessori children are the quickest of all children to pick up eurhythonics. His own little boy goes to a Montessori school. The simple, jingling music there used is, as Dr. Yorke-Trotter has said to me, like the nursery rhyme, the artistic form that the little child itself prefers. In the same way we give milk to babes. But the connoisseur might think that the baby ought to prefer China tea.

CHAPTER XII

MONTESSORI AND BERGSON

When I began writing these articles Dr. Montessori and M. Bergson were unacquainted with one another. About the middle of October, 1919, I had the pleasure of meeting Dr. Crichton-Miller. Before we parted he said a few words which confirmed something that had been in my own mind for a long time. "This method," he said, "will have to be considered in connection with the philosophy of Bergson and the psycho-analytical work of Jung." These three, in fact, he thought, were mining in apparent independence of one another towards an identical point. Bergson is stating, with perfect lucidity, the conditions of the fall of Adam—the colossal mistake that has been at the bottom of human misery since the beginning, not of time, but of time stated by human utilitarianism in incompatible terms. Psycho-analysis is seeking out in each individual life the processes of this misadaptation. Dr. Montessori is working to secure that misadaptation shall not take place.

Nothing can be more ridiculous than the ground on which Dr. Montessori is sometimes criticized: that she has arrived at nothing coherent and nothing new. Prof. Boyd's *From Locke to Montessori,* published in 1914, is as beside the mark as Dr. Davidson's *Rousseau,* published in 1898. For all through his examination of the Montessori method he is floundering in search of the philosophical clue which will unite what seems to him a congeries of disconnected notions, a pseudo-system of scraps. The inference is either that he had not at that time read Bergson, or that Bergson's doctrine is to him nonsense. Dr. Montessori endorses a great part of what Bergson says from her daily experience in the schools, and probably every one who understands Bergson will eventually come to understand what Dr. Montessori is doing. Innumerable men in the street, unencumbered with theory, can see what Bergson is driving at, as plainly as they can see that the traffic is setting cityward or the wind making for rain. What Bergson represents is too widely diffused for it to be safe to say much on any subject unless one can keep pace with him. Moreover, whatever his merits or demerits, he has made many of our time-honored methods of arriving at conclusions into scrap-iron and old plant. He gave Dr. Montessori, when she met him, the impression

of a spirit unfettered by the old mental processes.

The disappointment of criticism when it finds innovation not to be totally new is based on short-sightedness and ignorance. No great thinker claims a monopoly. To posterity he becomes a token of the "new thought" of his age. But in his own age he is a living nucleus. Ideas are "about." The great thinker of the age gathers them, focusses light on them, sifts them, codifies them, and makes them accessible to all. In one sense the thought of the present age is a revival of the thought of Christ, that we shall look neither here nor there, for the Kingdom of Heaven is within. "Christian Science" accepts it unquestioningly as such, and Christian Science, with its fundamental conception of "error of mortal mind," prepares the minds of millions for the work of Bergson. Glimpses of a tendency appear here and there throughout the centuries, long before the current sets definitely east or west. The life-rule of the Stoics reiterates "that the view taken is everything," "that man's soul does violence to itself when it makes itself a tumor and excrescence on the universe." "Evil for you," says Marcus Aurelius, "lies not in any self external to your own, nor yet in any phase or alteration of your material shell. Where is it, then? In that part of you which forms your

views of what is evil. Refuse the view, and all is well."

It is never easy to expound the commonly acceptable philosophy of the day. Probably many children and many unsophisticated persons "have" it, and have always had it. But the unsophisticated are often also the inarticulate. Such clues to the living of life as they possess do not get beyond themselves. In learning to be articulate we learn only too easily to be sophisticated. Emerson has a tale of a man who, ostensibly free, was actually chained by the leg to his household furniture. Pascal includes *"les logiciens"* among the people who, wise in their own conceits, forget that an ever-present God is creating the world. "Culture ought to set people free," Signorina Maccheroni said to me the other day, "but most of the learned people I know seem to go about with their learning laden on top of them so that they can hardly walk and certainly cannot see. Professors of the humanities come into our schools, but I find that they are so convinced that they know all about the dispositions *(attitudine)* of human nature that they do not really observe human nature at all." Dr. Montessori has described the situation to me thus: that the children are running about on their feet but that as we grow older we educate our-

selves, laboriously, to stand on our heads and to look at everything upside down.

Our difficulties, according to Bergson, arise from the "desire to endow duration with the same attributes as extensity, to interpret a succession by a simultaneity, and to express the idea of freedom in a language in which it is untranslatable." "Intensity, duration, voluntary determination have to be clarified by ridding them of all that they owe to the obsession of the idea of space." The origin of this obsession is utilitarian. The illusory distinction and solidification that we give to conscious states "enables us to give them fixed names in spite of their instability, and distinct ones in spite of their interpretation. It enables us to objectify them, to throw them out into the current of social life." In the process of ages it has come to this—that we neglect the reality and build up a life which is an elaborate juggling with simulacra.

"The moments at which we grasp ourselves are rare, and that is why we are rarely free. The greater part of the time we live outside ourselves, hardly perceiving anything of ourselves but our own ghost, a colorless shadow which pure duration projects into homogeneous space. Hence our life unfolds in space rather than in time: we live for the external world rather than for ourselves; we speak rather than think;

we 'are acted' rather than act ourselves. To act freely is to recover possession of oneself, and to get back into pure duration."

Just as the Christian Scientists, when they succeed in grasping the principle of "error of mortal mind," find themselves immediately freer and less hampered in their ethical and even in their physical life, so psycho-analysis aims, by every means in its power, at getting rid of mental obsessions. Déjérine has said, in so many words, that the deterministic outlook on life, due to a wrong mental make-up, is at the bottom of nearly all the human misery he has seen. In a system of thought which is artificial discrepancies must inevitably arise which baffle men and often drive them to despair. But, as Bergson says, we are free, whenever we are willing, to get back into ourselves, although it seldom happens that we are willing. "By merely getting rid of the clumsy symbols round which we are fighting we might bring the fight to an end."

The Montessori method insists that the very young child shall be put face to face with circumstance, and not with current interpretation of circumstance. It is to rediscover the world and mint the coin of symbolism for itself. Our common interpretation of phenomena is not to be imposed on the child as gospel, as has been

done hitherto. The way to study house-construction, Dr. Montessori said a few days ago at St. Bride's, is to assist at the building, not to accept your house and then analyze it as if such and such were the necessary conditions of all building whatsoever. So the child is to approach every subject. It is to reconstruct knowledge from primitive material, not to be given knowledge ready-made. Dr. Montessori told me the other day that she intends now to devote herself to finding out at what stage the adult begins to foist adult determinism on the unsuspecting baby. For she is certain that the relations between the baby and life are much more perfect than those of life and the grown-up man. If every one agrees in regretting that children have to grow up, there is obviously something wrong with that growing-up process which it is her intention to set to and try to remedy. It seems to her that if the points are set right from the beginning there will be no need for the personality to get side-tracked. It should not be so very difficult, as a little child, to enter the Kingdom of Heaven.

In its objective aspect I am inclined to think that all this, which I have called the commonly acceptable philosophy of the day, is the centering of the pendulum of human culture, which had swung to its limit in Germanism and turned

back with the crisis of the war. Or rather, probably, the war and the end of Germanism brought the fact of the swing-back home to the world at large. Montessori is working on lines which should eventually make psychotherapy unnecessary, and Bergsonism the commonplace of every day. My friend the other day thought that when Bergson, Jung, and Montessori met something astonishing would happen. I think, rather, that it has already happened, and that these three are making it known. Montessori has far more robust a faith than either Freud or Jung in what, for want of better terms, we call God and goodness, and she translates her faith into works, where Bergson lives by faith alone. She, putting into daily practice what the others are indicating, appears to me to embody more than any other one person the momentum of the swing.

CHAPTER XIII

TRAINING FOR CITIZENSHIP

THE formula to which the general public (as distinguished from the teaching profession, which by this time knows better) has reduced the Montessori method is this: "Oh, yes, those are the schools where the children run the show." To ascribe the invention of school-Bolshevism to a Roman of the Romans shows lack of historical sense. Yet newspapers find inexhaustible copy in this notion: *Punch* does not tire of it, and the "popular comic" spreads itself weekly, with drawings of the things that children in a self-determined state would do. The public follows up its first generalization with the general comment that it "doesn't see how that sort of thing is going to work." Dr. Montessori assures them, once for all, that it would not. Infant self-government never does work, in Russia or anywhere else. "You might as well throw new-born babies into a pond," Dr. Montessori says, "and expect them to swim."

Although the ideal of the Montessori schools

is to any one who knows them recognizably the liberal idea of our own public schools and older universities—the algebraical rather than the arithmetical ideal, the working up to a quantity unknown—yet Dr. Montessori's criticism of public school methods, in so far as she has seen them, is that the children are not quite sufficiently cared for—in some matters they are too much "on their own." She has nothing but approval for debating-societies such as exist in most of our public schools. She thinks that school children ought to read the newspaper and know what is happening in the world. But as for the type of school, popular in America, where imitations of Courts of Justice and other social institutions are introduced, she said to me the other day that though it is not the duty of the adult to develop the child, it is his duty to safeguard the child's development. To force moral responsibility for the acts of others upon a young, unorganized, undeveloped creature is to stunt that young life as surely as if we forced it into child-labor. Early familiarization with political technique is merely "vocational training." The embryology of sociology is not so simple, social proficiency is not so easily inculcated, as the "learning by doing" school believe. If man were not, fortunately, just by nature, he would not become just by practicing law in

school, any more than an unborn mammal learns to live in air by practicing breathing in its mother's womb.

