

THE MONTESSORI METHOD

SCIENTIFIC PEDAGOGY AS APPLIED TO CHILD
EDUCATION IN "THE CHILDREN'S HOUSES"
WITH ADDITIONS AND REVISIONS
BY THE AUTHOR

BY
MARIA MONTESSORI

TRANSLATED FROM THE ITALIAN BY
ANNE E. GEORGE

WITH AN INTRODUCTION BY
PROFESSOR HENRY W. HOLMES
OF HARVARD UNIVERSITY

WITH THIRTY-TWO ILLUSTRATIONS FROM PHOTOGRAPHS

NEW YORK
FREDERICK A. STOKES COMPANY
MCMXIX

Copyright, 1912, by
FREDERICK A. STOKES COMPANY

*All rights reserved, including that of translation into foreign
languages, including the Scandinavian*

I place at the beginning of this volume, now appearing in the United States, her fatherland, the dear name of

ALICE HALLGARTEN

of New York, who by her marriage to Baron Leopold Franchetti became by choice our compatriot.

Ever a firm believer in the principles underlying the Case dei Bambini, she, with her husband, forwarded the publication of this book in Italy, and, throughout the last years of her short life, greatly desired the English translation which should introduce to the land of her birth the work so near her heart.

To her memory I dedicate this book, whose pages, like an ever-living flower, perpetuate the recollection of her beneficence.

ACKNOWLEDGMENTS

Grateful acknowledgment is made to Mrs. Guy Baring, of London, for the loan of her manuscript translation of “*Pedagogia Scientifica*”; to Mrs. John R. Fisher (Dorothy Canfield) for translating a large part of the new work written by Dr. Montessori for the American Edition; and to The House of Childhood, Inc., New York, for use of the illustrations of the didactic apparatus. Dr. Montessori's patent rights in the apparatus are controlled, for the United States and Canada, by The House of Childhood, Inc., and for Great Britain and Ireland, by Messrs. Philip & Tacey, Ltd.

PREFACE TO THE AMERICAN EDITION

IN February, 1911, Professor Henry W. Holmes, of the Division of Education of Harvard University, did me the honour to suggest that an English translation be made of my Italian volume, "*Il Metodo della Pedagogia Scientifica applicato all' educazione infantile nelle Case dei Bambini.*" This suggestion represented one of the greatest events in the history of my educational work. To-day, that to which I then looked forward as an unusual privilege has become an accomplished fact.

The Italian edition of "*Il Metodo della Pedagogia Scientifica*" had no preface, because the book itself I consider nothing more than the preface to a more comprehensive work, the aim and extent of which it only indicates. For the educational method for children of from three to six years set forth here is but the earnest of a work that, developing the same principle and method, shall cover in a like manner the successive stages of education. Moreover, the method which obtains in the *Case dei Bambini* offers, it seems to me, an experimental field for the study of man, and promises, perhaps, the development of a science that shall disclose other secrets of nature.

In the period that has elapsed between the publication of the Italian and American editions, I have had, with my pupils, the opportunity to simplify and render more exact certain practical details of the method, and to gather additional observations concerning discipline. The results attest the vitality of the method and the necessity for an

viii PREFACE TO THE AMERICAN EDITION

extended scientific collaboration in the near future, and are embodied in two new chapters written for the American edition. I know that my method has been widely spoken of in America, thanks to Mr. S. S. McClure, who has presented it through the pages of his well-known magazine. Indeed, many Americans have already come to Rome for the purpose of observing personally the practical application of the method in my little schools. If, encouraged by this movement, I may express a hope for the future, it is that my work in Rome shall become the centre of an efficient and helpful collaboration.

To the Harvard professors who have made my work known in America and to *McClure's Magazine*, a mere acknowledgment of what I owe them is a barren response; but it is my hope that the method itself, in its effect upon the children of America, may prove an adequate expression of my gratitude.

MARIA MONTESSORI.

ROME, 1912.