This linking up of the school and the parish pump is distinctively German. It has nothing to do with an enlightened regionalism, such as is gaining ground in Wales to-day. Whatever the faults of our public schools, they produce colonizers. But the German Empire went to pieces on the rock of illiberality and parochialism. The German psychology, nursed, if not on the doctrines of Herbart, at any rate on the practice of his followers, grew more and more self-contained and utilitarian till finally it was thrown out from the main stream of duration, as round and as dead as the moon. We can see this now, since Germany gave herself away, and the necessity of opposing her ran through the turbid indefinite life of the nations like an electric current, separating the German from the non-German, the possible from the not to be done. In the same way, one can see now that much of our past educational doctrine was "made in Germany"—that it was "étatisme," the subjugation of the living spirit to a certain conventional representation of things as they are not. Herbart himself believed moral character to be a growth arising from the soil of social experience, not a faculty born in us. Herbart's follower Rein proclaimed

definitely that "the development of the individual is nourished in the development of the whole." "We get no moral ideals, no moral standards," said Dewey, writing before the war, "excepting as we interpret these in social terms."

The swing-back from Germanism is a thing to be intuitively felt in the life around us to-day, if the schools have not reached it. The pyrotechnics of Bergson, who embodies the negation of Germanism more than any one living writer except, perhaps, Dr. Montessori herself, all illuminate one central theme—that man is man first and a trade unionist after; that we are dead except in so far as we hold direct from God. To the Antonines, eighteen hundred years ago, the first social duty was "to keep the god implanted in the breast unsoiled," to "walk as a follower of the ordinance of the city and commonwealth most high." The clue to right government was in prayer, rather than in the Forum. "In all things call upon the gods," says the Dial of Princes, "and trouble not over the time it occupies. Three hours so spent avail."

Dr. Montessori has explained to me her conception of patriotism. "Dependence is not patriotism," she said. "A man does not love his mother if he hangs about her to the point of burdening her with a weak, feckless son." The true social virtue is to learn first to walk with

God, and with man singly, and after that to study the technique of our social order, which is obviously imperfect. *Patria* is less an immense coöperative association than the sum of the godliness of her sons. When we are all as simple and good as Christ was—and as normal children are and might continue to be—social order will follow as a by-product. The technique can be learnt when we are grown up.

In the educational world the cry of anarchy and Bolshevism was only for a short time raised against the Montessori method. When the facts did not justify it, and order, industry, and sweet reasonableness were found to accompany the work of the Montessori schools—when, moreover, the "Montessori children" were found to be more amenable at home than other children—educational criticism swung round to the other extreme. The catchword "suggestion" was raised, and many who did not understand child-psychology began to suspect indirect, "hypnotic," possibly occult adult control. The fact that life is naturally "good" if not let and hindered; that the child is a natural worker, a naturally social being, a natural seeker after truth, did not occur to the critics. They argued back inevitably to the types of children they had seen. "I have never yet succeeded," Dr. Montessori says, "in convincing any one by word of mouth. I think

some new form of language will have to be developed to express this new phenomenon. Fortunately the children are there, behaving as I say they behave, and people who do not believe me can go down into the schools and see! But then there is the difficulty, with so much opposition, of establishing the proper school conditions where these things can happen! Nobody likes me any more than they do any other constructive worker in education, because it is a good deal of trouble to reconstruct. At the same time almost every one agrees, instinctively, with a fine piece of destructive criticism, like that of Mr. Edmond Holmes." In fact, when conferences are held and articles written to consider education from a destructive point of view, people say that of course this is all *true,* but it is nothing *new.* When the new is provided they will not try it, because it might be wrong. The fear of the new is easily linked up with any other prevalent phobia, from witchcraft to Popery.

The kind and degree of freedom that Dr. Montessori has found necessary for children's development is, in fact, very difficult to describe. Miss Booth, who formerly directed the Montessori Society's demonstration school, told me then that the first requisite of a Montessori teacher is live judgment, and I am afraid that a good deal of the trouble with the Montessori

method on the part of teachers is that Dr. Montessori is a kinetic, not a static, conception of school life. There is apparently little to "get hold of"; no solid immovable framework of prizes, punishments, and rules. The Montessori conception of the duty of the adult mind to the child mind is probably more intelligible to a woman than to a man. "We await," Dr. Montessori says, "the successsive births in the soul of the child. We give all possible material, that nothing may lack to the groping soul, and then we watch for the perfect faculty to come, safeguarding the child from interruption so that it may carry its efforts through." The older generation, in fact, must not meddle with child-life, any more than an expectant mother meddles with embryonic life. At the same time the grown-up is indispensable, must provide the wherewithal and must be, like the mother, very much there indeed. Since the whole tissue of the school life is alive and mobile, the teacher has to be alive with the rest.

The public lecture at the Central Hall ended on one of those fine points of psychology which hardly any one before now has taken the trouble to expound.

"The person who is developing freely and naturally," Dr. Montessori said, "arrives at a

spiritual equilibrium, in which he is master of his actions, just as one who has acquired physical poise can move freely. When he is master of himself he is also flexible in his attitude towards others, and capable of adaptation to the wishes and requirements of others, and of 'give and take.' In this consists the discipline of our own schools. *Quest' anima ordinata in se stessa è un' anima ordinata, e non ha bisogno di una disciplina esterna.* Hitherto man has connected the word 'discipline' with the idea of mastery by some one else. Thence we have come to think that the 'free' child must be a child abandoned to its own devices. But this is not so. When the order is not imposed from without, but formed naturally from within, discipline and liberty are identical. As the soul of man advances in this inner discipline, so much the freer is it to develop and expand."

Speaking to those gathered to welcome her at St. George's Harpenden, Dr. Montessori reminded them that the baby is not an adult, and baby liberty is not adult liberty.

"A person with vague ideas about liberty might conceivably be sorry for a fish because it was in the water or for a plant because it was rooted in the ground. But the fish would be no better off if it were taken out to enjoy the air. So, if we have mistaken ideas about liberty, we may deprive the human spirit of things that are necessary to its life, and in this way be causing

death. Every living being has its own type of liberty, and all we can do is to watch, to provide, and to help each to live according to its needs. We shall not be giving the human child liberty if we simply let it loose to run in the fields like an animal. This kind of liberty is too limited for man. We can give the child freedom by providing it with the means of development, and by removing obstacles to development—removing our own preconceptions also, in so far as they are stumbling-blocks to the child. The first thing we must do, to this end, is to learn humility. We must not consider ourselves either as creators of the children or as models for the children to imitate, but only as ever-ready comforters and helpers of these little souls, patiently striving towards the light."

Some of the public opposition to the method of liberty is based on the argument that we, the present generation, did very well without. But Dr. Montessori convinces her students of adult clumsiness and helplessness in a very disconcerting way by putting them through the same delicate operations that the children, and especially the Italian children, with their racial mobility and vivacity, perform so easily and so well.

"The first time we did this, with the exercises for dramatic interpretation, the result astonished us all; the torpid movements of the grown-ups, the lack of grace, the almost complete incapacity

to give expression to the face. This made us realize, indeed, that we have lost something upon the path of life."

I heard Dr. Montessori describing this experiment in the course of a lecture at St. Bride's, and at this point she stopped and looked at us all for a long time, reflectively.

"There is no doubt," she continued, "that our faces are less beautiful and less expressive than they might be. The whole of our personality resembles that of heavy animals who carry their bodies from place to place, who have no other mission than to transport their bodies."

CHAPTER XIV

TRAINING FOR VISION

It is sometimes urged against the Montessori method that it does not make enough provision for creative work, for art, and poetry, and the handicrafts. Dr. Montessori wrings her hands in despair over the stupidity of this criticism, for it is to these very ends, above all, that the method leads. "How can any one paint," she says, "who cannot grade colors? How can any one write poetry who has not learnt to hear and see?" Another time she said to me, *"Per poter spendere bisogna prima guadagnare."* In order to give back anything to the world one must first take in nourishment from the world. No one can work on an empty stomach, and no one can produce literature on an empty brain.

Prof. Foster Watson told me that it was his feeling that in education a child ought to have the chance of being "all over everything": seeing, feeling, tasting, and experiencing every variety of material out of which the world is made. He had had some little doubt as to

whether, in the Montessori school, they would be enough of this eclecticism. I believe I convinced him that there was no fear of any kind of narrowness, and I do not think that any one will fear it who intimately knows any "Montessori child."

I watched a five-year-old Montessori child once come into a room, where a new and elaborate brass bedstead had been set up, which he had not seen. The little boy quickly set to work and climbed all over the bedstead. He ran one finger round all the outlines of the ornamentation: he spent a long time watching the play of light on the mother-of-pearl with which it was inlaid. He counted the little knobs and the big knobs and compared the sizes of them with each other. At last he inserted himself between the bed and the wall and squeezed himself round it as far as he could go, and only then woke up to the fact that he was being observed, and began to laugh.

Then he went to the window and reported that it was a misty day. Quite close, he said, you could see through the mist, but a little way off you could not see through it. First the trees were rather blue and then they were quite gray; and then where there ought to be hills there were none. Up among the blue trees some one must

be burning something, because there was a big piece of smoke. Somewhere down the road there was a doggie barking, and somewhere up the road there was somebody making an iron hoop run along on the path. How did he know it was a hoop? Could he see it? No, he "heared" it. It was an iron noise. Up against the trees the smoke from the chimneys was white and rather blue, and up against the sky it was rather black —no, rather browny. For more than half an hour he stayed at the window, obligingly reporting the news of the morning to his grown-up friend who was having breakfast in bed.

Later, his grown-up friends used to avoid going down the High Street with him if they were in anything of a hurry, because there were so many entrancing varieties of alphabets to be studied on the sign-boards over the shops. At that period he got hold of a Greek text-book and was unwearying in turning it over and sorting out the English type from the Greek. "Isn't it funny," he would call out joyfully from the low branches of a beech-tree that he was climbing, "how you can make three kinds of little printing g's?"

At about the same time the developing talk of his baby sister began to attract his attention, so that whenever he was parted from her he

wished afterwards to be told every word that she had said. As he lay in his cot, before going to sleep, he murmured scales to himself, and octaves, and thirds, and fifths. I have always, in thinking of that little friend of mine, thought of Stevenson's line:

"The world is so full of a number of things."

Here, at any rate, was some one who was far too busy to be naughty: as busy as a bee and as happy as a hundred kings. "What do the French people say for 'the'?" he would say, as one went to tuck him up. *"Le! le! Funny,* isn't it? Why do they do it?" and would turn over contentedly —"God bless you"—and go to sleep for eleven hours.

It was after going for a walk with him that I wrote the following account of what we saw, and put it into the mouth of an imaginary teacher with an imaginary dozen or so little pupils like him.

"The school is on the edge of a wood: in the heart of the wood are a couple of lakes. Fuel is scarce this autumn, and the authorities have decided that the bakers have first claim. So that, as there is not enough firing to go around all the departments, the infants' class, which is a Montessori class and has also been to some extent

an open-air class all the summer, is setting a Spartan example to the rest. The infants are glad, because it takes them out into the woods, where odd things are happening, whilst the older children nurse chilblains and are scolded by the teachers for stamping their feet.

"There has been no systematic study of nature in this class as interpreted by object-lessons and explanations. But all the children's work has gone to the developing of sharp ears and seeing eyes, and to the noticing of almost imperceptible differences. To-day, when winter has suddenly sprung upon autumn, there are so many differences between to-day and yesterday that the teacher is almost pulled to pieces by the children, who drag her hither and thither, impatient to make her see what they have seen.

"On the lower lake there was, overnight, a film of ice. In the south-west corner there is a little bay, and in the bay the ice has remained. At the mouth of the bay broken ice is grating and screaming in the teeth of a cruel north-easter, which has driven the open surface of the lake into waves. The teacher thinks to herself that just such conditions must prevail in the frozen ports of the North of Europe, where winter has long since set in. But she does not say so, for to five-year-olds and six-year-olds Europe itself is hardly more than a word, and she has learnt to think that one should begin to understand a thing first and name it afterwards.

"Moreover, the children are all taken up in

laughing and jumping with excitement over something that one of them has seen. The waves beyond the broken ice are waves of leaves. The dead leaves, not yet cockled and brittle, have been swept by the wind into this corner, just as in class we sweep a handful of confetti together with the broom. Thick on the surface of the water they are surging up and down in wave-shapes like a canvas sea.

"This is too soon to begin telling such little children anything of what science has put together about wave-formation; moreover, at this stage, the children do not want to know. They only want to look, and look again, and make what is happening around and about them their own, a part of themselves. They run and jump, crackling the frozen leaves on the shore edge of the little bay, and under the frozen surface of the water they discover that there are leaves again, pressed up by the force of the water, and flattened down by the sheet of ice, like the preparations for the microscope which they will meet some day.

"Under the ice are big white patches, and speculation arises among them as to what these may be. So the teacher chooses one near the edge, where the ice is already rough and uneven, and drops a big stone into it, so that the children can see the whiteness slowly bubbling itself out through the hole that the stone has made. The children do not throw any more stones, because the teacher says it would spoil the ice, and they have a general habit of taking care of things.

Moreover, when somebody spoiled this particular ice last winter there was trouble, and the Crown —that mysterious being to whom the lake belongs, and who lets the town skate on it—was not pleased, and if it was done again might even prevent the children from coming here.

"After a while a general wish comes to see what is doing on the upper lake. To get there one has to go all round the lower, wind-swept lake, and the children remember that on the northern shore a great belt of trees has been cut down. The children saw the German prisoners going in lorry-loads to do the felling; this summer there was a Canadian forestry corps encamped in the woods. Now the place that was wood is all clear—even the stumps and roots that were standing about on their heads all over the clearing are gone; and this is why the north-easterly wind is ruffling the lake.

"The upper lake is always a still, shrouded pool. Nobody boats on it; it is not weeded; will-o'-the-wisps haunt it; the trees press high and close around it, making dense shelter and shade. On this lake the whole skin of ice is intact. All over the surface of the ice fallen leaves are scudding, advancing from shore to shore in companies and battalions, turning, retreating, returning whence they came. Dust-devils and whirlpools and waterspouts of leaves form and unform themselves; all at incredible speed; the air filled and reëchoing with their light, dry, tinkling song. The children are enchanted—never did human beings skate like

this. On this lake no one ever skates, for there are currents which make the ice treacherous. So here the teacher and the children all take fir-cones and send them flying and skimming across the ice. As they go they make a ringing sound, which echoes from the wall of trees. When stones are thrown instead the noise is much louder, rising almost to a scream. The children at this age are impatient of explanations. But the teacher is convinced that they see and hear far more than she does—a million invisible, inaudible things. When the half-gods go, the gods arrive. Fairy-tales lose some of their force when the children come to life and become fairies themselves."

There are people who think that the Montessori schools will not teach enough, and there are also people who fear that they will teach too much. "These delicate brains that you are training," said a French gentleman to Dr. Montessori, "these fine ears, attuned to every faintest sound: how will they ever learn to support the uproar of our Paris streets?" "My dear sir," replied Dr. Montessori, "they will learn to support it by walking through the streets of Paris twice a day, on their way to school and on their way back from school." Children are better able to take care of their faculties than we imagine, and we need not fear to be over-refining them by making them alive and sensitive to all that they

hear and see. The child who is awake to movement and color and texture and sky and wind and stars will not be starved of nature even in a city slum.

CHAPTER XV

LIBERAL EDUCATION

In a series of Monday lectures at St. Bride's Institute from September to late December, 1919, Dr. Montessori developed, for the benefit of the students of her training course, what is likely to be a final settlement of the age-long controversy about "liberal education." She solves it as Aristotle solved it, and as the Labor Party in England, with its clear vision of the uselessness of the utilitarianism that we imported ready-made from Germany, is solving it to-day. Education must be super-civic, and must aim at no stated end. As Dr. Montessori said a few days ago, answering the question that is incessantly put to her about English *versus* Italian children:

"There are things—roots of the construction of the mind—which are common to all mankind. What I have developed in my method serves these fundamental needs. In fact, this method does not touch upon any particular. Whether the children we are dealing with have a special

country, special national customs, does not come within the range of this that I have done."

The test of a liberal education, according to Dr. Montessori, does not consist in what is done in the schools, but in the way in which, and the motive for which, it is done. She revolves into a unity the fallacious dualism of the *Gymnasium* and the *Realschule,* of the *Realgymnasium* and the *Technische Hochschule.* She has no mercy on any one who sets out, with any intentions whatsoever, civic or otherwise, to tinker a *Teilmensch* out of what God intended to be a man. But, in her system, the liberally educated man will not necessarily be a "brain-worker." In fact, if a man turns out to be simply and solely a "brain-worker" he will not, according to her, be liberally educated at all. The elements of all manual activities as well as of all intellectual activities must enter into the liberal scheme of life. Every school task must involve a complete cycle of thought and action, in order that in adult life all theory shall be not only founded on, but permeated with, fact.

The seven liberal arts have, in fact, been stretched by Dr. Montessori to include everything that God has allowed man to do. Since school hours are limited, the function of a school that is to include everything is, obviously, not

to teach subjects, but to assist the faculties to growth. The Montessori child, with this idealistic education, is the most practically efficient person on earth. The didactic material is a stuff to try the soul's strength on, and the soul works not through the eye and brain alone. The engineer who knows no poetry and the savant who cannot light a fire or keep his accounts are all alike uneducated in Dr. Montessori's eyes. The intellectual, without the use of his hands, is as illiberally educated as the manual laborer who does not think. I discussed this point with Dr. Ballard, and he agreed with me that it is probably not possible to argue this question with any person in whom fine skill, of one kind or another, is undeveloped, because the corresponding faculty of mind also lies dormant. It is probably no more use talking of craft to a man who is in no sense a craftsman, than to discuss music with the stone-deaf or color with the color-blind; and, since abstractions have been to a great extent the bright child's only food in school, nearly every one who thinks thinks "brainishly." Salvation has come in some degree to a few through the fine use of language, which is in some sense a craft, and will be more so now, by the Montessori grammar system, where words acquire an exact and actual value for the child.

The tendency of all education hitherto has been

to divide men into two classes—one attached to the abstract, and the other to the concrete. Hence the gulf between the man in coat and the man in shirt-sleeves. But to the child, as to the craftsman, abstract and concrete are one. There is no real dissociation, and there never need be any dissociation for us, in that universe which Bergson has led us to conceive of as an interpenetration, which all our instincts claim to be a unity. As Dr. Ballard said once to a gathering of exclusively literary people, if manual work is so disgusting as literary people think, then they ought not to shirk it and make other people do it for them. But it is not. The child, if given the means, and left alone, is no snob. It wants to try everything. It does not sweep the floor because it is going to be a domestic servant, but because every one at some time needs to have swept, if only to be able in the future to think accurately and not make sweeping assertions, or believe that things one does not care about can be abolished by sweeping them aside. The point of view of the person who does things is radically different from that of the person who does not.