INTRODUCTION

AN audience already thoroughly interested awaits this translation of a remarkable book. For years no educational document has been so eagerly expected by so large a public, and not many have better merited general anticipation. That this widespread interest exists is due to the enthusiastic and ingenious articles in *McClure's Magazine* for May and December, 1911, and January, 1912; but before the first of these articles appeared a number of English and American teachers had given careful study to Dr. Montessori's work, and had found it novel and important. The astonishing welcome accorded to the first popular expositions of the Montessori system may mean much or little for its future in England and America; it is rather the earlier approval of a few trained teachers and professional students that commends it to the educational workers who must ultimately decide upon its value, interpret its technicalities to the country at large, and adapt it to English and American conditions. To them as well as to the general public this brief critical Introduction is addressed.

It is wholly within the bounds of safe judgment to call Dr. Montessori's work remarkable, novel, and important. It is remarkable, if for no other reason, because it represents the constructive effort of a woman. We have no other example of an educational system—original at least in its systematic wholeness and in its practical application—worked out and inaugurated by the feminine mind and

hand. It is remarkable, also, because it springs from a combination of womanly sympathy and intuition, broad social outlook, scientific training, intensive and long-continued study of educational problems, and, to crown all, varied and unusual experience as a teacher and educational leader. No other woman who has dealt with Dr. Montessori's problem—the education of young children—has brought to it personal resources so richly diverse as hers. These resources, furthermore, she has devoted to her work with an enthusiasm, an absolute abandon, like that of Pestalozzi and Froebel, and she presents her convictions with an apostolic ardour which commands attention. A system which embodies such a capital of human effort could not be unimportant. Then, too, certain aspects of the system are in themselves striking and significant: it adapts to the education of normal children methods and apparatus originally used for deficient; it is based on a radical conception of liberty for the pupil; it entails a highly formal training of separate sensory, motor, and mental capacities; and it leads to rapid, easy, and substantial mastery of the elements of reading, writing, and arithmetic. All this will be apparent to the most casual reader of this book.

None of these things, to be sure, is absolutely new in the educational world. All have been proposed in theory; some have been put more or less completely into practice. It is not unjust, for instance, to point out that much of the material used by Dr. Walter S. Fernald, Superintendent of the Massachusetts Institution for the Feeble-Minded at Waverley, is almost identical with the Montessori material, and that Dr. Fernald has long maintained that it could be used to good effect in the education of normal children. (It may interest American readers to know that Séguin,

on whose work that of Dr. Montessori is based, was once head of the school at Waverley.) So, too, formal training in various psycho-physical processes has been much urged of late by a good many workers in experimental pedagogy, especially by Meumann. But before Montessori, no one had produced a system in which the elements named above were combined. She conceived it, elaborated it in practice, and established it in schools. It is indeed the final result, as Dr. Montessori proudly asserts, of years of experimental effort both on her own part and on the part of her great predecessors; but the crystallisation of these experiments in a programme of education for normal children is due to Dr. Montessori alone. The incidental features which she has frankly taken over from other modern educators she has chosen because they fit into the fundamental form of her own scheme, and she has unified them all in her general conception of method. The system is not original in the sense in which Froebel's system was original; but as a system it is the novel product of a single woman's creative genius.

As such, no student of elementary education ought to ignore it. The system doubtless fails to solve all the problems in the education of young children; possibly some of the solutions it proposes are partly or completely mistaken; some are probably unavailable in English and American schools; but a system of education does not have to attain perfection in order to merit study, investigation, and experimental use. Dr. Montessori is too large-minded to claim infallibility, and too thoroughly scientific in her attitude to object to careful scrutiny of her scheme and the thorough testing of its results. She expressly states that it is not yet complete. Practically, it is highly probable that the system ultimately adopted in our schools will combine

elements of the Montessori programme with elements of the kindergarten programme, both "liberal" and "conservative." In its actual procedure school work must always be thus eclectic. An all-or-nothing policy for a single system inevitably courts defeat; for the public is not interested in systems as systems, and refuses in the end to believe that any one system contains every good thing. Nor can we doubt that this attitude is essentially sound. If we continue, despite the pragmatists, to believe in absolute principles, we may yet remain skeptical about the logic of their reduction to practice—at least in any fixed programme of education. We are not yet justified, at any rate, in adopting one programme to the exclusion of every other simply because it is based on the most intelligible or the most inspiring philosophy. The pragmatic test must also be applied, and rigorously. We must try out several combinations, watch and record the results, *compare them*, and proceed cautiously to new experiments. This procedure is desirable for every stage and grade of education, but especially for the earliest stage, because there it has been least attempted and is most difficult. Certainly a system so radical, so clearly defined, and so well developed as that of Dr. Montessori offers for the thoroughgoing comparative study of methods in early education new material of exceptional importance. Without accepting every detail of the system, without even accepting unqualifiedly its fundamental principles, one may welcome it, thus, as of great and immediate value. If early education is worth studying at all, the educator who devotes his attention to it will find it necessary to define the differences in principle between the Montessori programme and other programmes, and to carry out careful tests of the results obtainable from the various systems and their feasible combinations.