At the close of the third public lecture at the Kingsway Hall, Dr. Montessori summed up the matter in a few words:

"Education," she said, "is a work of self-organization, by which man adapts himself to the

conditions of life. We find the beginnings of self-organization for the child in the works which by us have been considered to be the humblest and lowest forms of work—the exercises of practical life, the putting of the environment in order. These things coördinate the mind and fix the attention in a simple manner. They are a necessary preparation for subsequent constructive work."

Dr. Montessori knows very well that all this is too primitive to catch the attention of those psychologists who seek after complicated things to the neglect of the simple. "Educators ought surely," she said to me the other day, "to understand that I, too, have studied educational theory in all its complexity just as they have. If, in the end, I have put aside the complicated and come down to the simple, surely any one ought to be able to see that it is because, after a lifetime of study, I am finally convinced that the simple things which have hitherto been neglected are the most vital."

As an unerring practical psychologist, Dr. Montessori scarcely answers any of the current criticisms of her method, because she knows that almost all of it is vitiated by the "sedentary" outlook of the average person who writes. She believes it to be a mistake that the early training of boys and girls should be different, and in her

schools the boys and girls, equally, share the responsibility of the housework, and the preparation of meals. She gave a lecture recently at St. Bride's, from which I gathered—though one cannot "corner" her on this subject—that she believes, literally, that in order to be able to concentrate fruitfully on any serious work we should all begin the day—man after his kind, and woman after her kind: the judge, the duchess, the philosopher, the schoolboy, the trade union leader—by making our own beds, and setting our own rooms in order. Las Casas said that Napoleon's ideal of national efficiency was the old Roman ideal that every soldier should have his own hand-mill and grind his own corn. There are innumerable politicians, thinkers, writers, in whose thought, although it is obviously warped, it is almost impossible to find the flaw—this is it: there is no flaw in the reasoning, but the whole man is subtly vitiated by the lack of the point of view which he lost with that humble action that he never did, never even began to be able to do. One may think, for instance, that one knows the working man's point of view, but the working man knows that almost no writer has ever known it. The working man, indeed, suspects writers of "wangling" all things, to conclusions which are private and non-universal, and, in revolt against what he takes for a conspiracy on the part

of the writers of history, is setting out at this moment to rewrite history, and reconstruct economics from another partial point of view. But when the Montessori generation is grown up, there will not be a man alive, whether learned or unlearned, who depends on others, who makes work, who finds work irksome, who is incapable by his education of understanding how another person thinks and feels.

CHAPTER XVI

A NEW THEORY OF WORK

Among Dr. Montessori's most valuable gifts to the world has been her theory of work, based upon observation of the way in which children, left to themselves, approach a task and carry it through. In one of her lectures to teachers at St. Bride's Institute, Dr. Montessori said that there had hitherto been in the world two prevailing conceptions of work. The one conception is to regard work as the curse of Adam—a burden too heavy for man to bear; the other conception is of work as a means of production. The combination of the two ideas may be summed up in the text, "in the sweat of thy brow shalt thou eat bread." All social trouble springs from this paradoxical conception of labor as a thing necessary to our existences, but which, at the same time, must be avoided. The ideal of man has become the acquisition of wealth, so that he may sit in idleness and cause others to do the work which he abhors and finds fatiguing. The ideal of the laborer is to work no more.

But medical investigation of the phenomena of fatigue is gradually bringing about a different attitude on the part of humanity. Illness and exhaustion have been found to arise from "too little to do" more than from overwork. "Work *plus* interest," or, rather, "work *plus* impetus," is virtually a panacea for all the lesser human ills. So that we have, to-day, this third conception of work as a necessary function of our being, a thing which we must give off constantly in order to keep ourselves in a state of health. All children tend to work incessantly. Any mother knows that a young child, as long as it is awake, is never still. It is perpetually looking, perpetually touching, hearing, incessantly solving problems. But it is all on a very minute scale and is all, to us, very easy and primitive. We have to come down off our stilts to realize what difficulties children are overcoming every moment of their lives.

The task of the Montessori school is to slow the child down, not to drive it—to give it easy steps to climb instead of steep ones; peace and leisure for climbing them in the place of hurry and rush. It is also to give the child "heaps to do." As Dr. Montessori says, our only idea of being kind to children, hitherto, has been to stop them from working. But the child, without occupation, is starved. I spoke to Dr. Montessori of

the state of things that prevails in Eastern village life, where the children have a finger in every pie: where every one is kind to them, as only semi-civilized folk are kind: where all little boys play with their father's tools, unconsciously learning their father's trade. "Ecco!" she said, "that is just what I mean." The child ought not to be made to work, but it ought not to be shut out from helping if it wants to help. There are many ways in which little children can enter into the workaday life of the kitchen, the garden, and the house, but our tendency to-day is to segregate them, to provide them with toys and kindergarten occupations, which have no sense in them and do not satisfy the child because they have no sense.

The Montessori apparatus holds the children because there is so much that they can do with it. But the reason why they want to do those things is deeper to seek. By means of the apparatus it gains powers—powers of vision, of discrimination, of judgment in a hundred spheres, all of which it applies to the facts of life: "The world," says Dr. Montessori, "which is much richer and more logical than anything we can conceive, will complete the child's education for it." All art, all craft, all invention, all manufacture, lie ready for the hand and brain and spirit to exercise themselves as soon as they have

grasped the rudiments of self-organization through these simple means that the didactic apparatus provides. All through life spontaneous work is educational, just as all education consists in spontaneous work.

The whole of the Montessori method is permeated with the sense of the joy of work, and also with the sense of the value of leisure. Since the children were free to do as they liked, and at the same time had the possibility of unlimited occupation, Dr. Montessori was able to observe the evolution of cycles of work, and to make graphs illustrating them, which are to be found in her books. An essential part of every cycle of work is a period of what an untrained teacher might take to be idleness, when the child sits about, or looks out of the window, or watches the others. As the work of a school steadies down to regularity, these work and rest periods of the individual children steady down also to such a constant rhythm that experienced teachers do not trouble, knowing that presently the child will "set to." Signorina Maccheroni has described to me a phenomenon of tension of waiting for the teacher to come and explain something, which she believes to be an essential part of work, and one of the reasons why a class of forty with one teacher gives better results than a class of twenty, with two. Many of these observed phe-

nomena are foreign to the psychology of education as we understand it to-day.

The children in the Montessori schools not only display a great love of work, but after it is over are not tired. A small child will go through an exercise involving an immense amount of concentrated attention for its age and at the end will mix up the material and start working out the same problem again. After it has done this perhaps forty times it will sit back in its chair, its face radiant with satisfaction, at peace with itself and all the world. Then it will of its own accord put back the material in the cupboard, roll up the rug it has been sitting on (for any of the work can be done sitting or standing or lying about, as the children prefer)—and perhaps begin to help its neighbor, or run to the teacher and fling its arms round her knees in tacit gratitude for all it has been allowed to do.

From what she has seen in her schools for the last twenty years, Dr. Montessori deduces what is also an established fact in modern medicine, that it is not work itself, but the dislike of work, that makes people tired. Mankind has labored for centuries under a curious delusion. Work has, as I have said, been considered by him as a necessary evil, a means of producing the necessities of life, and happiness has come to be connected with the possession of riches, which will

enable the rich man to make some one else do the work while he sits still.

But modern medicine is discovering that disease, and especially nervous disease, is just as prevalent amongst the idle as amongst the overworked. The children in the Montessori schools, who work incessantly, are happier and healthier than other children. Apparently, says Dr. Montessori, the truth about work is this—that it is a simple, natural function, a thing we need to do in order to keep well, just as we have to breathe to live, and as our hearts have to beat. This truth is only beginning to dawn on the present generation, but when it has dawned completely there will be no more labor troubles, no more strikes. The only unfortunate man will be the man who has nothing to do. When work is a privilege for all, no one will "make work" for any one else. The well-to-do will no longer consider it an advantage to be served, nor will the poor think it a hardship to serve. But the day of all these wonders is not yet. Only the germ of it is here with us to-day in the happy, industrious children of these schools.

As for trade-unionism and strikes, those who can see the State schools of to-day with anything of Dr. Montessori's clear, far-sighted vision know that with our present methods of education, governments in all countries are manufacturing

trouble for themselves. Psycho-analysis has shown the inevitable results of repression and coercion of children, however benevolent. Not by the mildest of Prussianism can we bring up a generation that will love authority and wish to coöperate with it and further its aims. The rigidity, moreover, of the time-table and the arbitrariness of the school curriculum all tend to produce a type of worker whose interest is not in the work done but in the time which it takes to do it. When the class is over, the work is put away, however much any boy or girl may be interested and wish to go on. So when the whistle sounds the shift downs tools, however vital it be to the workers' welfare, and to the life of the nation, that the particular effort on which that shift is engaged go through.

CHAPTER XVII

THE EDUCATION OF THE ADOLESCENT

SINCE Dr. Montessori has only worked out her method, experimentally, for the first eleven years of a child's life, and since immense changes occur in the child-psyche with every fresh faculty that is developed—the baby in the cradle being a different creature from the crawling child, the crawling child different from the "toddler," the two-year-old from the four-year-old, the seven-year-old from the ten-year-old—there is, as Mr. Claremont has said in his pamphlet, *A Review of Montessori Literature,* no such thing at present as a Montessori method for children older than ten.

"The freedom given," he says, "in schools professing an 'atmosphere of freedom,' or which, as is sometimes claimed, adopt the 'Montessori Principle' but not the Montessori apparatus, is but a myth . . . and this is inevitable until the means of permitting such freedom are devised."

In the institute at Barcelona some progress has been made with the method as it may eventually

be applied to secondary schools, and Dr. Montessori hopes to go on with this in the intervals of the work with the tiny babies, on which her heart is set. She has every aspect of education in mind, in connection with everything that she does, but she wants, above all, collaborators: secondary school masters and mistresses who will master her basic conception of the "average psychological ages," and, experimenting on that basis, let her know their results. Just as there is an average age when the child, if allowed, will eat, and breathe, and dream alphabets—when even his food does not interest him so much as the inscription, "A Present from Brighton," on the plate—so she believes that there is an age for making Latin verse, an age for sculpture, an age for trigonometry, an age for woodcraft, an age for cookery, Shakespeare, and the observation of the stars. What the school has to do is to provide the elements of all these things so that the child may move freely among them and choose what his soul desires. On the observation of what he does we can base our method.

At Barcelona, and at Mr. Grant's school at Harpenden, experiments will be carried on in a direction that will, she hopes, eventually approximate secondary education to that best type of university education where the student is free for research and works not for examinations but

for the preparation of theses. Dr. Montessori is well aware that work on these lines is being attempted in many schools both in England and on the Continent, and welcomes gladly any news of such experiments that reaches her. There seems no reason why instruction of this kind should not replace the often perfunctory schooling of our own public schools, without disturbing the atmosphere or tradition. It cannot be too often repeated that it is our methods of instruction that Dr. Montessori is seeking to improve. She does not want, for instance, to belittle the "corporate spirit," but she labors under no delusion that any corporate spirit other than the common spirit of revolt can be fostered by class-teaching as it now is. I am often asked how far she encourages team-work, and the answer is that she "lets it happen." So far as children can work better in groups they tend to do so, and there is, in fact, a good deal of natural grouping in a Montessori school.

I have heard the doubt expressed whether free opportunity for research will be appreciated by the ordinary child. If not, it is not a condemnation of the new methods, but of the old, that make the ordinary child lazy and dull. The point also arises: whether the Montessori method fits or unfits children for the ordinary secondary schools. Dr. Montessori tells me that the pass-

ing of entrance examinations to such schools is nothing, because the children are so intelligent and have such a broad basis of reasoning power, that they can quickly be "crammed" if necessary, and as long as the present ridiculous examination system persists. I am occasionally told that the Montessori children are "backward," and I think that this probably means that they have no parrot-knowledge, and no glib facility in displaying what they know. The whole of the Montessori system is opposed to anything in the nature of showing off or working for results. If the teachers in the secondary schools are sympathetic, they find the Montessori children charming pupils, eager for knowledge, and possessed of more critical faculty than other children of their age. They have to be allowed to work, however, and to work undisturbed, and the ordinary schools sometimes cannot supply enough material to satisfy them.

Dr. Montessori told me of a little girl who, promoted to a secondary school, came home and asked her mother if she might take needle-work to school with her, because the teachers did all the lessons and she had nothing to do. "Oh, they *do* waste my time!" moaned a little Montessorian in an ordinary kindergarten in Edinburgh.

The psychological age for learning mother-craft Dr. Montessori believes to be twelve or

thirteen. The little girls of the poor have to mind the baby, anyhow, but would do it with more pleasure and profit if they were shown how. No doctor really likes a growing girl to be sitting still all day doing lessons. Yet growing girls' minds must be occupied. At that age nearly all children love a baby, and will devote themselves to learning baby ways with a more single-minded devotion than can ever inspire them later, when a thousand other conflicting attractions have come into their lives. Dr. Montessori has found little girls of twelve to be perfect "Montessori teachers."

Dr. Montessori never pushes a truth to the point of absurdity or even of laughableness, but would not deny that some training of this kind even for boys would diminish the irresponsibility of the male population, solve some of the growing boys' as well as the growing girls' problems, and help to produce that ideal type of father who can give baby its bottle at a pinch and is not ashamed of pushing the pram. The human embryo shows little differentiation of sex in the early stages: yet no one is anxious on that account lest it should develop into something that is neither definitely a boy nor a girl. But in a family there is often great fear that a boy will not become manly if he knows much about domestic things. Yet in later life (by common

standards of virility) the more obvious "man" is not the helpless type, but rather the able-bodied seaman, however rough, or the common soldier who sits in the sun by the barrack-room door, knitting himself a football jersey, after he has finished scrubbing his canvas clothing, and the pots and pans in the cookhouse, and the barrack-room floor.

As to the teaching of sex-hygiene, Dr. Montessori believes that if necessity exists to-day for formal teaching on such points, it is a proof of the fundamental falsity and artificiality of our outlook upon life. She told me of a town child in America who had never seen a cow milked, and who, when she first found out where milk came from, at the age of nine, was hysterically sick at the thought of having drunk milk all her life. In the same way life tends to divorce our children from all the daily facts of life. Yet the child of four or five wants to know how and why a hen lays an egg, in all sweet innocence, just as it wants to know why "i" has a dot, why "l" has none: and at each psychological age asks a hundred simple questions which if simply answered, will bring it up thinking little about such things, knowing, half-instinctively, all that it needs to know.

CHAPTER XVIII

THE NEW CHILDREN

When Dr. Montessori gave her lecture (interpreted by Dr. Crichton Miller) before the medical section of the British Psychological Society, the keynote of the meeting was the question whether the work that she is doing will eventually make the work of the "nerve-specialist" superfluous. As. Dr. Crichton Miller said to her and to me, when the Montessori system is established in all schools, almshouses will have to be set up for the psycho-analysts. For the troubles that psycho-analysis discovers and disperses are such as, if human growth followed its normal course, should not occur. The Montessori children have so much "way on"—the current of their life runs so deep and strong, that there seems no reason why they should go aground or drift into backwaters. If any doctors wish to disprove this they will assuredly not fall into the error of basing their assertions on the pre-Montessori child. The child who is allowed to grow freely, and to have all the solid concrete

material it wants to exercise its imagination upon, is not the child whom former pedagogists have described to us.

"The child," says Dewey, "lives in a somewhat narrow world of personal contacts. Things hardly come within his experience unless they touch, intimately and obviously, his own well-being, or that of his family and friends. His world is a world of persons, with their personal interests, rather than a realm of facts and laws."

Dr. Montessori has found this preoccupation of children with the ways of other people, and especially older people, which had seemed so universal in children, and to which Jung has traced back so many human ills, to be an artificial preoccupation, induced by direct adult suggestion in an unformed mind which has been given nothing but personal interests to exercise itself upon.

Dr. Montessori gives one the impression of a shepherd in Israel who has "happened" upon the summit of Pisgah in the course of the daily round, and who, not being a prophet by profession, scarcely knows how to tell all she has seen. The medical world of a decade or two ago ceased to be interested in her when she took up the study of normality. One of her own chiefs in the medical schools told her, in so many words,

that she was lowering the prestige of the medical profession by making of herself *"una maestra di asilo infantile."* Believing her to be an educator and education an empiric affair, outside the scope of science, scientists have scarcely yet waked up to her existence. A hundred years hence they will want her back. For, whatever reluctance there may be to accept her conclusions, nobody can deny that from the merely encyclopedic point of view she has made a more minute and a more extensive study than any person who has yet lived, of children normal and abnormal, of all ages, types, classes and races. She herself feels herself almost hopelessly inarticulate in the face of all there is to say, and of all that yet remains to be proven.

"I don't now what to do," she said to me the other day. "There is so much of it, and nobody will ever collaborate. Either they accept what I say, and ask for more, or else they waste precious time in criticizing. What I want now is a body of colleagues, research workers, who will examine what I have already done, apply my principles as far as I have gone, not in a spirit of opposition or conviction, but as a matter of experiment. Then they can help me with constructive criticism, after, not before, the event. I have never yet had any one—starting from my own previous body of knowledge—work shoulder to shoulder with me in a scientific inde-

pendence. Now that doctors and psychologists are beginning to take an interest in normal children, perhaps some of them will help me. At present I am in a kind of isolation, which is the last thing I desire. *Questo lavoro e troppo per una persona sola—sono troppo sola nel mondo.*"

Unfortunately for Dr. Montessori, those who have had the handling of children in bulk are in a sense unfitted for the examination of the individual child. For the child that the schools of to-day know is not the real child, but a child drilled and suggested into artificiality by the adult. The human child has, since the dawn of human reason, suffered under one great disadvantage which other growing creatures escape. Man is able consciously to measure his offspring's development. This consciousness is a comparatively new acquisition of man. It is useful for so many purposes that man has pardonably come to believe it sufficient for all purposes. Thus he has fallen into disastrous errors. There are innumerable things of which we should judge with the unconscious soul through intuition, not with the conscious mind through reason. If we think logically about education, we are bound to leave out a million factors. We shall never see a reason for the irrational. Yet the irrational plays a most necessary part in human growth. As Dr. Montessori said to me a few days ago,

although one eye is enough to see with, yet we have two; although it would be more convenient to be clothed with fur, yet we have none; although the essential parts of a flower are pistil and stamens, yet without the corolla there is no flower. One cannot count and define and measure everything. But from the fact that we are able to observe certain phenomena connected with the child's development we have come to believe that we understand it all; that it is we, moreover, who are responsible for his growth. At Harpenden, Dr. Montessori described how modern biological knowledge removes from us this responsibility that we have so long and fondly believed to be ours. The conception of the "transforming environment" has long since given place, for biologists, to the conception of the "helping environment." That is to say, that though we cannot create growth we are able, by withholding proper food, to stunt it. We can stunt it, moreover, in a subtle way by not allowing room for growth to take place. "If we have preconceptions as to what growth should precisely consist in, those very preconceptions may hinder the growth."