One such combination this Introduction will suggest, and it will discuss also the possible uses of the Montessori apparatus in the home; but it may be helpful first to present the outstanding characteristics of the Montessori system as compared with the modern kindergarten in its two main forms.

Certain similarities in principle are soon apparent. Dr. Montessori's views of childhood are in some respects identical with those of Froebel, although in general decidedly more radical. Both defend the child's right to be active, to explore his environment and develop his own inner resources through every form of investigation and creative effort. Education is to guide activity, not repress it. Environment cannot create human power, but only give it scope and material, direct it, or at most but call it forth; and the teacher's task is first to nourish and assist, to watch, encourage, guide, induce, rather than to interfere, prescribe, or restrict. To most American teachers and to all kindergartners this principle has long been familiar; they will but welcome now a new and eloquent statement of it from a modern viewpoint. In the practical interpretation of the principle, however, there is decided divergence between the Montessori school and the kindergarten. The Montessori "directress" does not teach children in groups, with the practical requirement, no matter how well "mediated," that each member of the group shall join in the exercise. The Montessori pupil does about as he pleases, so long as he does not do any harm.

Montessori and Froebel stand in agreement also on the need for training of the senses; but Montessori's scheme for this training is at once more elaborate and more direct than Froebel's. She has devised out of Séguin's apparatus a comprehensive and scientific scheme for formal gymnastic

of the senses; Froebel originated a series of objects designed for a much broader and more creative use by the children, but by no means so closely adapted to the training of sensory discrimination. The Montessori material carries out the fundamental principle of Pestalozzi, which he tried in vain to embody in a successful system of his own: it "develops piece by piece the pupil's mental capacities" by training separately, through repeated exercises, his several senses and his ability to distinguish, compare, and handle typical objects. In the kindergarten system, and particularly in the "liberal" modifications of it, sense training is incidental to constructive and imaginative activity in which the children are pursuing larger ends than the mere arrangement of forms or colours. Even in the most formal work in kindergarten design the children are "making a picture," and are encouraged to tell what it looks like—"a star," "a kite," "a flower."

As to physical education, the two systems agree in much the same way: both affirm the need for free bodily activity, for rhythmic exercises, and for the development of muscular control; but whereas the kindergarten seeks much of all this through group games with an imaginative or social content, the Montessori scheme places the emphasis on special exercises designed to give formal training in separate physical functions.

In another general aspect, however, the agreement between the two systems, strong in principle, leaves the Montessori system less formal rather than more formal in practice. The principle in this case consists of the affirmation of the child's need for social training. In the conservative kindergarten this training is sought once more, largely in group games. These are usually imaginative, and sometimes decidedly symbolic: that is, the children

play at being farmers, millers, shoemakers, mothers and fathers, birds, animals, knights, or soldiers; they sing songs, go through certain semi-dramatic activities—such as “opening the pigeon house,” “mowing the grass,” “showing the good child to the knights,” and the like; and each takes his part in the representation of some typical social situation. The social training involved in these games is formal only in the sense that the children are not engaged, as the Montessori children often are, in a real social enterprise, such as that of serving dinner, cleaning the room, caring for animals, building a toy house, or making a garden. It cannot be too strongly emphasized that even the most conservative kindergarten does not, on principle, exclude “real” enterprises of this latter sort; but in a three-hour session it does rather little with them. Liberal kindergartens do more, particularly in Europe, where the session is often longer. Nor does the Montessori system wholly exclude imaginative group games. But Dr. Montessori, despite an evidently profound interest not only in social training, but also in æsthetic, idealistic, and even religious development, speaks of “games and foolish stories” in a casual and derogatory way, which shows that she is as yet unfamiliar with the American kindergartner’s remarkable skill and power in the use of these resources. (Of course the American kindergartner does not use “foolish” stories; but stories she does use, and to good effect.) The Montessori programme involves much direct social experience, both in the general life of the school and in the manual work done by the pupils; the kindergarten extends the range of the child’s social consciousness through the imagination. The groupings of the Montessori children are largely free and unregulated; the groupings of kindergarten children are more often formal and prescribed.

On one point the Montessori system agrees with the conservative kindergarten, but not with the liberal: it prepares directly for the mastery of the school arts. There can be no doubt that Dr. Montessori has devised a peculiarly successful scheme for teaching children to write, an effective method for the introduction of reading, and good material for early number work. Both types of kindergarten increase, to be sure, the child's general capacity for expression: kindergarten activity adds to his stock of ideas, awakens and guides his imagination, increases his vocabulary, and trains him in the effective use of it. Children in a good kindergarten hear stories and tell them, recount their own experiences, sing songs, and recite verses, all in a company of friendly but fairly critical listeners, which does even more to stimulate and guide expression than does the circle at home. But even the conservative kindergarten does not teach children to write and to read. It does teach them a good deal about number; and it may fairly be questioned whether it does not do more fundamental work in this field than the Montessori system itself. The Froebelian gifts offer exceptional opportunity for concrete illustration of the conceptions of *whole* and *part*, through the creation of wholes from parts, and the breaking up of wholes into parts. This aspect of number is at least as important as the series aspect, which children get in counting and for which the Montessori "Long Stair" provides such good material. The Froebelian material may be used very readily for counting, however, and the Montessori material gives some slight opportunity for uniting and dividing. So far as preparation for arithmetic is concerned, a combination of the two bodies of material is both feasible and desirable. The liberal kindergarten, meanwhile, abandoning the use of the

gifts and occupations for mathematical purposes, makes no attempt to prepare its pupils directly for the school arts.

Compared with the kindergarten, then, the Montessori system presents these main points of interest: it carries out far more radically the principle of unrestricted liberty; its materials are intended for the direct and formal training of the senses; it includes apparatus designed to aid in the purely physical development of the children; its social training is carried out mainly by means of present and actual social activities; and it affords direct preparation for the school arts. The kindergarten, on the other hand, involves a certain amount of group-teaching, in which children are held—not necessarily by the enforcement of authority, yet by authority, confessedly, when other means fail—to definite activities; its materials are intended primarily for creative use by the children and offer opportunity for mathematical analysis and the teaching of design; and its procedure is rich in resources for the imagination. One thing should be made entirely clear and emphatic: in none of these characteristics are the two systems rigidly antagonistic. Much kindergarten activity is free, and the principle of prescription is not wholly given over by the “Houses of Childhood”—witness their *Rules and Regulations*; the kindergarten involves direct sense training, and the Montessori system admits some of the Froebel blocks for building and design; there are many purely muscular activities in the kindergarten, and some of the usual kindergarten games are used by Montessori; the kindergarten conducts some gardening, care of animals, construction-work, and domestic business, and the Montessori system admits a few imaginative social plays; both systems (but not the liberal form of the kindergarten)

work directly toward the school arts. Since the difference between the two programmes is one of arrangement, emphasis, and degree, there is no fundamental reason why a combination especially adapted to English and American schools cannot be worked out.

The broad contrast between a Montessori school and a kindergarten appears on actual observation to be this: whereas the Montessori children spend almost all their time handling *things*, largely according to their individual inclination and under individual guidance, kindergarten children are generally engaged in group work and games with an imaginative background and appeal. A possible principle of adjustment between the two systems might be stated thus: work with objects designed for formal sensory, motor, and intellectual training should be done individually or in purely voluntary groups; imaginative and social activity should be carried on in regulated groups. This principle is suggested only as a possible basis for education during the kindergarten age; for as children grow older they must be taught in classes, and they naturally learn how to carry out imaginative and social enterprises in free groups, and the former often alone. Nor should it be supposed that the principle is suggested as a rule to which there can be no exception. It is suggested simply as a general working hypothesis, the value of which must be tested in experience. Although it has long been observed by kindergartners themselves that group-work with the Fröebelian materials, especially such work as involves geometrical analysis and formal design, soon tires the children, it has been held that the kindergartner could safeguard her pupils from loss of interest or real fatigue by watching carefully for the first signs of weariness and stopping the work promptly on their appearance. For