The child grows because it has characteristics, like every other living being. Which of us by taking thought can add one cubic unto his stature? If the child tends to become strong in

character, active, good, intelligent, with the use of eye, ear, and hand—social, serviceable, literate —it is because those are the proper characteristics of a well-grown man. This consummation will take place if the means are provided, but it will not take place through any direct effort of the adult. The effect is not predetermined in the cause, but for all we know the preceding train of action may be consequent on the effect. If all be, as Bergson has taught us, an interpenetration, a simultaneity, which for private reasons we have pigeon-holed and considered piecemeal, the past may come after the future just as well as the future after the past. All may, in fact, be happening at once. Though the brain cannot know about the future, yet life itself evidently knows about it, since the untaught plant behaves, in the seedling stage, in that manner which will lead it to expand and flower. Child life has the same instinctive knowledge as plant life.

This theory of the inherent unconscious wisdom of the individual life, apart from the acquired conscious knowledge of society, is borne out by the observations of Dr. Montessori and her assistants as to the types of work which, under free conditions, hold the children's interest longest. There is, she is convinced, no need for the teacher to press matters upon the children's attention, or to be anxious lest they should grow

one-sided. The child, if left alone with the elements of all things, will choose out the needful and absorb and digest it, just as surely as the seedling can be trusted to draw from the soil the sustenance that will help it to grow into a fir, or an ash, or an oak. Provide sufficient material and allow free choice of action: safeguard the action to a finish: these are the duties of the teacher, and life can be trusted to do the rest for itself.

The phenomenon of the fixing of the attention under free conditions was what guided Dr. Montessori in her choice of material and of the method of its presentation. The "cycle of work" shows a constant outline as soon as children have settled down to the school environment. The child on first entering the class goes to the cupboard and chooses a task, often a repetition of something he has done before. To this task he applies himself for a short time, after which he leaves it and moves about the room, or rests, or watches the others. Then he returns to the cupboard and gets out a task which he has not done before, and works at it probably for a long time, strongly attracted, though not necessarily silent, and certainly not motionless, for work naturally involves movement, exercising the "whole man." This second spell of work Dr. Montessori characterizes as *il gran lavoro*. If the teacher is impatient

for it to begin, it is apt to be spoilt. By the refreshed and happy state in which these periods of work leave the child, the teacher can see that it is in these periods that the personality makes growth—by which is meant the whole personality, and not any one side of it. The movements by which the work is carried out are what constitute mental rest. The teacher need not be anxious as to the content of what the child does in these periods, or wonder whether he is "learning anything." There need never be anything to show, except that the child is absorbed at the time and refreshed and happy afterwards. Whether we understand the process or not, something is being taken in which is being incorporated in a vital manner into the tree of life. If hand and ear and eye and brain are at the same time being shaped to what we can see to be useful and godly ends, that is because it is the nature of man so to do, and not otherwise.

Man is so much attached to the conception of original sin that he is not likely on the mere word of any one person to believe that the old Adam is a figment—that, in fact, there "ain't no sich person." Yet this incredible fact, that the children are all children of God, and none of them children of Satan, is being demonstrated daily in the Montessori schools. The children do not want to be naughty. It tires and bores them to

be idle. If the heavy deterrent force of adult interference, of unfavorable adult suggestion, is removed, then the children of their own accord work hard, seek after knowledge, coöperate with their elders, and dwell in helpful harmony with one another. All this happens as automatically as the same phenomenon happens in a forest, when a sapling is taken out from under the sunless, root-bound shelter of surrounding grown trees and put out by itself, on the lee side of the trees, to draw nourishment freely for itself from soil and sun and air. When one realizes that every normal child might be a "new child," that no ordinary person need fail in life if he were properly brought up, one understands Dr. Montessori's "divine impatience" that the truths which she has established may prevail.

CHAPTER XVIII

THE ENGLISH NURSERY SCHOOL

JUST as Dr. Montessori was preparing to return to Italy, having given her message to the English people, a book on *The Nursery School* was published, the work of that great English social reformer, Miss Margaret McMillan, who claims to have based the methods she has used upon the work of Séguin. Miss McMillan also claims to educate children "through the imagination," and has laid herself open to the criticism of vagueness on the ground that no two psychologists have ever given to the word "imagination" one sense. Dr. Ballard found seventeen totally different connotations of this word to be in common use. My own limited research in this direction convinced me that the word "imagination" is in need of a rest, and I was confirmed in this opinion by the fact that the psycho-analysts scarcely use it at all, but have split it into a number of more exact terms, from unconscious memory upwards through a chromatic scale of delicate definitions.

The nursery-school movement in this country owes more to Miss Margaret McMillan, probably, than to any other one person. It is she who has shown up the need for the nursery school in strong light, reflected from ugly facts. But the nursery-school movement is hanging fire. On every hand one hears that the local authorities, in the present state of their finances, cannot bear the expense of nursery schools. In any case, one is told only a very few of them can be set up in the poorest districts of large cities. The President of the Board of Education said to the present writer that equipment was so expensive and the local authorities so crippled by the increase in teachers' salaries, that reform in the nursery-school direction must perforce wait. "We must not be impatient," says Mr. Fisher. "I think we shall have to wait until we can do it really well" is the opinion of members of more than one great education committee. But the Inspectors of Schools, who know most about actual conditions, and who know how urgent is the necessity for the nursery school, believe that it will be attained by reform of the present infants' departments of elementary schools or not at all. And the road to reform of the infant schools is the adoption of the methods of the Case dei Bambini.

How over-emphasis on the English "nursery"

idea, with all its excellences, has brought about the existing attitude on the part of authorities towards the nursery school, will be clear to any one who reads Miss McMillan's book. Miss McMillan is a social reformer first, an educator second. Living in the midst of submerged humanity, her ideal has been to bring the submerged portion of humanity up to the existing standards of living. The nurseries of the well-to-do are the model for the nursery school as here conceived. Give the slum child, says Miss McMillan, the same environment in babyhood as the rich child—fresh air, flower-gardens, warm baths, good clothes, rest, educated nurses, loving care—and all will be well with him. But at this raising of the slum child to "standard" Miss McMillan stops short. She has catered for the slum child, and scarcely at all for the children of the decent-living, or of the lower middle classes. The rich child has had all these things already that she claims for the slum children, and yet falls far short of the millennium. The working man thinks that such upbringing does not produce a type enormously superior to his own.

Dr. Montessori's message is one of hope for immediate realization. As a doctor she never prescribed impossibilities, and as a reformer she does not indicate reform without also indicating

in detail how it can be achieved. She cares as little for "standards of living" as did St. Francis. In fact, in Italy, beyond the simple essentials, domestic luxury is little cultivated, whether in palace or cottage. Saints and patriots, poets and painters grow easily in Italy, whether in garden or street, country or town. The national Church, for the last five hundred years, has inculcated the ideal of poverty. The extremes—material luxury at the one end, and dirt and horror at the other—of our industrial city system have not far invaded Italian life. Neither Dr. Montessori nor any of her followers can see any sense in the general demand for expenditure in connection with English nursery schools. It is true that no parallel exists in Italy to the squalor and gloom of our own average elementary school. The elementary school in Italy is a democratic institution frequented by all, and possesses sufficient light, sufficient air, hot water and baths. But the unsuitability of our elementary schools as environment for children, so strongly emphasized by Miss McMillan, does not do away, for Dr. Montessori, with the advisability of getting the babies of the populace into them, away from the hurry and noise of adult life, and the dirt of the pavements and the streets. If material cannot be bought, the teachers can make something to go on with; if furniture is expensive, the chil-

dren can work and play on rugs laid down on the floor. Where two or three children are working together in peace and harmony, there is Christ in the midst of them, even in a bare room. Not by our efforts, but by the natural innocence and goodness of the children the atmosphere is created. The amenities of life can follow as means permit.

Miss McMillan's work has been a great protest against the existing social order. Parts of her book are painful, and at the same time most eloquent of the necessity of what she has done. With a Christ-like love and persistence she gathers the trampled flowers of childhood out of the gutter—often the same child again and again —and nurses them to life in the oasis she has created for them in the desert of East-end slumdom. She and her brave little company of workers wage war against one symptom after another of an unhealthy social condition—drink, brutality, coarse enjoyments, "dirt diseases." They go as missionaries and as learners into filthy cellars where children are being born and bred. They reason with mothers who spend their nights drinking and fighting, while three-year-old children are locked out, crying, in the rain. Some of the children go home well on Saturday and come back ill on Monday, week after week. Almost all the children contract some disease in

the summer holidays, when the school is shut. All Miss McMillan's teachers learn to be social workers.

"The grim street, the public-house and pawnshop area, the drunkenness, the cruel rack-renting, the epidemics and high death-rate, concern the teachers just as bombs and gangrene and broken limbs concern the nurses in a war hospital."

Miss McMillan, like all social workers, attacks established disease. Dr. Montessori, as a professor of preventive medicine, is working rather to cut at the roots of that evil which comes, in the long run, from lack of discrimination, from wrong senses of value. Her aim is not merely to produce a worker who will not submit to the old evil conditions of industrialism because he has known something better. Throughout all classes of all races she is working to produce finer perceptions, finer moral sense. Children who have grown up in nurseries and gardens have still become ignorant agitators, heavy oppressors of their kind. But in what is often the poor austerity of the Case dei Bambini we may believe that those are being bred who will, as Prof. Foster-Watson has said to me, not "make" the better social order, but "be" it; that a generation of just men, eschewing evil, is growing up to take charge of the world.

APPENDIX I

AN ENGLISH WELCOME

THERE was a great gathering at the Savoy Hotel on the 5th of December, 1919, when the dinner took place which represented England's welcome to Dr. Montessori. Mr. H. A. L. Fisher, President of the Board of Education, occupied the chair, Dr. Montessori being seated on his right. Special messages were sent by the Italian Royal Family. The Syndic of Naples, where the State schools are being reconstructed on Montessori lines, wrote as follows:

"I am glad to have an opportunity of testifying to my feelings of high admiration and deepest devotion for the great educational work of Dr. Montessori. This illustrious Italian woman has known how to realize a type of school where the pupil receives education indeed—healthy, harmonious, and complete. What so many eminent men have sought with passion has been found by a woman with a keen mind and a great heart. My greeting to the mothers and to the English educators who have been able to understand and honor worthily the great Italian educator."

Telegrams were received from the Syndic of Rome and many members of the Italian Government; from the American Minister of Education; and from members of the Catalonian Government in Barcelona; with letters from the President of the Catalonian Senate, and from friends and supporters of Dr. Montessori in Spain, America, and in all parts of Italy.

The loyal toasts having been duly honored, Mr. Fisher proposed the health of the Italian Royal Family. He said they had followed during the war the career of the King of Italy with profound admiration. His Majesty shared all the hardships of his troops at the front, he never failed in personal courage, endurance, and steadfastness, and he had won new laurels for the famous house of Savoy. His Queen had always been foremost in all good causes and he (the Chairman) had the pleasure of announcing that his Majesty sent them a special message of sympathy that evening for their illustrious guest.

Signor G. Balsamo, Secretary of the Italian Embassy, responded and expressed the deep regret of the Italian Ambassador at being unable to be present at that dinner in honor to one who had devoted all her energies and activities in the interest of childhood.

Sir James Crichton Browne proposed the health of the guest of the evening. Dr. Montessori was a member of the profession to which he belonged, and he was sure that had she not been a doctor she could not have accomplished her momentous task. It was her scientific knowledge that had enabled her to infuse new and vivifying influences into a somewhat cadaverous routine. To him the supreme merit of her procedure was that it was calculated to eliminate much pain and strain from primary education. Many of the follies and vices of later years had their root in the petty tyrannies practiced and the trials and terrors endured in early childhood.

Montessori schools had sprung up in every civilized country, and Dr. Montessori's text-book had been translated into English, French, Russian, German, Spanish, Rumanian, Danish, Dutch, and Chinese. The Montessori lamp had already freely shed its light on this country and promised much brighter illumination. There were in England a hundred schools into which Montessori methods had been introduced and in a much larger number they were being experimentally tried. For Dr. Montessori's four months' training course in London 250 students were enrolled, and these were selected out of 2,000 applicants. The three-lecture course given in November was attended

by about 1,500 teachers, and the popular lecture in the Central Hall, Westminster, by 2,700 people.

Support and encouragement were now pouring in on Dr. Montessori from all quarters of the globe, and it must, he thought, have been given to few reformers to see their work prosper so abundantly in their own lifetime as Dr. Montessori's had done. Queen Margaret of Savoy, the present Queen Mother of Italy, had shown her interest in the Case dei Bambini in Rome, and furnished the means to employ five mistresses there. The Queen of Belgium had personally founded two Children's Houses in Belgium. Miss Margaret Wilson, the daughter of President Wilson, had been one of the most active promulgators of the Montessori doctrine in the United States. Pope Benedict had had Dr. Montessori's books placed in the Vatican library, and had sent her his Apostolic blessing.

Dr. Montessori had been deluged with compliments from eminent persons, but he hoped she would not despise the democratic compliment which they wished to pay her that evening. He asked them to drink to her health, and to the success of her campaign here and elsewhere.

Dr. Montessori, who was greeted with cheers, replied in Italian. She said she thanked them for the great honor they were doing her, by which she felt greatly touched; but she recognized that it represented the generosity of English feeling, ever watchful for the good of the children. It represented, too, the traditional courtesy of their great country, always hospitable, always encouraging to any individual who had endeavored to do any work for the welfare and progress of humanity. The splendid welcome that she had had in London, to which that evening's great gathering was a wonderful climax—this would be a memory for all her life. Two months ago Sir George Kekewich said to her that by neglecting the democratic ideal in education—by not throwing open the gates of education to all—a great asset was lost to a nation—lost in the chaos of untaught minds and souls oppressed. On the other hand, to open the gates of the schools to all—that is, to give all the means of developing their own energies—was the best economy, the most paying business of a nation.

And let her add: if the school should become to-morrow a true protection to humanity, watching over human development—such a school would be as it were a mother of the nations. It would be impossible then to conceive of the progress of civilization, without seeing the figure of education always before one's eyes, as the first and most fundamental factor of all social reconstruction. The State was the father of the nation, but if the State and the school were unwedded there could be no children; nothing could come of it.

There were therefore two questions—that of giving far more possibilities for education than existed to-day—and the other, not less important, to reform the school within itself—to improve its methods in order that it might serve truly to mother free men, freely developed.

It was this second question, the question of reform, that had brought them together there that night. The method that was called by her name represented a reform of the school. She wanted to take that occasion to draw their attention to the real authors of her work, and to tell them that the honor they were doing her that night was due to others, not to herself, to a score or so of tiny children—poor people's children—gathered together out of the slums; tiny creatures, some two years old, some three, four, five. It was they who had spoken with such eloquence, whose cry had so gone up to heaven that they had been heard by all nations, by almost all the races of the world.

All true progress towards the knowledge of living creatures had been gained by the observation of the simplest forms of life. In the simple forms were clearly revealed those facts which in the more complex forms were hidden from analysis. The study of simple forms of life revealed the truths of life like the key of an enigma. Not only the body of man stood in need of embryology, which should illuminate the story of its development; human society needed also to seek the truth in an embryology not of the body but of the spirit. From the laws of development only could we learn what was necessary to man's welfare and establish the life of the community on the firm basis

of reality and of the knowledge of the laws that governed life.

She would thank them now in the name of those little children who actually lived, ten years or so ago, in the wretched tenements of the San Lorenzo quarter and in the Convent of the Franciscan Missionaries, in Rome. They were big boys and girls now, Italian boys and girls, twelve to eighteen years old. In their name she thanked Mr. Fisher, Sir James Crichton Browne, and Sir George Kekewich for their kind words to her. She thanked the honorary Committee of the Course, and her honorary organizer, Mr. Bang. She would thank them all in thanking Sir George Kekewich, and that person whose name stood first on the list of the honorary committee, whose name was very near to her heart, the name of the Ambassador of Italy in England. She thanked all her English students and the pioneer of them all, Mrs. Lily Hutchinson, who, sent to Rome by the London County Council, brought back with her that spirit of well-wishing which enabled this work to be started in the London schools. She thanked Dr. Kimmins most deeply for his kind and consistent encouragement, and through him the London County Council. It was the love of the children that had brought Mrs. Radice to visit her, *"una donna eletta, dallo spirito fiammeggiante."* Finally, they would let her thank them all from her own heart for the help and support which she so deeply felt herself to have received from them. The strength of those who were fighting any battle needed to be renewed, and recognition given them was a pledge of more strength for the future. She knew that she had the merit at least of being a fighter, in what she believed to be the cause of humanity. She thanked the President of the Board of Education from herself and from her colleagues, Signora Anna Maccheroni, Miss Pyle, and Signorina Anna Fedeli, for his kindly presence there that night.

She thanked the English Press for their kindly and courteous reception of her, and, above all, the veteran international newspaper, the heritage of all the nations of the world, *The Times*. She thanked, finally, the Mon-

tessori Society and the honorary committee, which had helped her in all her work in this country.

Let her end with an apostrophe to a Sovereign. In these times they heard from two different camps the same cry—Liberty, independence. What the revolutionaries demanded could be more safely put in practice by the little child who rose up in majesty, to guide them to the earthly realization of the Kingdom of Heaven. To this humble hidden King of Humanity, the little unconsidered child, she paid her homage. (Prolonged cheers.)

The President of the Board of Education, in responding to the toast of "Education," coupled with his own name, proposed by Sir George Kekewich, said they had there that day the great pleasure and the great honor of the presence of the most distinguished educatress of our times. England had owed many debts to Italy. There had been, perhaps, no more powerful political influence in the democratic thought of this country than the influence of Mazzini, and now we owed a deep debt of gratitude to this Italian lady of genius who had devoted thought, sympathy, knowledge and trained intelligence to the needs of the child.

Sir George Kekewich had asked him whether he would see to it that the teachers in this country had power to adopt Dr. Montessori's methods. There were several schools in London where those methods were now currently taught, and so far as he was concerned he was only too glad as President of the Board of Education to encourage. Dr. Montessori was showing them that there were many things still to be learned about education, and they in England who were concerned with the progress of the public system of education warmly welcomed her to this country. They hoped that would not be the last occasion on which they would have the pleasure of meeting her here. Whenever she came she would find the warmest welcome.

Mrs. Moult said she had been asked by other students of the Montessori Training Course to read the following statement:

"We, who have been privileged to study the Montessori

method of education under Dr. Montessori herself, and who are fired with the greatest enthusiasm and filled with the deepest reverence before the wonders of this method as they have unfolded themselves to our eyes; we, who have been teachers in English elementary and other schools, and in whose experience still remains the disappointment and the distress of our failure to achieve the ideals we visioned at the beginning of our life's work; we, who failed because, as we now know, we had deceived ourselves into belief that we held all the requisite materials to work with and all the training and knowledge needed for the tremendous task before us; we wish at the conclusion of our course of training under Dr. Montessori to offer her our heartfelt gratitude for the new hope, the new confidence, she has inspired in us that the teacher's work is not only of the noblest that man can do, but that it can be achieved by us with success, measured in the true progress and happiness of the children and ourselves. We have learnt, as by a new revelation, how to teach children so that the natural laws of child life are given the best environment for development. We have rediscovered how these laws of development act, and how they may be hindered. And, knowing how profound the effect on the future of humanity itself will be the carrying out of all we have learnt from her, we are filled with a great responsibility. We know, and knowing, we cannot for the future pretend to be ignorant; knowing, we feel that we cannot stand on one side, careless or indifferent; we cannot conscientiously follow the same paths as hitherto without a new and glad divergence.

"We are now the possessors of a new power that we can only neglect to the injury of our own souls, and, as we believe, to the detriment, first, of the children and ultimately of the race, because knowledge in itself carries a moral obligation to which we dare not close our eyes. Our responsibility is so acute, and felt so deeply, that we are anxious to discharge it at the first possible moment. But, alas! even as we look around us for a place in which these ideals, clamoring in our hearts, can be practiced, we are checked and discouraged. We are realizing how

infinitely dependent our work must be on outside forces. We need schools, we need materials, and we need other teachers to join us; but at the moment there seems to be nothing to justify the confidence that this great, this redeeming, this uplifting work can be commenced in our land. We know not where to begin, nor when, handicapped as we are by this threefold lack. Very humbly, but as strongly and urgently as may only those who are fired by idealism, we ask to-night for a lead from those who have power, those whose idealism, we know, is not less, and is at one with ours, so that these hopes may not be made futile from sheer lack of opportunity. We ask that some word of encouragement be given us in our new task; we ask that we be not kept long waiting; we ask, indeed, that our enthusiasm for a work which we believe supreme be made use of immediately. We are assured of the success of the method. Dr. Montessori has taught us our part. With the greatest hope and confidence we await the opportunity for its expression."

APPENDIX II

THE MONTESSORI SOCIETY IN ENGLAND

The Montessori Society of the United Kingdom was formally incorporated in the spring of 1912, and its members approved by Dr. Montessori as her representatives in England. In June, 1912, an arrangement was entered into by which Dr. Montessori undertook to train a limited number of students sent out to Rome by the Society from time to time, who might extend the knowledge of her methods in England.

The names of those who formed the original Montessori Committee in England are as follows:

Mr. B. V. Melville, Major and Mrs. Guy Baring, the Marchioness of Bute, Mrs. Spender Clay, Princess Doria, Mrs. Arthur Franklin, Lady Isabel Margesson, Mrs. Meyrick-Jones, Mrs. George Montagu, Mrs. Roger Plowden, Viscount and Viscountess St. Cyres, Lady Dorothy Wood, Mr. D. T. Cowan, The Rev. Cecil Grant, Mr. Bertram Hawker, Mr. Edmond Holmes, Mr. Guy Kendall, Mr. R. W. Kittle, the Earl of Lytton, Mr. Albert Mansbridge, Sir William Mather, Sir Michael Sadler; with Major Baring as Hon. Treasurer, Mrs. Smyth as Secretary, and the Marchesa de Viti de Marco as Representative of the Society in Rome.

Dr. Montessori, after the international training courses held by her in Rome, which were largely followed by American students, went to America, and later to Barcelona, where the Catalan Government has founded and financed for her an institute for research. Dr. Montessori fully recognizes the value of such reforms as have been brought about by those who have endeavored to graft the new teaching on the old. Since, however,

she believes that the old teaching must eventually disappear, with the superseded psychology on which it was based, any institution to which Dr. Montessori lends her name must plainly be one that embodies the whole of her teaching, and her teaching only. Dr. Montessori has consistently on this account declined to approve any schemes for training "Montessori" teachers not under her own control. The present Montessori Society (London), with a membership of over 1000, has represented those who are willing for the sake of pure research, and apart from questions of expediency, to sail for the present at least under Dr. Montessori's own flag.

The work of the Society consists in the assistance of any measures that Dr. Montessori may set on foot in this country in the establishment of classes and study-circles, and in the giving of lectures. An office has been opened at 11, Tavistock Square, with a library, where books can be borrowed and where the didactic material can be seen. The Montessori Society has recently opened a bureau for the registration of Montessori teachers. At the present moment (January, 1919) there is no model Montessori school which can be visited, but many of the members of the Society are connected with Montessori schools and classes in various parts of England. There are also a great number of unauthorized schools and classes, carried on by those who have not studied under Dr. Montessori, but who have learnt the method so far as is possible from books.

APPENDIX III

THE MONTESSORI SOCIETY

At a meeting of the Montessori Society at University College, London, in January, 1919, Signorina Maccheroni outlined the history of Dr. Montessori's work during the years of the war.

"In 1914," she said, "we were preparing a Montessori course in England, which had to be postponed. Dr. Montessori went instead to America. In that same year I myself went to Barcelona, where I opened a small school of five children on March 1. By October 1 we had over 100 children. No sort of publicity had been given to the school, and no prospectuses had been circulated: the parents of the original children told others, who brought their children and asked us to take them. The parents assisted the school better than any business organizer could have done. In October of that year the school was moved to larger premises, and at the same time a training course for teachers was started. Many of the leading medical men of Barcelona associated themselves with the work of the school. After that Dr. Montessori went to California and conducted courses. At San Francisco she arranged a model Montessori school in connection with the World Exhibition, which attracted immense numbers of visitors. For this class, 30 small children were selected from 2000 applicants, and were put under the charge of one teacher. Some one at Barcelona said to me, 'Dr. Montessori must have tremendous faith in her own work to do such a thing!' This is, in fact, the case. The arrangements for this model class were as simple as is the case in all Montessori schools, and the results followed automatically. The public were greatly interested in the

enthusiasm of the children, and one entire day of the exhibition was devoted to explanations of what was happening.

"In spite of the state of the world during the years of the war Dr. Montessori continually received letters from people all over the world, telling her that although they could do little for the time being, they were only awaiting an opportunity to act in support of her ideas. The Municipality of Naples decided that all the public elementary schools of Naples should be transformed into Montessori schools, and this work is now being carried out. A Montessori institute is also shortly to be established there. At Barcelona, by 1918, the small school had grown and flourished till out of it an institute had evolved itself. Other countries have been waiting and are still waiting. Dr. Montessori has seen her work spreading so rapidly that the interest taken in it is almost an embarrassment to her. 'I too have to work,' she sometimes says, 'and cannot talk all the time.' "

Signorina Maccheroni read an extract from a paper written by Dr. Montessori in the early days of her work. "It took some time," wrote Dr. Montessori, "before I could persuade myself that this was not an illusion. At every new experience of the same phenomena I said to myself, 'I do not yet believe it: next time I will.' For a long time I was incredulous before the children, though always astonished and moved. Again and again I reproached teachers who reported results to me which I could not believe to be true, and the teachers said to me that indeed they could scarcely believe them themselves. The children appeared to be inspired by the angels. One day at last, standing before the children, I said within myself: 'Who are you then? Have I here met the children who were in the arms of Christ?' "

Dr. Crichton Miller, who translated Signorina Montessori's address sentence by sentence, also gave an address, in which he said that he was interested in this movement as a clinical psychologist who was daily and hourly brought in contact with social deficiency, personal unhappiness, suffering of all kinds, most of which could be

traced back to morbid emotional development in childhood. The reason why the Montessori method had such a tremendous future before it was that it was the key to the normal, wholesome, and sane emotional development of the child. What the clinical psychologist recognized as a tragedy at the one end was foreseen and averted at the other end by this new system of education.

The way in which we have brought up small children had been artificial in the extreme. The Montessori child, surrounded with innumerable different possibilities for activity, is able to make his choice of action in the same way that is conceded to energetic grown-up people who wish to do fruitful work. The Froebelians, on the other hand, had always said: "This is what you must do, and we will make it as interesting as possible for you." Froebel's method, moreover, had been based on a subtle affective influence in the way of suggestion from the teacher, personal inspiration, etc. Dr. Montessori sought to eliminate this affective element from the story of the thought-life. She had established in her schools phenomena which recurred with the automatic regularity of a natural law, and had based her work on observation of the child's attitude during the performance of those tasks in which he was able to lose himself and become wholly interested. This phenomenon was so remarkable that it has a specific value. It was not the ordinary interest of the child ordinarily taught. The fundamentally sound basis of the Montessori method was the large choice of interests and the freedom which permit the appearance of this phenomenon. Under other methods a large proportion of the children never were really interested.

The essential feature of the Montessori method was the appearance of this phenomenon, which Dr. Montessori had named *"il gran lavoro."* At an astonishingly early age by this means the child "realized itself," whereas the average child often did not realize itself at all till it had left school, and possibly university too.

Those who talked loosely about discipline often did not realize that the child brought up in strict discipline was just as much in an artificial state of emotivity as the child

who had been "spoilt." The emotional element in the one case was hostile and in the other apparently friendly, but artificial emotion was still there. Dr. Montessori gives us the possibility of allowing the child to grow up without interference from the emotional point of view. We must remember that we have always been dealing with the ante-social child. The Montessori child is the social child, and the whole situation is altered. The great problem of the clinical psychologist has been how to provide for the spontaneous development of emotion. Outbursts of spontaneous affection of the children always come after the phenomena of self-realization. That spontaneous emotion, coming from within the child, is totally different to the cooped-up hot-house emotions we have been accustomed to foster.

Long before the development of analytical psychology, medicine was occupied with the problems of the introversion and entroversion, the miseries of persons who suffer from lack of expression or from a morbid facility of expression. The origins of these things, which we did not understand, Dr. Montessori has now explained to us in a way that is both damning and final.

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